

# Kentucky Performance Rating for Educational Progress



## 2018–19 Yearbook

Version 1.0



Pearson

## Table of Contents

|   |     |
|---|-----|
| Glossary of Terms .....   | iii |
| Appendix A. Participation Rates.....                                      | 1   |
| Appendix B. Score Reports .....   | 2   |
| Appendix C. Item Mean Summaries.....                                      | 17  |
| Appendix D. Item-Total Correlation Summaries.....                         | 18  |
| Appendix E. Differential Item Functioning Summaries .....                 | 19  |
| Appendix F. Item Response Theory Parameter Summary .....                  | 21  |
| Appendix G. Raw Score to Scale Score Tables.....                          | 22  |
| Appendix H. Raw Score to Scale Score Tables—Subdomain .....               | 43  |
| Appendix I. Score Frequency Distributions.....                            | 97  |
| Appendix J. Score Frequency Distributions—Subdomain .....                 | 104 |
| Appendix K. Scale Score Descriptive Statistics .....                      | 121 |
| Appendix L. Performance Level Rates .....                                 | 133 |
| Appendix M. Reliability.....  | 145 |
| Appendix N. Scoring Metrics for K-PREP Constructed-Response Items.....    | 172 |
| Appendix O. On-Demand Writing Score Distribution and Rater Agreement..... | 176 |
| Appendix P. Accuracy and Consistency.....                                 | 177 |
| Appendix Q. Principal Components Analysis—Scree Plots.....                | 193 |
| Appendix R. Model Fit Indices for Confirmatory Factor Analysis .....      | 204 |
| Appendix S. Correlations of Total Test and Subdomain Scores .....         | 205 |
| Appendix T. Operational Constructed-Response Item Omit Rates .....        | 210 |

## Glossary of Terms

**Classification accuracy:** The extent to which achievement classifications from test scores match classifications if test scores contained no error of measurement.

**Classification consistency:** The extent to which achievement classifications from test scores match classifications from test scores of a parallel form of the same test.

**Constructed-response item:** Test item that requires a form of written response by the examinee.

**Differential item functioning:** The difference in performance on an item between subgroups of students, after controlling for differences in group achievement or score level.

**Field-test items:** Items used on a test for gathering performance data while not contributing to examinees' test scores.

**Item response theory:** Measurement theory that prescribes relationships of item difficulty and examinee proficiency for indices of test performance.

**Item-test correlation:** Correlation between item score and total test score.

**Multiple-choice item:** Test item that requires selection of response from a group of options.

**Percentile rank:** A numerical value indicating relative standing of performance among other examinees.

**Performance level:** A categorization of achievement from test performance.

**P-value:** The proportion of correct responses to an item (for multiple-choice items).

**Quartile:** A group of observations representing one-fourth of the total group.

**Rasch model:** Measurement model that factors proficiency and item difficulty in determining probability of item success.

**Raw score:** The sum of points for a test, or subdomain.

**Reliability:** The consistency of results obtained from a measurement.

**Scale score:** A score derived from a transformation of a raw score.

**Standard error of measurement:** A statistic, in classical test theory, expressing the interval of an examinee's true score.

**Standard setting:** The process of setting cut points that delineate levels of achievement.

**Subdomain:** A set of knowledge and skills within a larger content space.

**True score:** An examinee's expected score resulting from multiple replications of measurement.

## Appendix A. Participation Rates<sup>1</sup>

| Students              | Subgroup                         | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 11 |
|-----------------------|----------------------------------|---------|---------|---------|---------|---------|---------|----------|
| All                   | Students Tested                  | 48,951  | 51,165  | 51,981  | 52,125  | 50,515  | 49,788  | 45,388   |
| Gender                | Female                           | 48.2%   | 48.9%   | 48.9%   | 49%     | 48.3%   | 48.6%   | 49.1%    |
|                       | Male                             | 51.8%   | 51.1%   | 51.1%   | 51%     | 51.7%   | 51.4%   | 50.9%    |
| Ethnicity             | Hispanic                         | 7.7%    | 7.5%    | 7.7%    | 7.3%    | 7.2%    | 6.6%    | 6.1%     |
|                       | Asian                            | 1.8%    | 1.6%    | 1.7%    | 1.7%    | 1.7%    | 1.8%    | 2%       |
|                       | Native Hawaiian/Pacific Islander | 0.1%    | 0.1%    | 0.2%    | 0.1%    | 0.1%    | 0.1%    | 0.1%     |
|                       | Black/African American           | 10.5%   | 10.5%   | 10.5%   | 10.6%   | 10.1%   | 10.5%   | 10.2%    |
|                       | American Indian                  | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%    | 0.1%     |
|                       | White                            | 74.1%   | 74.3%   | 74.3%   | 74.6%   | 75.4%   | 76%     | 77.4%    |
|                       | Other                            | 4.7%    | 4.7%    | 4.5%    | 4.4%    | 4%      | 3.8%    | 2.8%     |
|                       | Missing                          | 1%      | 1.1%    | 1.1%    | 1.2%    | 1.2%    | 1.2%    | 1.3%     |
| Migrant               | Non-Migrant                      | 99.5%   | 99.5%   | 99.5%   | 99.6%   | 99.6%   | 99.6%   | 99.7%    |
|                       | Migrant                          | 0.5%    | 0.5%    | 0.5%    | 0.4%    | 0.4%    | 0.4%    | 0.3%     |
| LEP                   | Non-LEP                          | 93.3%   | 93.9%   | 94.9%   | 95.7%   | 95.8%   | 95.9%   | 96.8%    |
|                       | LEP                              | 6.7%    | 6.1%    | 5.1%    | 4.3%    | 4.2%    | 4.1%    | 3.2%     |
| Economic Disadvantage | Free Lunch                       | 59.1%   | 58.9%   | 58.4%   | 57.4%   | 55.7%   | 54.4%   | 48.3%    |
|                       | Reduced-Price Lunch              | 4.1%    | 4%      | 3.9%    | 4.2%    | 4.1%    | 4%      | 4.3%     |
|                       | Regular Lunch                    | 36.7%   | 37.1%   | 37.7%   | 38.5%   | 40.2%   | 41.6%   | 47.5%    |
| IEP                   | Non-IEP                          | 81.8%   | 83.7%   | 84.7%   | 86.6%   | 88%     | 88.9%   | 91.6%    |
|                       | IEP                              | 18.2%   | 16.3%   | 15.3%   | 13.4%   | 12%     | 11.1%   | 8.4%     |

<sup>1</sup> Alternate K-PREP students are included, but participation rates for Alternate K-PREP grades 9, 10 and 12 are not provided.

## **Appendix B. Score Reports**

# STUDENT REPORT

2019 Grade 5  
Kentucky Performance Rating for Educational Progress (K-PREP)

FIRSTNAME I. LASTNAME

School: SCHOOL NAME  
District: DISTRICT NAME  
State ID: 0000000000

## K-PREP Student Scores

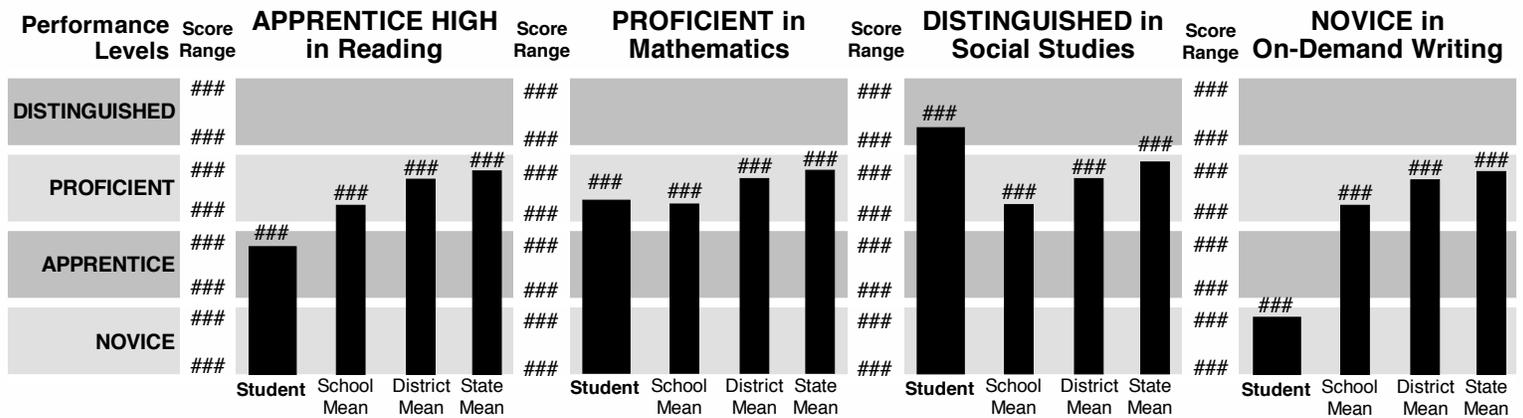


This report provides specific information about your student's performance on the K-PREP test. It also includes information for teachers and parents/guardians about how to support student learning. The K-PREP test is only one indication of how well students do in each subject tested; therefore, it is also important to consider how well students are doing on class work, special projects and assessments.

Students taking the K-PREP test are assessed on the Kentucky Academic Standards. These standards in reading, writing, mathematics and science are rigorous and focus on college and career readiness. Rigorous standards, across all grade levels, help students prepare for what they plan to do after high school. For the future, Kentucky continues to work toward implementation and assessment of new standards for social studies.

## Student's Scores and Performance Levels

The chart below shows the student's overall performance in reading, mathematics, social studies and on-demand writing. The performance levels of Novice and Apprentice are broken into two levels HIGH and LOW for reading and mathematics. The first bar for each subject shows the student's score printed above the bar with the performance level listed above the chart and also signified by the height of the bar. The second bar for each subject shows the school average score printed above the bar. The third bar for each subject shows the district average score printed above the bar. Finally, the fourth bar for each subject shows the state average score printed above the bar.



## About the Student's Performance Levels

**Reading Performance Level: APPRENTICE HIGH**

(PLD prints here)

**Social Studies Performance Level: DISTINGUISHED**

(PLD prints here)

**Mathematics Performance Level: PROFICIENT**

(PLD prints here)

**On-Demand Writing Performance Level: NOVICE**

(PLD prints here)

For further information, visit the Kentucky Department of Education online at [www.education.ky.gov](http://www.education.ky.gov).

**K-PREP Student Results (continued)****Student's Lexile/Quantile Measures****Student's Lexile® measure: #####L**

A student receives a Lexile reader measure as a score from a reading test - it describes his or her reading ability. Books and other texts receive a Lexile text measure from a software tool called the Lexile Analyzer - it describes the book's reading demand or difficulty. Visit [www.Lexile.com](http://www.Lexile.com). On the homepage, click Educators and then click Lexile Book Database where you will be able to search for books by Lexile range, keyword, title, author or ISBN.

**Student's Quantile® measure: #####Q**

The Quantile Framework uses a Quantile measure to describe a student's mathematical achievement, and the difficulty of specific mathematical skills and concepts. Visit [www.Quantiles.com](http://www.Quantiles.com) and click on the "Math at Home" section for more information.

For further information,  
visit the Kentucky Department of Education online at [www.education.ky.gov](http://www.education.ky.gov).



# TESTED STUDENTS SCHOOL LISTING

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999999  
 School: SCHOOL NAME  
 District: DISTRICT NAME

### GRADE 5



Student Name Student ID

| Student Name            | Student ID | Accommodated | Alternate K-PREP1 | Reading                        |                          |                     | Mathematics                    |                          |                        | Social Studies                 |                          | On-Demand Writing              |                          |
|-------------------------|------------|--------------|-------------------|--------------------------------|--------------------------|---------------------|--------------------------------|--------------------------|------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------|
|                         |            |              |                   | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> | Lexile <sup>4</sup> | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> | Quantiles <sup>5</sup> | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 | Y            | Y                 | P                              | ###                      |                     | P                              | ###                      |                        | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | AH                             | ###                      | #####Q                 | A                              | ###                      | A                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | #####L              | NH                             | ###                      | #####Q                 | N                              | ###                      | N                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AL                             | ###                      | #####L              | NH                             | ###                      | #####Q                 | N                              | ###                      | A                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 | Y            |                   | P                              | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | #####L              | AL                             | ###                      | #####Q                 | A                              | ###                      | A                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | NL                             | ###                      | #####Q                 | N                              | ###                      | N                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | P                              | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 | Y            |                   | NL                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AL                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NL                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | P                              | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | BR###L              | NH                             | ###                      | EM###Q                 | N                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AL                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |

1 Y = Alternate K-PREP student

2 The performance level designations are D = Distinguished, P = Proficient, A = Apprentice, AH = Apprentice High, AL = Apprentice Low, N = Novice, NH = Novice High and NL = Novice Low; "-" = Student did not test

3 Alternate K-PREP reports total score

4 Lexile measure of BR = Beginning Reader

5 Quantile measure of EM = Emerging Mathematician

# TESTED STUDENTS SCHOOL LISTING

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999999  
 School: SCHOOL NAME  
 District: DISTRICT NAME

### GRADE 5



| Student Name            | Student ID | Accommodated | Alternate K-PREP1 | Reading                        |                          |                     | Mathematics                    |                          |                        | Social Studies                 |                          | On-Demand Writing              |                          |
|-------------------------|------------|--------------|-------------------|--------------------------------|--------------------------|---------------------|--------------------------------|--------------------------|------------------------|--------------------------------|--------------------------|--------------------------------|--------------------------|
|                         |            |              |                   | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> | Lexile <sup>4</sup> | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> | Quantiles <sup>5</sup> | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> | Performance Level <sup>2</sup> | Scale Score <sup>3</sup> |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 | Y            | Y                 | P                              | ###                      |                     | P                              | ###                      |                        | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | AL                             | ###                      | #####Q                 | A                              | ###                      | A                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | #####L              | NL                             | ###                      | #####Q                 | N                              | ###                      | N                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | -----EXEMPTED-----             |                          |                     |                                |                          |                        |                                |                          |                                |                          |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 | Y            |                   | P                              | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AL                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | #####L              | AH                             | ###                      | #####Q                 | A                              | ###                      | A                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | NH                             | ###                      | #####Q                 | N                              | ###                      | N                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NL                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | P                              | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AL                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 | Y            |                   | NH                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | NH                             | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | D                              | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | P                              | ###                      | #####L              | P                              | ###                      | #####Q                 | P                              | ###                      | P                              | ###                      |
| LASTNAME, FIRSTNAME, I. | 9999999999 |              |                   | AH                             | ###                      | #####L              | D                              | ###                      | #####Q                 | D                              | ###                      | D                              | ###                      |

|                                   |                               |
|-----------------------------------|-------------------------------|
| Number of Standard Assessed: ###  | Number of Exempted: 1         |
| Number of Alternate Assessed: ### | Total Number of Students: ### |

- 1 Y = Alternate K-PREP student
- 2 The performance level designations are D = Distinguished, P = Proficient, A = Apprentice, AH = Apprentice High, AL = Apprentice Low, N = Novice, NH = Novice High and NL = Novice Low; "-" = Student did not test
- 3 Alternate K-PREP reports total score
- 4 Lexile measure of BR = Beginning Reader
- 5 Quantile measure of EM = Emerging Mathematician

# TESTED STUDENTS SCHOOL SUMMARY

## 2019 Kentucky Academic Standards Assessment

Code: 999999  
 School: SCHOOL NAME  
 District: DISTRICT NAME

### Grade 4 Science

#### Percent of Students by Performance Level

| Performance Level | Number Students Tested | Percent of Students |          |       |
|-------------------|------------------------|---------------------|----------|-------|
|                   |                        | School              | District | State |
| Novice            | #,###                  | ###.#               | ###.#    | ###.# |
| Apprentice        | #,###                  | ###.#               | ###.#    | ###.# |
| Proficient        | #,###                  | ###.#               | ###.#    | ###.# |
| Distinguished     | #,###                  | ###.#               | ###.#    | ###.# |
| Total             | #,###                  |                     |          |       |

#### Performance by Reporting Category

Each content area has been further divided into reporting categories to provide more detail about your school performance. The specific reporting categories have been analyzed for statistical significance to create a status by category. The status is Needs Work or On Track. Remember your formative system needs to supplement how your students are performing on these content areas.

| Reporting Category      | Status     | Status Description   |
|-------------------------|------------|--|
| Life Science            | Needs Work | On average, your school's students need additional attention on this content skill |
| Physical Science        | On Track   | On average, your school's students are performing well on this content skill       |
| Earth and Space Science | On Track   | On average, your school's students are performing well on this content skill       |
| Engineering Design      | Needs Work | On average, your school's students need additional attention on this content skill |



# TESTED STUDENTS SCHOOL SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999999  
 School: SCHOOL NAME  
 District: DISTRICT NAME

### Grade 6 Mathematics

#### Percent of Students by Performance Level

| Performance Level | Number Students Tested | Percent of Students |          |       |
|-------------------|------------------------|---------------------|----------|-------|
|                   |                        | School              | District | State |
| Novice Low        | #,###                  | ###.#               | ###.#    | ###.# |
| Novice High       | #,###                  | ###.#               | ###.#    | ###.# |
| Apprentice Low    | #,###                  | ###.#               | ###.#    | ###.# |
| Apprentice High   | #,###                  | ###.#               | ###.#    | ###.# |
| Proficient        | #,###                  | ###.#               | ###.#    | ###.# |
| Distinguished     | #,###                  | ###.#               | ###.#    | ###.# |
| Total             | #,###                  |                     |          |       |

#### Performance by Reporting Category

Each content area has been further divided into reporting categories to provide more detail about your school performance. The specific reporting categories have been analyzed for statistical significance to create a status by category. The status is Needs Work or On Track. Remember your formative system needs to supplement how your students are performing on these content areas.

| Reporting Category                    | Status     | Status Description  |
|---------------------------------------|------------|---|
| Ratios and Proportional Relationships | Needs Work | On average, your school's students need additional attention on this content skill. |
| The Number System                     | On Track   | On average, your school's students are performing well on this content skill.       |
| Expressions and Equations             | On Track   | On average, your school's students are performing well on this content skill.       |
| Geometry                              | Needs Work | On average, your school's students need additional attention on this content skill. |
| Statistics and Probability            | On Track   | On average, your school's students are performing well on this content skill.       |



# TESTED STUDENTS SCHOOL SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999999

School: SCHOOL NAME

District: DISTRICT NAME

### Grade 11 On-Demand Writing

#### Percent of Students by Performance Level

| Performance Level | Number Students Tested | Percent of Students |          |       |
|-------------------|------------------------|---------------------|----------|-------|
|                   |                        | School              | District | State |
| Novice            | #,###                  | ###.#               | ###.#    | ###.# |
| Apprentice        | #,###                  | ###.#               | ###.#    | ###.# |
| Proficient        | #,###                  | ###.#               | ###.#    | ###.# |
| Distinguished     | #,###                  | ###.#               | ###.#    | ###.# |
| Total             | #,###                  |                     |          |       |



# TESTED STUDENTS DISTRICT SUMMARY

## 2019 Kentucky Academic Standards Assessment

Code: 999

District: DISTRICT NAME

### Grade 4 Science



DISTRICT NAME

| School Name    | Code  | Number Students Tested | Scale Score         | Performance Level |            |            |               | Reporting Category <sup>1</sup> |                  |                         |                    |
|----------------|-------|------------------------|---------------------|-------------------|------------|------------|---------------|---------------------------------|------------------|-------------------------|--------------------|
|                |       |                        |                     | Novice            | Apprentice | Proficient | Distinguished | Life Science                    | Physical Science | Earth and Space Science | Engineering Design |
|                |       |                        | Percent of Students |                   |            |            | Status        |                                 |                  |                         |                    |
| State          |       | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | OT                      | OT                 |
| District       |       | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | NW                              | OT               | OT                      | NW                 |
| School Name 1  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | NW               | OT                      | OT                 |
| School Name 2  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | NW                      | OT                 |
| School Name 3  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | OT                      | OT                 |
| School Name 4  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | OT                      | NW                 |
| School Name 5  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | OT                      | OT                 |
| School Name 6  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | NW                      | OT                 |
| School Name 7  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | NW               | OT                      | OT                 |
| School Name 8  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | NW                              | OT               | OT                      | OT                 |
| School Name 9  | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | NW                              | OT               | NW                      | OT                 |
| School Name 10 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | OT                      | OT                 |
| School Name 11 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | NW               | OT                      | OT                 |
| School Name 12 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | NW                      | OT                 |
| School Name 13 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | OT                      | OT                 |
| School Name 14 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | NW               | OT                      | OT                 |
| School Name 15 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | NW                      | OT                 |
| School Name 16 | ##### | ###,###                | ###                 | ###.#             | ###.#      | ###.#      | ###.#         | OT                              | OT               | NW                      | OT                 |

<sup>1</sup> Reporting Category OT = On Track - Students should continue working on this category; NW = Needs Work - Students need additional work on this category. Alternate students are included in Performance Level but not in Reporting Category.

# 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

## TESTED STUDENTS DISTRICT SUMMARY

Code: 999

District: DISTRICT NAME

### Grade 6 Mathematics



DISTRICT NAME

| School Name    | Code  | Number Students Tested | Scale Score         | Performance Level |             |                |                 |            |               | Reporting Category <sup>1</sup>       |                   |                           |          |                            |
|----------------|-------|------------------------|---------------------|-------------------|-------------|----------------|-----------------|------------|---------------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|
|                |       |                        |                     | Novice Low        | Novice High | Apprentice Low | Apprentice High | Proficient | Distinguished | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |
|                |       |                        | Percent of Students |                   |             |                |                 |            | Status        |                                       |                   |                           |          |                            |
| State          |       | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| District       |       | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                                    | OT                | OT                        | OT       | NW                         |
| School Name 1  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | OT       | OT                         |
| School Name 2  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |
| School Name 3  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | NW       | OT                         |
| School Name 4  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | NW                         |
| School Name 5  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | NW       | OT                         |
| School Name 6  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |
| School Name 7  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | OT       | OT                         |
| School Name 8  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                                    | OT                | OT                        | OT       | OT                         |
| School Name 9  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                                    | OT                | NW                        | OT       | OT                         |
| School Name 10 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| School Name 11 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | NW       | OT                         |
| School Name 12 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |
| School Name 13 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| School Name 14 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | OT       | OT                         |
| School Name 15 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |
| School Name 16 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |

<sup>1</sup> Reporting Category OT = On Track - Students should continue working on this category; NW = Needs Work - Students need additional work on this category  
Alternate K-PREP students are included in Performance Level but not in Reporting Category.

# TESTED STUDENTS DISTRICT SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999

District: DISTRICT NAME

### Grade 6 Mathematics



DISTRICT NAME

| School Name    | Code  | Number Students Tested | Scale Score        | Performance Level |             |                |                 |            |               | Reporting Category <sup>1</sup>       |                   |                           |          |                            |
|----------------|-------|------------------------|--------------------|-------------------|-------------|----------------|-----------------|------------|---------------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|
|                |       |                        |                    | Novice Low        | Novice High | Apprentice Low | Apprentice High | Proficient | Distinguished | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |
|                |       |                        | Number of Students |                   |             |                |                 |            | Status        |                                       |                   |                           |          |                            |
| State          |       | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| District       |       | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                                    | OT                | OT                        | OT       | OT                         |
| School Name 17 | ##### | 9                      | ****               | ****              | ****        | ****           | ****            | ****       | ****          | ****                                  | ****              | ****                      | ****     | ****                       |
| School Name 18 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |
| School Name 19 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | OT       | OT                         |
| School Name 20 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | OT       | NW                         |
| School Name 21 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                                    | OT                | OT                        | NW       | OT                         |
| School Name 22 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| School Name 23 | ##### | 40                     | ###                | ****              | ****        | ****           | ****            | ****       | ****          | OT                                    | NW                | NW                        | OT       | NW                         |
| School Name 24 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| School Name 25 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                                    | OT                | OT                        | OT       | OT                         |
| School Name 26 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | OT       | OT                         |
| School Name 27 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| School Name 28 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | NW                        | NW       | OT                         |
| School Name 29 | ##### | 9                      | ****               | ****              | ****        | ****           | ****            | ****       | ****          | ****                                  | ****              | ****                      | ****     | ****                       |
| School Name 30 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | OT                | OT                        | OT       | OT                         |
| School Name 31 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | NW       | OT                         |
| School Name 32 | ##### | ###,###                | ###                | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                                    | NW                | OT                        | NW       | OT                         |

<sup>1</sup> Reporting Category OT = On Track - Students should continue working on this category; NW = Needs Work - Students need additional work on this category

\*\*\*\* In order to protect student identification required by the Family Educational Rights and Privacy ACT (FERPA), performance results are suppressed for groups with fewer than 10 students or groups that scored at the same performance level. Alternate K-PREP students are included in Performance Level but not in Reporting Category.

# TESTED STUDENTS DISTRICT SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999

District: DISTRICT NAME

### Grade 6 Reading



DISTRICT NAME

| School Name    | Code  | Number Students Tested | Scale Score         | Performance Level |             |                |                 |            |               | Reporting Category <sup>1</sup> |                     |                      |                            |
|----------------|-------|------------------------|---------------------|-------------------|-------------|----------------|-----------------|------------|---------------|---------------------------------|---------------------|----------------------|----------------------------|
|                |       |                        |                     | Novice Low        | Novice High | Apprentice Low | Apprentice High | Proficient | Distinguished | Key Ideas                       | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|                |       |                        | Percent of Students |                   |             |                |                 |            | Status        |                                 |                     |                      |                            |
| State          |       | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | OT                   | OT                         |
| District       |       | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                              | OT                  | OT                   | NW                         |
| School Name 1  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | NW                  | OT                   | OT                         |
| School Name 2  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | NW                   | OT                         |
| School Name 3  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | OT                   | OT                         |
| School Name 4  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | OT                   | NW                         |
| School Name 5  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | OT                   | OT                         |
| School Name 6  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | NW                   | OT                         |
| School Name 7  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | NW                  | OT                   | OT                         |
| School Name 8  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                              | OT                  | OT                   | OT                         |
| School Name 9  | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | NW                              | OT                  | NW                   | OT                         |
| School Name 10 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | OT                   | OT                         |
| School Name 11 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | NW                  | OT                   | OT                         |
| School Name 12 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | NW                   | OT                         |
| School Name 13 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | OT                   | OT                         |
| School Name 14 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | NW                  | OT                   | OT                         |
| School Name 15 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | NW                   | OT                         |
| School Name 16 | ##### | ###,###                | ###                 | ###.#             | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | OT                              | OT                  | NW                   | OT                         |

<sup>1</sup> Reporting Category OT = On Track - Students should continue working on this category; NW = Needs Work - Students need additional work on this category  
Alternate K-PREP students are included in Performance Level but not in Reporting Category.

# TESTED STUDENTS DISTRICT SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999

District: DISTRICT NAME

### Grade 11 On-Demand Writing



DISTRICT NAME

| School Name    | Code  | Number Students Tested | Scale Score | Performance Level   |            |            |               |
|----------------|-------|------------------------|-------------|---------------------|------------|------------|---------------|
|                |       |                        |             | Novice              | Apprentice | Proficient | Distinguished |
|                |       |                        |             | Percent of Students |            |            |               |
| State          |       | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| District       |       | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 1  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 2  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 3  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 4  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 5  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 6  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 7  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 8  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 9  | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 10 | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 11 | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 12 | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 13 | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 14 | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 15 | ##### | ###,###                | ###         | ###.#               | ###.#      | ###.#      | ###.#         |
| School Name 16 |       |                        |             |                     |            |            |               |

Alternate K-PREP students are included in Performance Level.

# TESTED STUDENTS STATE SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999

State: Commonwealth of Kentucky

### Grade 6 Mathematics



| District Name    | Code  | Number Students Tested | Scale Score | Performance Level   |             |                |                 |            |               | Reporting Category <sup>1</sup>       |                   |                           |          |                            |    |
|------------------|-------|------------------------|-------------|---------------------|-------------|----------------|-----------------|------------|---------------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|----|
|                  |       |                        |             | Novice Low          | Novice High | Apprentice Low | Apprentice High | Proficient | Distinguished | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |    |
|                  |       |                        |             | Percent of Students |             |                |                 |            |               | Status                                |                   |                           |          |                            |    |
| State            |       | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 1  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |
| District Name 2  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 3  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | NW       | OT                         | OT |
| District Name 4  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |
| District Name 5  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | NW |
| District Name 6  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 7  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | NW                         | OT |
| District Name 8  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | NW                        | OT       | OT                         | OT |
| District Name 9  | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 10 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | NW       | OT                         | OT |
| District Name 11 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 12 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |
| District Name 13 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | NW                         | OT |
| District Name 14 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 15 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | NW                        | OT       | OT                         | OT |
| District Name 16 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | NW |
| District Name 17 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 18 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |

<sup>1</sup> Reporting Category OT = On Track - Students should continue working on this category; NW = Needs Work - Students need additional work on this category  
Alternate K-PREP students are included in Performance Level but not in Reporting Category.

# TESTED STUDENTS STATE SUMMARY

## 2019 Kentucky Performance Rating for Educational Progress (K-PREP)

Code: 999

State: Commonwealth of Kentucky

### Grade 6 Mathematics



| District Name    | Code  | Number Students Tested | Scale Score | Performance Level   |             |                |                 |            |               | Reporting Category <sup>1</sup>       |                   |                           |          |                            |    |
|------------------|-------|------------------------|-------------|---------------------|-------------|----------------|-----------------|------------|---------------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|----|
|                  |       |                        |             | Novice Low          | Novice High | Apprentice Low | Apprentice High | Proficient | Distinguished | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |    |
|                  |       |                        |             | Percent of Students |             |                |                 |            |               | Status                                |                   |                           |          |                            |    |
| State            |       | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 19 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 20 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |
| District Name 21 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | NW       | OT                         | OT |
| District Name 22 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 23 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | NW                         | OT |
| District Name 24 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 25 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 26 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | NW |
| District Name 27 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |
| District Name 28 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 29 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | NW       | OT                         | OT |
| District Name 30 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 31 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 32 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | OT                         | OT |
| District Name 33 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | NW                        | NW       | OT                         | OT |
| District Name 34 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | OT                | OT                        | OT       | NW                         | OT |
| District Name 35 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |
| District Name 36 | ##### | ###,###                | ###         | ###.#               | ###.#       | ###.#          | ###.#           | ###.#      | ###.#         | ###.#                                 | NW                | OT                        | OT       | OT                         | OT |

<sup>1</sup> Reporting Category OT = On Track - Students should continue working on this category; NW = Needs Work - Students need additional work on this category  
Alternate K-PREP students are included in Performance Level but not in Reporting Category.

## Appendix C. Item Mean Summaries

### Operational

#### *Multiple-choice*

| Subject        | Grade | $p < 0.30$ | $0.30 \leq p < 0.55$ | $0.55 \leq p < 0.75$ | $0.75 \leq p < 0.95$ | $p \geq 0.95$ | Mean $p$ | N  |
|----------------|-------|------------|----------------------|----------------------|----------------------|---------------|----------|----|
| Reading        | 3     | 1          | 8                    | 14                   | 13                   | --            | 0.66     | 36 |
|                | 4     | 1          | 15                   | 12                   | 7                    | --            | 0.58     | 35 |
|                | 5     | --         | 12                   | 14                   | 9                    | --            | 0.62     | 35 |
|                | 6     | --         | 14                   | 25                   | 3                    | --            | 0.60     | 42 |
|                | 7     | 1          | 17                   | 17                   | 7                    | --            | 0.58     | 42 |
|                | 8     | 2          | 17                   | 15                   | 8                    | --            | 0.59     | 42 |
| Mathematics    | 3     | 1          | 8                    | 21                   | 14                   | --            | 0.65     | 44 |
|                | 4     | --         | 15                   | 23                   | 6                    | --            | 0.60     | 44 |
|                | 5     | 1          | 11                   | 24                   | 8                    | --            | 0.60     | 44 |
|                | 6     | 1          | 24                   | 16                   | 3                    | --            | 0.53     | 44 |
|                | 7     | --         | 25                   | 15                   | 4                    | --            | 0.55     | 44 |
|                | 8     | 1          | 20                   | 20                   | 3                    | --            | 0.54     | 44 |
| Science        | 4     | 6          | 20                   | 14                   | 3                    | --            | 0.49     | 43 |
|                | 7     | 10         | 24                   | 6                    | --                   | --            | 0.39     | 40 |
|                | 11    | 10         | 34                   | 15                   | 1                    | --            | 0.45     | 60 |
| Social Studies | 5     | --         | 6                    | 32                   | 6                    | --            | 0.64     | 44 |
|                | 8     | --         | 14                   | 27                   | 3                    | --            | 0.61     | 44 |

#### *Multi-select/Constructed Response<sup>2</sup>*

| Subject        | Grade | <i>Multi-select/Short Answer</i> |      |      |      | <i>Extended Response</i> |      |      |      |
|----------------|-------|----------------------------------|------|------|------|--------------------------|------|------|------|
|                |       | N                                | Mean | Min  | Max  | N                        | Mean | Min  | Max  |
| Reading        | 3     | 2                                | 1.14 | 1.06 | 1.22 | --                       | --   | --   | --   |
|                | 4     | 2                                | 0.99 | 0.77 | 1.20 | 1                        | 1.64 | 1.64 | 1.64 |
|                | 5     | 2                                | 1.08 | 0.90 | 1.26 | 1                        | 1.75 | 1.75 | 1.75 |
|                | 6     | 2                                | 0.94 | 0.90 | 0.98 | 1                        | 1.50 | 1.50 | 1.50 |
|                | 7     | 2                                | 1.11 | 0.97 | 1.24 | 1                        | 2.60 | 2.60 | 2.60 |
|                | 8     | 2                                | 1.23 | 1.22 | 1.24 | 1                        | 1.96 | 1.96 | 1.96 |
| Mathematics    | 3     | 3                                | 1.04 | 0.85 | 1.23 | --                       | --   | --   | --   |
|                | 4     | 3                                | 0.80 | 0.51 | 1.04 | 1                        | 1.61 | 1.61 | 1.61 |
|                | 5     | 3                                | 0.78 | 0.63 | 0.88 | 1                        | 1.31 | 1.31 | 1.31 |
|                | 6     | 3                                | 1.00 | 0.80 | 1.34 | 1                        | 1.29 | 1.29 | 1.29 |
|                | 7     | 3                                | 0.70 | 0.44 | 0.96 | 1                        | 1.39 | 1.39 | 1.39 |
|                | 8     | 3                                | 0.77 | 0.39 | 1.00 | 1                        | 1.87 | 1.87 | 1.87 |
| Science        | 4     | 6                                | 1.04 | 0.71 | 1.38 | 7                        | 1.29 | 0.84 | 1.86 |
|                | 7     | 9                                | 0.96 | 0.84 | 1.11 | 7                        | 1.10 | 0.66 | 1.59 |
|                | 11    | 10                               | 1.01 | 0.61 | 1.25 | 10                       | 1.15 | 0.88 | 1.61 |
| Social Studies | 5     | --                               | --   | --   | --   | 3                        | 1.55 | 1.36 | 1.88 |
|                | 8     | --                               | --   | --   | --   | 3                        | 2.36 | 2.34 | 2.40 |

<sup>2</sup> Multi-select items in Science are scored 0, 1, and 2.

## Appendix D. Item-Total Correlation Summaries

### Operational

#### *Multiple-choice*

| Subject        | Grade | $r < 0.20$ | $0.20 \leq r < 0.40$ | $0.40 \leq r < 0.60$ | $0.60 \leq r < 0.80$ | $r \geq 0.80$ | Median Pt.Bis | N  |
|----------------|-------|------------|----------------------|----------------------|----------------------|---------------|---------------|----|
| Reading        | 3     | --         | 11                   | 25                   | --                   | --            | 0.43          | 36 |
|                | 4     | 1          | 19                   | 15                   | --                   | --            | 0.39          | 35 |
|                | 5     | --         | 16                   | 19                   | --                   | --            | 0.41          | 35 |
|                | 6     | 2          | 21                   | 19                   | --                   | --            | 0.39          | 42 |
|                | 7     | 1          | 25                   | 16                   | --                   | --            | 0.39          | 42 |
|                | 8     | 3          | 18                   | 21                   | --                   | --            | 0.40          | 42 |
| Mathematics    | 3     | --         | 9                    | 35                   | --                   | --            | 0.44          | 44 |
|                | 4     | --         | 11                   | 33                   | --                   | --            | 0.43          | 44 |
|                | 5     | 1          | 7                    | 36                   | --                   | --            | 0.45          | 44 |
|                | 6     | --         | 18                   | 26                   | --                   | --            | 0.43          | 44 |
|                | 7     | --         | 15                   | 29                   | --                   | --            | 0.41          | 44 |
|                | 8     | --         | 17                   | 27                   | --                   | --            | 0.42          | 44 |
| Science        | 4     | 6          | 23                   | 14                   | --                   | --            | 0.35          | 43 |
|                | 7     | 8          | 21                   | 11                   | --                   | --            | 0.31          | 40 |
|                | 11    | 9          | 28                   | 23                   | --                   | --            | 0.33          | 60 |
| Social Studies | 5     | --         | 17                   | 27                   | --                   | --            | 0.41          | 44 |
|                | 8     | --         | 12                   | 31                   | 1                    | --            | 0.44          | 44 |

#### *Multi-select/Constructed Response*

| Subject        | Grade | <i>Multi-select/Short Answer</i> |            |         |         | <i>Extended Response</i> |            |         |         |
|----------------|-------|----------------------------------|------------|---------|---------|--------------------------|------------|---------|---------|
|                |       | N                                | Median $r$ | Min $r$ | Max $r$ | N                        | Median $r$ | Min $r$ | Max $r$ |
| Reading        | 3     | 2                                | 0.47       | 0.41    | 0.52    | --                       | --         | --      | --      |
|                | 4     | 2                                | 0.49       | 0.47    | 0.51    | 1                        | 0.61       | 0.61    | 0.61    |
|                | 5     | 2                                | 0.44       | 0.38    | 0.49    | 1                        | 0.47       | 0.47    | 0.47    |
|                | 6     | 2                                | 0.55       | 0.52    | 0.57    | 1                        | 0.55       | 0.55    | 0.55    |
|                | 7     | 2                                | 0.48       | 0.44    | 0.51    | 1                        | 0.54       | 0.54    | 0.54    |
|                | 8     | 2                                | 0.48       | 0.43    | 0.53    | 1                        | 0.56       | 0.56    | 0.56    |
| Mathematics    | 3     | 3                                | 0.55       | 0.52    | 0.57    | --                       | --         | --      | --      |
|                | 4     | 3                                | 0.59       | 0.48    | 0.59    | 1                        | 0.59       | 0.59    | 0.59    |
|                | 5     | 3                                | 0.53       | 0.46    | 0.56    | 1                        | 0.56       | 0.56    | 0.56    |
|                | 6     | 3                                | 0.53       | 0.44    | 0.61    | 1                        | 0.64       | 0.64    | 0.64    |
|                | 7     | 3                                | 0.42       | 0.40    | 0.61    | 1                        | 0.69       | 0.69    | 0.69    |
|                | 8     | 3                                | 0.54       | 0.47    | 0.58    | 1                        | 0.69       | 0.69    | 0.69    |
| Science        | 4     | 6                                | 0.37       | 0.22    | 0.59    | 7                        | 0.59       | 0.53    | 0.63    |
|                | 7     | 9                                | 0.42       | 0.15    | 0.52    | 7                        | 0.65       | 0.61    | 0.68    |
|                | 11    | 10                               | 0.37       | 0.20    | 0.55    | 10                       | 0.69       | 0.59    | 0.75    |
| Social Studies | 5     | --                               | --         | --      | --      | 3                        | 0.54       | 0.48    | 0.57    |
|                | 8     | --                               | --         | --      | --      | 3                        | 0.46       | 0.43    | 0.55    |

# Appendix E. Differential Item Functioning Summaries

## Operational

### Reading

| Grade | Subgroups      | DIF Categories |           |              |           |                 |           |
|-------|----------------|----------------|-----------|--------------|-----------|-----------------|-----------|
|       |                | Negligible DIF |           | Moderate DIF |           | Substantial DIF |           |
|       |                | Focal          | Reference | Focal        | Reference | Focal           | Reference |
| 3     | Male-Female    | 17             | 21        | --           | --        | --              | --        |
|       | White-Black    | 22             | 15        | --           | 1         | --              | --        |
|       | White-Hispanic | 20             | 15        | 1            | 1         | --              | 1         |
| 4     | Male-Female    | 20             | 16        | 1            | --        | --              | 1         |
|       | White-Black    | 21             | 17        | --           | --        | --              | --        |
|       | White-Hispanic | 19             | 18        | --           | 1         | --              | --        |
| 5     | Male-Female    | 17             | 19        | 1            | --        | --              | 1         |
|       | White-Black    | 19             | 19        | --           | --        | --              | --        |
|       | White-Hispanic | 18             | 19        | --           | 1         | --              | --        |
| 6     | Male-Female    | 21             | 18        | 1            | 5         | --              | --        |
|       | White-Black    | 21             | 24        | --           | --        | --              | --        |
|       | White-Hispanic | 27             | 18        | --           | --        | --              | --        |
| 7     | Male-Female    | 18             | 21        | 2            | 3         | 1               | --        |
|       | White-Black    | 21             | 24        | --           | --        | --              | --        |
|       | White-Hispanic | 21             | 23        | --           | 1         | --              | --        |
| 8     | Male-Female    | 19             | 23        | --           | --        | 2               | 1         |
|       | White-Black    | 23             | 22        | --           | --        | --              | --        |
|       | White-Hispanic | 22             | 23        | --           | --        | --              | --        |

Note: 'Focal' indicates DIF in favor of Female, Black, or Hispanic students; 'Reference' indicates DIF in favor of Male or White students.

## Mathematics

| Grade | Subgroups      | DIF Categories |           |              |           |                 |           |
|-------|----------------|----------------|-----------|--------------|-----------|-----------------|-----------|
|       |                | Negligible DIF |           | Moderate DIF |           | Substantial DIF |           |
|       |                | Focal          | Reference | Focal        | Reference | Focal           | Reference |
| 3     | Male-Female    | 27             | 19        | 1            | --        | --              | --        |
|       | White-Black    | 23             | 24        | --           | --        | --              | --        |
|       | White-Hispanic | 24             | 23        | --           | --        | --              | --        |
| 4     | Male-Female    | 22             | 25        | --           | 1         | --              | --        |
|       | White-Black    | 24             | 24        | --           | --        | --              | --        |
|       | White-Hispanic | 29             | 19        | --           | --        | --              | --        |
| 5     | Male-Female    | 27             | 21        | --           | --        | --              | --        |
|       | White-Black    | 28             | 20        | --           | --        | --              | --        |
|       | White-Hispanic | 28             | 20        | --           | --        | --              | --        |
| 6     | Male-Female    | 20             | 27        | --           | 1         | --              | --        |
|       | White-Black    | 25             | 23        | --           | --        | --              | --        |
|       | White-Hispanic | 25             | 23        | --           | --        | --              | --        |
| 7     | Male-Female    | 26             | 20        | --           | 2         | --              | --        |
|       | White-Black    | 26             | 22        | --           | --        | --              | --        |
|       | White-Hispanic | 27             | 21        | --           | --        | --              | --        |
| 8     | Male-Female    | 20             | 26        | 1            | 1         | --              | --        |
|       | White-Black    | 28             | 20        | --           | --        | --              | --        |
|       | White-Hispanic | 25             | 23        | --           | --        | --              | --        |

Note: 'Focal' indicates DIF in favor of Female, Black, or Hispanic students; 'Reference' indicates DIF in favor of Male or White students.

## Science

| Grade | Subgroups      | DIF Categories |           |              |           |                 |           |
|-------|----------------|----------------|-----------|--------------|-----------|-----------------|-----------|
|       |                | Negligible DIF |           | Moderate DIF |           | Substantial DIF |           |
|       |                | Focal          | Reference | Focal        | Reference | Focal           | Reference |
| 4     | Male-Female    | 23             | 33        | --           | --        | --              | --        |
|       | White-Black    | 28             | 27        | --           | --        | --              | 1         |
|       | White-Hispanic | 27             | 29        | --           | --        | --              | --        |
| 7     | Male-Female    | 16             | 39        | 1            | --        | --              | --        |
|       | White-Black    | 27             | 29        | --           | --        | --              | --        |
|       | White-Hispanic | 31             | 25        | --           | --        | --              | --        |
| 11    | Male-Female    | 28             | 45        | 2            | 3         | 1               | 1         |
|       | White-Black    | 47             | 32        | --           | 1         | --              | --        |
|       | White-Hispanic | 41             | 39        | --           | --        | --              | --        |

Note: 'Focal' indicates DIF in favor of Female, Black, or Hispanic students; 'Reference' indicates DIF in favor of Male or White students.

## Social Studies

| Grade | Subgroups      | DIF Categories |           |              |           |                 |           |
|-------|----------------|----------------|-----------|--------------|-----------|-----------------|-----------|
|       |                | Negligible DIF |           | Moderate DIF |           | Substantial DIF |           |
|       |                | Focal          | Reference | Focal        | Reference | Focal           | Reference |
| 5     | Male-Female    | 21             | 26        | --           | --        | --              | --        |
|       | White-Black    | 27             | 20        | --           | --        | --              | --        |
|       | White-Hispanic | 24             | 22        | --           | 1         | --              | --        |
| 8     | Male-Female    | 17             | 23        | 1            | 4         | 2               | --        |
|       | White-Black    | 24             | 23        | --           | --        | --              | --        |
|       | White-Hispanic | 20             | 27        | --           | --        | --              | --        |

Note: 'Focal' indicates DIF in favor of Female, Black, or Hispanic students; 'Reference' indicates DIF in favor of Male or White students.

## Appendix F. Item Response Theory Parameter Summary

### Operational

|         |       |              | Item Difficulty |         |        |        |        | Infit |                |                |      | Outfit |                 |                 |      |
|---------|-------|--------------|-----------------|---------|--------|--------|--------|-------|----------------|----------------|------|--------|-----------------|-----------------|------|
| Subject | Grade | No. of Items | Min.            | P25     | Median | P75    | Max.   | <0.5  | 0.5<=Infit<1.5 | 1.5<=Infit<2.0 | >2.0 | <0.5   | 0.5<=Outfit<1.5 | 1.5<=Outfit<2.0 | >2.0 |
| Science | 11    | 80           | -1.5945         | -0.5515 | 0.0153 | 0.5416 | 1.6457 | -     | 80             | -              | -    | -      | 78              | 2               | -    |

## Appendix G. Raw Score to Scale Score Tables

### Grade 3 Reading

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 131         | 17              |
| 2         | 143         | 12              |
| 3         | 150         | 10              |
| 4         | 156         | 9               |
| 5         | 160         | 8               |
| 6         | 164         | 8               |
| 7         | 167         | 7               |
| 8         | 170         | 7               |
| 9         | 173         | 7               |
| 10        | 175         | 6               |
| 11        | 178         | 6               |
| 12        | 180         | 6               |
| 13        | 182         | 6               |
| 14        | 184         | 6               |
| 15        | 187         | 6               |
| 16        | 189         | 6               |
| 17        | 190         | 6               |
| 18        | 192         | 6               |
| 19        | 194         | 6               |
| 20        | 196         | 6               |
| 21        | 198         | 6               |
| 22        | 200         | 6               |
| 23        | 202         | 6               |
| 24        | 204         | 6               |
| 25        | 206         | 6               |
| 26        | 208         | 6               |
| 27        | 210         | 6               |
| 28        | 213         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 29        | 215         | 6               |
| 30        | 217         | 6               |
| 31        | 220         | 7               |
| 32        | 223         | 7               |
| 33        | 226         | 7               |
| 34        | 229         | 8               |
| 35        | 233         | 8               |
| 36        | 238         | 9               |
| 37        | 243         | 10              |
| 38        | 251         | 12              |
| 39        | 263         | 17              |
| 40        | 287         | 34              |

### Grade 3 Reading- Braille

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 131         | 17              |
| 2         | 143         | 12              |
| 3         | 151         | 10              |
| 4         | 156         | 9               |
| 5         | 161         | 8               |
| 6         | 164         | 8               |
| 7         | 168         | 7               |
| 8         | 171         | 7               |
| 9         | 173         | 7               |
| 10        | 176         | 6               |
| 11        | 178         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 12        | 181         | 6               |
| 13        | 183         | 6               |
| 14        | 185         | 6               |
| 15        | 187         | 6               |
| 16        | 189         | 6               |
| 17        | 191         | 6               |
| 18        | 193         | 6               |
| 19        | 195         | 6               |
| 20        | 198         | 6               |
| 21        | 200         | 6               |
| 22        | 202         | 6               |
| 23        | 204         | 6               |
| 24        | 206         | 6               |
| 25        | 208         | 6               |
| 26        | 210         | 6               |
| 27        | 213         | 6               |
| 28        | 215         | 7               |
| 29        | 218         | 7               |
| 30        | 221         | 7               |
| 31        | 224         | 7               |
| 32        | 227         | 8               |
| 33        | 231         | 8               |
| 34        | 236         | 9               |
| 35        | 242         | 10              |
| 36        | 249         | 12              |
| 37        | 262         | 17              |
| 38        | 286         | 34              |

**Grade 4 Reading**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 137         | 17              |
| 2         | 149         | 12              |
| 3         | 157         | 10              |
| 4         | 163         | 9               |
| 5         | 167         | 8               |
| 6         | 171         | 8               |
| 7         | 175         | 7               |
| 8         | 178         | 7               |
| 9         | 180         | 7               |
| 10        | 183         | 6               |
| 11        | 185         | 6               |
| 12        | 188         | 6               |
| 13        | 190         | 6               |
| 14        | 192         | 6               |
| 15        | 194         | 6               |
| 16        | 196         | 6               |
| 17        | 198         | 6               |
| 18        | 200         | 5               |
| 19        | 201         | 5               |
| 20        | 203         | 5               |
| 21        | 205         | 5               |
| 22        | 207         | 5               |
| 23        | 208         | 5               |
| 24        | 210         | 5               |
| 25        | 212         | 5               |
| 26        | 214         | 5               |
| 27        | 215         | 5               |
| 28        | 217         | 6               |
| 29        | 219         | 6               |
| 30        | 221         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 31        | 223         | 6               |
| 32        | 225         | 6               |
| 33        | 227         | 6               |
| 34        | 230         | 6               |
| 35        | 232         | 7               |
| 36        | 235         | 7               |
| 37        | 238         | 7               |
| 38        | 242         | 8               |
| 39        | 246         | 9               |
| 40        | 251         | 10              |
| 41        | 258         | 12              |
| 42        | 270         | 17              |
| 43        | 294         | 33              |

**Grade 4 Reading-Braille**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 137         | 17              |
| 2         | 150         | 12              |
| 3         | 157         | 10              |
| 4         | 163         | 9               |
| 5         | 167         | 8               |
| 6         | 171         | 8               |
| 7         | 175         | 7               |
| 8         | 178         | 7               |
| 9         | 181         | 7               |
| 10        | 183         | 6               |
| 11        | 186         | 6               |
| 12        | 188         | 6               |
| 13        | 190         | 6               |
| 14        | 192         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 15        | 194         | 6               |
| 16        | 196         | 6               |
| 17        | 198         | 6               |
| 18        | 200         | 6               |
| 19        | 202         | 5               |
| 20        | 204         | 5               |
| 21        | 205         | 5               |
| 22        | 207         | 5               |
| 23        | 209         | 5               |
| 24        | 211         | 5               |
| 25        | 213         | 5               |
| 26        | 214         | 6               |
| 27        | 216         | 6               |
| 28        | 218         | 6               |
| 29        | 220         | 6               |
| 30        | 222         | 6               |
| 31        | 224         | 6               |
| 32        | 226         | 6               |
| 33        | 229         | 6               |
| 34        | 231         | 7               |
| 35        | 234         | 7               |
| 36        | 237         | 7               |
| 37        | 241         | 8               |
| 38        | 245         | 9               |
| 39        | 250         | 10              |
| 40        | 258         | 12              |
| 41        | 270         | 17              |
| 42        | 293         | 33              |

**Grade 5 Reading**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 1         | 134         | 17              |
| 2         | 146         | 12              |
| 3         | 154         | 10              |
| 4         | 160         | 9               |
| 5         | 164         | 8               |
| 6         | 168         | 8               |
| 7         | 172         | 7               |
| 8         | 175         | 7               |
| 9         | 178         | 7               |
| 10        | 180         | 7               |
| 11        | 183         | 6               |
| 12        | 185         | 6               |
| 13        | 187         | 6               |
| 14        | 189         | 6               |
| 15        | 191         | 6               |
| 16        | 193         | 6               |
| 17        | 195         | 6               |
| 18        | 197         | 6               |
| 19        | 199         | 6               |
| 20        | 201         | 6               |
| 21        | 203         | 6               |
| 22        | 205         | 6               |
| 23        | 207         | 6               |
| 24        | 208         | 6               |
| 25        | 210         | 6               |
| 26        | 212         | 6               |
| 27        | 214         | 6               |
| 28        | 216         | 6               |
| 29        | 218         | 6               |
| 30        | 220         | 6               |
| 31        | 222         | 6               |
| 32        | 225         | 6               |
| 33        | 227         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 34        | 230         | 7               |
| 35        | 232         | 7               |
| 36        | 235         | 7               |
| 37        | 239         | 8               |
| 38        | 242         | 8               |
| 39        | 247         | 9               |
| 40        | 252         | 10              |
| 41        | 259         | 12              |
| 42        | 271         | 17              |
| 43        | 294         | 33              |

**Grade 6 Reading**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 139         | 17              |
| 2         | 151         | 12              |
| 3         | 159         | 10              |
| 4         | 164         | 9               |
| 5         | 168         | 8               |
| 6         | 172         | 7               |
| 7         | 175         | 7               |
| 8         | 178         | 7               |
| 9         | 180         | 6               |
| 10        | 182         | 6               |
| 11        | 185         | 6               |
| 12        | 187         | 6               |
| 13        | 188         | 6               |
| 14        | 190         | 5               |
| 15        | 192         | 5               |
| 16        | 194         | 5               |
| 17        | 195         | 5               |
| 18        | 197         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 19        | 198         | 5               |
| 20        | 200         | 5               |
| 21        | 201         | 5               |
| 22        | 203         | 5               |
| 23        | 204         | 5               |
| 24        | 206         | 5               |
| 25        | 207         | 5               |
| 26        | 209         | 5               |
| 27        | 210         | 5               |
| 28        | 212         | 5               |
| 29        | 213         | 5               |
| 30        | 214         | 5               |
| 31        | 216         | 5               |
| 32        | 217         | 5               |
| 33        | 219         | 5               |
| 34        | 220         | 5               |
| 35        | 222         | 5               |
| 36        | 224         | 5               |
| 37        | 226         | 5               |
| 38        | 227         | 6               |
| 39        | 229         | 6               |
| 40        | 231         | 6               |
| 41        | 233         | 6               |
| 42        | 236         | 6               |
| 43        | 238         | 7               |
| 44        | 241         | 7               |
| 45        | 245         | 8               |
| 46        | 249         | 9               |
| 47        | 254         | 10              |
| 48        | 261         | 12              |
| 49        | 273         | 17              |
| 50        | 296         | 33              |

**Grade 6 Reading–  
Braille**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 140         | 17              |
| 2         | 152         | 12              |
| 3         | 159         | 10              |
| 4         | 164         | 9               |
| 5         | 168         | 8               |
| 6         | 172         | 7               |
| 7         | 175         | 7               |
| 8         | 178         | 7               |
| 9         | 180         | 6               |
| 10        | 183         | 6               |
| 11        | 185         | 6               |
| 12        | 187         | 6               |
| 13        | 189         | 6               |
| 14        | 191         | 5               |
| 15        | 192         | 5               |
| 16        | 194         | 5               |
| 17        | 196         | 5               |
| 18        | 197         | 5               |
| 19        | 199         | 5               |
| 20        | 200         | 5               |
| 21        | 202         | 5               |
| 22        | 203         | 5               |
| 23        | 205         | 5               |
| 24        | 206         | 5               |
| 25        | 208         | 5               |
| 26        | 209         | 5               |
| 27        | 211         | 5               |
| 28        | 212         | 5               |
| 29        | 214         | 5               |
| 30        | 215         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 31        | 217         | 5               |
| 32        | 218         | 5               |
| 33        | 220         | 5               |
| 34        | 222         | 5               |
| 35        | 223         | 5               |
| 36        | 225         | 5               |
| 37        | 227         | 6               |
| 38        | 229         | 6               |
| 39        | 231         | 6               |
| 40        | 233         | 6               |
| 41        | 235         | 6               |
| 42        | 238         | 7               |
| 43        | 241         | 7               |
| 44        | 244         | 8               |
| 45        | 248         | 9               |
| 46        | 253         | 10              |
| 47        | 260         | 12              |
| 48        | 272         | 17              |
| 49        | 296         | 33              |

**Grade 7 Reading**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 135         | 17              |
| 2         | 147         | 12              |
| 3         | 154         | 10              |
| 4         | 160         | 9               |
| 5         | 164         | 8               |
| 6         | 167         | 8               |
| 7         | 171         | 7               |
| 8         | 174         | 7               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 9         | 176         | 6               |
| 10        | 178         | 6               |
| 11        | 181         | 6               |
| 12        | 183         | 6               |
| 13        | 185         | 6               |
| 14        | 187         | 6               |
| 15        | 188         | 5               |
| 16        | 190         | 5               |
| 17        | 192         | 5               |
| 18        | 193         | 5               |
| 19        | 195         | 5               |
| 20        | 197         | 5               |
| 21        | 198         | 5               |
| 22        | 200         | 5               |
| 23        | 201         | 5               |
| 24        | 203         | 5               |
| 25        | 204         | 5               |
| 26        | 206         | 5               |
| 27        | 207         | 5               |
| 28        | 209         | 5               |
| 29        | 211         | 5               |
| 30        | 212         | 5               |
| 31        | 214         | 5               |
| 32        | 215         | 5               |
| 33        | 217         | 5               |
| 34        | 219         | 5               |
| 35        | 221         | 6               |
| 36        | 223         | 6               |
| 37        | 225         | 6               |
| 38        | 227         | 6               |
| 39        | 229         | 6               |
| 40        | 231         | 6               |
| 41        | 234         | 7               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 42        | 236         | 7               |
| 43        | 239         | 7               |
| 44        | 242         | 8               |
| 45        | 246         | 8               |
| 46        | 251         | 9               |
| 47        | 256         | 10              |
| 48        | 264         | 12              |
| 49        | 276         | 17              |
| 50        | 300         | 34              |

**Grade 7 Reading-  
Braille**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 135         | 17              |
| 2         | 147         | 12              |
| 3         | 154         | 10              |
| 4         | 160         | 9               |
| 5         | 164         | 8               |
| 6         | 168         | 8               |
| 7         | 171         | 7               |
| 8         | 174         | 7               |
| 9         | 176         | 6               |
| 10        | 179         | 6               |
| 11        | 181         | 6               |
| 12        | 183         | 6               |
| 13        | 185         | 6               |
| 14        | 187         | 6               |
| 15        | 189         | 5               |
| 16        | 190         | 5               |
| 17        | 192         | 5               |
| 18        | 194         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 19        | 195         | 5               |
| 20        | 197         | 5               |
| 21        | 199         | 5               |
| 22        | 200         | 5               |
| 23        | 202         | 5               |
| 24        | 203         | 5               |
| 25        | 205         | 5               |
| 26        | 206         | 5               |
| 27        | 208         | 5               |
| 28        | 210         | 5               |
| 29        | 211         | 5               |
| 30        | 213         | 5               |
| 31        | 215         | 5               |
| 32        | 216         | 5               |
| 33        | 218         | 5               |
| 34        | 220         | 6               |
| 35        | 222         | 6               |
| 36        | 224         | 6               |
| 37        | 226         | 6               |
| 38        | 228         | 6               |
| 39        | 230         | 6               |
| 40        | 233         | 7               |
| 41        | 236         | 7               |
| 42        | 238         | 7               |
| 43        | 242         | 8               |
| 44        | 246         | 8               |
| 45        | 250         | 9               |
| 46        | 256         | 10              |
| 47        | 263         | 12              |
| 48        | 276         | 17              |
| 49        | 299         | 34              |

**Grade 8 Reading**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 136         | 17              |
| 2         | 148         | 12              |
| 3         | 155         | 10              |
| 4         | 161         | 9               |
| 5         | 165         | 8               |
| 6         | 169         | 8               |
| 7         | 172         | 7               |
| 8         | 175         | 7               |
| 9         | 178         | 7               |
| 10        | 180         | 6               |
| 11        | 183         | 6               |
| 12        | 185         | 6               |
| 13        | 187         | 6               |
| 14        | 189         | 6               |
| 15        | 191         | 6               |
| 16        | 193         | 5               |
| 17        | 194         | 5               |
| 18        | 196         | 5               |
| 19        | 198         | 5               |
| 20        | 199         | 5               |
| 21        | 201         | 5               |
| 22        | 202         | 5               |
| 23        | 204         | 5               |
| 24        | 205         | 5               |
| 25        | 207         | 5               |
| 26        | 209         | 5               |
| 27        | 210         | 5               |
| 28        | 212         | 5               |
| 29        | 213         | 5               |
| 30        | 215         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 31        | 216         | 5               |
| 32        | 218         | 5               |
| 33        | 220         | 5               |
| 34        | 221         | 5               |
| 35        | 223         | 5               |
| 36        | 225         | 6               |
| 37        | 227         | 6               |
| 38        | 229         | 6               |
| 39        | 231         | 6               |
| 40        | 233         | 6               |
| 41        | 236         | 6               |
| 42        | 238         | 7               |
| 43        | 241         | 7               |
| 44        | 244         | 8               |
| 45        | 248         | 8               |
| 46        | 252         | 9               |
| 47        | 258         | 10              |
| 48        | 265         | 12              |
| 49        | 277         | 17              |
| 50        | 300         | 33              |

**Grade 3 Mathematics**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 126         | 17              |
| 2         | 138         | 12              |
| 3         | 145         | 10              |
| 4         | 151         | 9               |
| 5         | 155         | 8               |
| 6         | 159         | 8               |
| 7         | 162         | 7               |
| 8         | 165         | 7               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 9         | 167         | 6               |
| 10        | 170         | 6               |
| 11        | 172         | 6               |
| 12        | 174         | 6               |
| 13        | 176         | 6               |
| 14        | 178         | 6               |
| 15        | 180         | 6               |
| 16        | 182         | 5               |
| 17        | 184         | 5               |
| 18        | 185         | 5               |
| 19        | 187         | 5               |
| 20        | 189         | 5               |
| 21        | 190         | 5               |
| 22        | 192         | 5               |
| 23        | 193         | 5               |
| 24        | 195         | 5               |
| 25        | 196         | 5               |
| 26        | 198         | 5               |
| 27        | 199         | 5               |
| 28        | 201         | 5               |
| 29        | 203         | 5               |
| 30        | 204         | 5               |
| 31        | 206         | 5               |
| 32        | 207         | 5               |
| 33        | 209         | 5               |
| 34        | 211         | 5               |
| 35        | 213         | 5               |
| 36        | 214         | 6               |
| 37        | 216         | 6               |
| 38        | 218         | 6               |
| 39        | 221         | 6               |
| 40        | 223         | 6               |
| 41        | 225         | 7               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 42        | 228         | 7               |
| 43        | 231         | 7               |
| 44        | 235         | 8               |
| 45        | 238         | 8               |
| 46        | 243         | 9               |
| 47        | 249         | 11              |
| 48        | 258         | 13              |
| 49        | 271         | 18              |
| 50        | 296         | 34              |

**Grade 4 Mathematics**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 34              |
| 1         | 130         | 17              |
| 2         | 142         | 12              |
| 3         | 150         | 10              |
| 4         | 155         | 9               |
| 5         | 160         | 8               |
| 6         | 163         | 8               |
| 7         | 167         | 7               |
| 8         | 170         | 7               |
| 9         | 172         | 7               |
| 10        | 175         | 6               |
| 11        | 177         | 6               |
| 12        | 179         | 6               |
| 13        | 181         | 6               |
| 14        | 183         | 6               |
| 15        | 185         | 6               |
| 16        | 187         | 5               |
| 17        | 189         | 5               |
| 18        | 190         | 5               |
| 19        | 192         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 20        | 193         | 5               |
| 21        | 195         | 5               |
| 22        | 197         | 5               |
| 23        | 198         | 5               |
| 24        | 200         | 5               |
| 25        | 201         | 5               |
| 26        | 203         | 5               |
| 27        | 204         | 5               |
| 28        | 206         | 5               |
| 29        | 207         | 5               |
| 30        | 209         | 5               |
| 31        | 210         | 5               |
| 32        | 212         | 5               |
| 33        | 213         | 5               |
| 34        | 215         | 5               |
| 35        | 216         | 5               |
| 36        | 218         | 5               |
| 37        | 219         | 5               |
| 38        | 221         | 5               |
| 39        | 222         | 5               |
| 40        | 224         | 5               |
| 41        | 226         | 5               |
| 42        | 227         | 5               |
| 43        | 229         | 6               |
| 44        | 231         | 6               |
| 45        | 233         | 6               |
| 46        | 235         | 6               |
| 47        | 238         | 7               |
| 48        | 241         | 7               |
| 49        | 244         | 8               |
| 50        | 248         | 9               |
| 51        | 253         | 10              |
| 52        | 260         | 12              |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 53        | 272         | 17              |
| 54        | 295         | 33              |

### Grade 5 Mathematics

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 131         | 17              |
| 2         | 144         | 12              |
| 3         | 151         | 10              |
| 4         | 156         | 9               |
| 5         | 161         | 8               |
| 6         | 164         | 8               |
| 7         | 168         | 7               |
| 8         | 171         | 7               |
| 9         | 173         | 6               |
| 10        | 176         | 6               |
| 11        | 178         | 6               |
| 12        | 180         | 6               |
| 13        | 182         | 6               |
| 14        | 184         | 6               |
| 15        | 186         | 6               |
| 16        | 188         | 5               |
| 17        | 189         | 5               |
| 18        | 191         | 5               |
| 19        | 193         | 5               |
| 20        | 194         | 5               |
| 21        | 196         | 5               |
| 22        | 198         | 5               |
| 23        | 199         | 5               |
| 24        | 201         | 5               |
| 25        | 202         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 26        | 204         | 5               |
| 27        | 205         | 5               |
| 28        | 207         | 5               |
| 29        | 208         | 5               |
| 30        | 210         | 5               |
| 31        | 212         | 5               |
| 32        | 213         | 5               |
| 33        | 215         | 5               |
| 34        | 216         | 5               |
| 35        | 218         | 5               |
| 36        | 220         | 5               |
| 37        | 221         | 5               |
| 38        | 223         | 5               |
| 39        | 225         | 6               |
| 40        | 227         | 6               |
| 41        | 229         | 6               |
| 42        | 231         | 6               |
| 43        | 233         | 6               |
| 44        | 235         | 6               |
| 45        | 237         | 6               |
| 46        | 240         | 7               |
| 47        | 243         | 7               |
| 48        | 246         | 7               |
| 49        | 250         | 8               |
| 50        | 254         | 9               |
| 51        | 259         | 10              |
| 52        | 266         | 12              |
| 53        | 278         | 17              |
| 54        | 300         | 33              |

**Grade 5 Mathematics-  
Braille**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 131         | 17              |
| 2         | 144         | 12              |
| 3         | 151         | 10              |
| 4         | 156         | 9               |
| 5         | 161         | 8               |
| 6         | 165         | 8               |
| 7         | 168         | 7               |
| 8         | 171         | 7               |
| 9         | 173         | 6               |
| 10        | 176         | 6               |
| 11        | 178         | 6               |
| 12        | 180         | 6               |
| 13        | 182         | 6               |
| 14        | 184         | 6               |
| 15        | 186         | 6               |
| 16        | 188         | 5               |
| 17        | 190         | 5               |
| 18        | 191         | 5               |
| 19        | 193         | 5               |
| 20        | 195         | 5               |
| 21        | 196         | 5               |
| 22        | 198         | 5               |
| 23        | 199         | 5               |
| 24        | 201         | 5               |
| 25        | 203         | 5               |
| 26        | 204         | 5               |
| 27        | 206         | 5               |
| 28        | 207         | 5               |
| 29        | 209         | 5               |
| 30        | 210         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 31        | 212         | 5               |
| 32        | 214         | 5               |
| 33        | 215         | 5               |
| 34        | 217         | 5               |
| 35        | 219         | 5               |
| 36        | 220         | 5               |
| 37        | 222         | 5               |
| 38        | 224         | 6               |
| 39        | 226         | 6               |
| 40        | 228         | 6               |
| 41        | 230         | 6               |
| 42        | 232         | 6               |
| 43        | 234         | 6               |
| 44        | 236         | 6               |
| 45        | 239         | 7               |
| 46        | 242         | 7               |
| 47        | 245         | 7               |
| 48        | 248         | 8               |
| 49        | 253         | 9               |
| 50        | 258         | 10              |
| 51        | 265         | 12              |
| 52        | 277         | 17              |
| 53        | 300         | 33              |

**Grade 6 Mathematics**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 137         | 17              |
| 2         | 149         | 12              |
| 3         | 156         | 10              |
| 4         | 162         | 9               |
| 5         | 166         | 8               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 6         | 170         | 8               |
| 7         | 173         | 7               |
| 8         | 176         | 7               |
| 9         | 178         | 6               |
| 10        | 181         | 6               |
| 11        | 183         | 6               |
| 12        | 185         | 6               |
| 13        | 187         | 6               |
| 14        | 189         | 5               |
| 15        | 191         | 5               |
| 16        | 192         | 5               |
| 17        | 194         | 5               |
| 18        | 195         | 5               |
| 19        | 197         | 5               |
| 20        | 199         | 5               |
| 21        | 200         | 5               |
| 22        | 202         | 5               |
| 23        | 203         | 5               |
| 24        | 204         | 5               |
| 25        | 206         | 5               |
| 26        | 207         | 5               |
| 27        | 209         | 5               |
| 28        | 210         | 5               |
| 29        | 211         | 5               |
| 30        | 213         | 5               |
| 31        | 214         | 5               |
| 32        | 216         | 5               |
| 33        | 217         | 5               |
| 34        | 219         | 5               |
| 35        | 220         | 5               |
| 36        | 222         | 5               |
| 37        | 223         | 5               |
| 38        | 225         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 39        | 226         | 5               |
| 40        | 228         | 5               |
| 41        | 230         | 5               |
| 42        | 232         | 6               |
| 43        | 234         | 6               |
| 44        | 236         | 6               |
| 45        | 238         | 6               |
| 46        | 240         | 7               |
| 47        | 243         | 7               |
| 48        | 246         | 7               |
| 49        | 250         | 8               |
| 50        | 254         | 9               |
| 51        | 259         | 10              |
| 52        | 267         | 12              |
| 53        | 279         | 17              |
| 54        | 300         | 33              |

### Grade 7 Mathematics

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 137         | 17              |
| 2         | 149         | 12              |
| 3         | 157         | 10              |
| 4         | 162         | 9               |
| 5         | 167         | 8               |
| 6         | 170         | 8               |
| 7         | 173         | 7               |
| 8         | 176         | 7               |
| 9         | 179         | 6               |
| 10        | 181         | 6               |
| 11        | 183         | 6               |
| 12        | 185         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 13        | 187         | 6               |
| 14        | 189         | 6               |
| 15        | 191         | 5               |
| 16        | 193         | 5               |
| 17        | 194         | 5               |
| 18        | 196         | 5               |
| 19        | 198         | 5               |
| 20        | 199         | 5               |
| 21        | 201         | 5               |
| 22        | 202         | 5               |
| 23        | 203         | 5               |
| 24        | 205         | 5               |
| 25        | 206         | 5               |
| 26        | 208         | 5               |
| 27        | 209         | 5               |
| 28        | 210         | 5               |
| 29        | 212         | 5               |
| 30        | 213         | 5               |
| 31        | 214         | 5               |
| 32        | 216         | 5               |
| 33        | 217         | 5               |
| 34        | 219         | 5               |
| 35        | 220         | 5               |
| 36        | 221         | 5               |
| 37        | 223         | 5               |
| 38        | 225         | 5               |
| 39        | 226         | 5               |
| 40        | 228         | 5               |
| 41        | 230         | 6               |
| 42        | 231         | 6               |
| 43        | 233         | 6               |
| 44        | 236         | 6               |
| 45        | 238         | 6               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 46        | 240         | 7               |
| 47        | 243         | 7               |
| 48        | 246         | 7               |
| 49        | 250         | 8               |
| 50        | 254         | 9               |
| 51        | 259         | 10              |
| 52        | 267         | 12              |
| 53        | 279         | 17              |
| 54        | 300         | 34              |

### Grade 8 Mathematics

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 136         | 17              |
| 2         | 148         | 12              |
| 3         | 156         | 10              |
| 4         | 161         | 9               |
| 5         | 165         | 8               |
| 6         | 169         | 8               |
| 7         | 172         | 7               |
| 8         | 175         | 7               |
| 9         | 177         | 6               |
| 10        | 180         | 6               |
| 11        | 182         | 6               |
| 12        | 184         | 6               |
| 13        | 186         | 6               |
| 14        | 188         | 5               |
| 15        | 190         | 5               |
| 16        | 191         | 5               |
| 17        | 193         | 5               |
| 18        | 195         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 19        | 196         | 5               |
| 20        | 198         | 5               |
| 21        | 199         | 5               |
| 22        | 200         | 5               |
| 23        | 202         | 5               |
| 24        | 203         | 5               |
| 25        | 205         | 5               |
| 26        | 206         | 5               |
| 27        | 207         | 5               |
| 28        | 209         | 5               |
| 29        | 210         | 5               |
| 30        | 211         | 5               |
| 31        | 213         | 5               |
| 32        | 214         | 5               |
| 33        | 216         | 5               |
| 34        | 217         | 5               |
| 35        | 218         | 5               |
| 36        | 220         | 5               |
| 37        | 221         | 5               |
| 38        | 223         | 5               |
| 39        | 225         | 5               |
| 40        | 226         | 5               |
| 41        | 228         | 5               |
| 42        | 230         | 6               |
| 43        | 232         | 6               |
| 44        | 234         | 6               |
| 45        | 236         | 6               |
| 46        | 238         | 6               |
| 47        | 241         | 7               |
| 48        | 244         | 7               |
| 49        | 247         | 8               |
| 50        | 251         | 9               |
| 51        | 256         | 10              |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 52        | 263         | 12              |
| 53        | 275         | 17              |
| 54        | 298         | 33              |

**Grade 4 Science**

| <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> | <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> | <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|------------------|--------------------|------------------------|-------------|------------------|--------------------|------------------------|-------------|------------------|--------------------|------------------------|
| 01          | 0                | 100                | 34                     | 01          | 32               | 221                | 6                      | 02          | 15               | 197                | 5                      |
| 01          | 1                | 134                | 17                     | 01          | 33               | 222                | 6                      | 02          | 16               | 199                | 5                      |
| 01          | 2                | 147                | 12                     | 01          | 34               | 224                | 6                      | 02          | 17               | 201                | 5                      |
| 01          | 3                | 154                | 10                     | 01          | 35               | 226                | 6                      | 02          | 18               | 202                | 5                      |
| 01          | 4                | 160                | 9                      | 01          | 36               | 228                | 6                      | 02          | 19               | 204                | 5                      |
| 01          | 5                | 164                | 8                      | 01          | 37               | 231                | 6                      | 02          | 20               | 205                | 5                      |
| 01          | 6                | 168                | 8                      | 01          | 38               | 233                | 6                      | 02          | 21               | 207                | 5                      |
| 01          | 7                | 171                | 7                      | 01          | 39               | 235                | 6                      | 02          | 22               | 209                | 5                      |
| 01          | 8                | 174                | 7                      | 01          | 40               | 238                | 7                      | 02          | 23               | 210                | 5                      |
| 01          | 9                | 177                | 7                      | 01          | 41               | 241                | 7                      | 02          | 24               | 212                | 5                      |
| 01          | 10               | 180                | 6                      | 01          | 42               | 244                | 7                      | 02          | 25               | 213                | 5                      |
| 01          | 11               | 182                | 6                      | 01          | 43               | 247                | 8                      | 02          | 26               | 215                | 5                      |
| 01          | 12               | 184                | 6                      | 01          | 44               | 251                | 9                      | 02          | 27               | 216                | 5                      |
| 01          | 13               | 187                | 6                      | 01          | 45               | 257                | 10                     | 02          | 28               | 218                | 5                      |
| 01          | 14               | 189                | 6                      | 01          | 46               | 264                | 12                     | 02          | 29               | 219                | 5                      |
| 01          | 15               | 191                | 6                      | 01          | 47               | 275                | 17                     | 02          | 30               | 221                | 5                      |
| 01          | 16               | 192                | 6                      | 01          | 48               | 299                | 33                     | 02          | 31               | 223                | 5                      |
| 01          | 17               | 194                | 6                      | 02          | 0                | 100                | 34                     | 02          | 32               | 224                | 5                      |
| 01          | 18               | 196                | 5                      | 02          | 1                | 143                | 17                     | 02          | 33               | 226                | 5                      |
| 01          | 19               | 198                | 5                      | 02          | 2                | 155                | 12                     | 02          | 34               | 228                | 6                      |
| 01          | 20               | 200                | 5                      | 02          | 3                | 163                | 10                     | 02          | 35               | 230                | 6                      |
| 01          | 21               | 201                | 5                      | 02          | 4                | 168                | 9                      | 02          | 36               | 232                | 6                      |
| 01          | 22               | 203                | 5                      | 02          | 5                | 172                | 8                      | 02          | 37               | 234                | 6                      |
| 01          | 23               | 205                | 5                      | 02          | 6                | 176                | 8                      | 02          | 38               | 236                | 6                      |
| 01          | 24               | 207                | 5                      | 02          | 7                | 179                | 7                      | 02          | 39               | 238                | 7                      |
| 01          | 25               | 208                | 5                      | 02          | 8                | 182                | 7                      | 02          | 40               | 241                | 7                      |
| 01          | 26               | 210                | 5                      | 02          | 9                | 185                | 6                      | 02          | 41               | 244                | 7                      |
| 01          | 27               | 212                | 5                      | 02          | 10               | 187                | 6                      | 02          | 42               | 248                | 8                      |
| 01          | 28               | 213                | 5                      | 02          | 11               | 189                | 6                      | 02          | 43               | 252                | 9                      |
| 01          | 29               | 215                | 5                      | 02          | 12               | 192                | 6                      | 02          | 44               | 257                | 10                     |
| 01          | 30               | 217                | 5                      | 02          | 13               | 194                | 6                      | 02          | 45               | 265                | 12                     |
| 01          | 31               | 219                | 5                      | 02          | 14               | 195                | 6                      | 02          | 46               | 277                | 17                     |

| Form | Raw Score | Scale Score | Conditional SEM | Form | Raw Score | Scale Score | Conditional SEM | Form | Raw Score | Scale Score | Conditional SEM |
|------|-----------|-------------|-----------------|------|-----------|-------------|-----------------|------|-----------|-------------|-----------------|
| 02   | 47        | 300         | 34              | 03   | 32        | 221         | 6               | 04   | 16        | 199         | 5               |
| 03   | 0         | 100         | 34              | 03   | 33        | 222         | 6               | 04   | 17        | 201         | 5               |
| 03   | 1         | 134         | 17              | 03   | 34        | 224         | 6               | 04   | 18        | 202         | 5               |
| 03   | 2         | 147         | 12              | 03   | 35        | 226         | 6               | 04   | 19        | 204         | 5               |
| 03   | 3         | 154         | 10              | 03   | 36        | 228         | 6               | 04   | 20        | 205         | 5               |
| 03   | 4         | 160         | 9               | 03   | 37        | 231         | 6               | 04   | 21        | 207         | 5               |
| 03   | 5         | 164         | 8               | 03   | 38        | 233         | 6               | 04   | 22        | 209         | 5               |
| 03   | 6         | 168         | 8               | 03   | 39        | 235         | 6               | 04   | 23        | 210         | 5               |
| 03   | 7         | 171         | 7               | 03   | 40        | 238         | 7               | 04   | 24        | 212         | 5               |
| 03   | 8         | 174         | 7               | 03   | 41        | 241         | 7               | 04   | 25        | 213         | 5               |
| 03   | 9         | 177         | 7               | 03   | 42        | 244         | 7               | 04   | 26        | 215         | 5               |
| 03   | 10        | 180         | 6               | 03   | 43        | 247         | 8               | 04   | 27        | 216         | 5               |
| 03   | 11        | 182         | 6               | 03   | 44        | 251         | 9               | 04   | 28        | 218         | 5               |
| 03   | 12        | 184         | 6               | 03   | 45        | 257         | 10              | 04   | 29        | 219         | 5               |
| 03   | 13        | 187         | 6               | 03   | 46        | 264         | 12              | 04   | 30        | 221         | 5               |
| 03   | 14        | 189         | 6               | 03   | 47        | 275         | 17              | 04   | 31        | 223         | 5               |
| 03   | 15        | 191         | 6               | 03   | 48        | 299         | 33              | 04   | 32        | 224         | 5               |
| 03   | 16        | 192         | 6               | 04   | 0         | 100         | 34              | 04   | 33        | 226         | 5               |
| 03   | 17        | 194         | 6               | 04   | 1         | 143         | 17              | 04   | 34        | 228         | 6               |
| 03   | 18        | 196         | 5               | 04   | 2         | 155         | 12              | 04   | 35        | 230         | 6               |
| 03   | 19        | 198         | 5               | 04   | 3         | 163         | 10              | 04   | 36        | 232         | 6               |
| 03   | 20        | 200         | 5               | 04   | 4         | 168         | 9               | 04   | 37        | 234         | 6               |
| 03   | 21        | 201         | 5               | 04   | 5         | 172         | 8               | 04   | 38        | 236         | 6               |
| 03   | 22        | 203         | 5               | 04   | 6         | 176         | 8               | 04   | 39        | 238         | 7               |
| 03   | 23        | 205         | 5               | 04   | 7         | 179         | 7               | 04   | 40        | 241         | 7               |
| 03   | 24        | 207         | 5               | 04   | 8         | 182         | 7               | 04   | 41        | 244         | 7               |
| 03   | 25        | 208         | 5               | 04   | 9         | 185         | 6               | 04   | 42        | 248         | 8               |
| 03   | 26        | 210         | 5               | 04   | 10        | 187         | 6               | 04   | 43        | 252         | 9               |
| 03   | 27        | 212         | 5               | 04   | 11        | 189         | 6               | 04   | 44        | 257         | 10              |
| 03   | 28        | 213         | 5               | 04   | 12        | 192         | 6               | 04   | 45        | 265         | 12              |
| 03   | 29        | 215         | 5               | 04   | 13        | 194         | 6               | 04   | 46        | 277         | 17              |
| 03   | 30        | 217         | 5               | 04   | 14        | 195         | 6               | 04   | 47        | 300         | 34              |
| 03   | 31        | 219         | 5               | 04   | 15        | 197         | 5               |      |           |             |                 |

**Grade 7 Science**

| <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> | <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> | <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|------------------|--------------------|------------------------|-------------|------------------|--------------------|------------------------|-------------|------------------|--------------------|------------------------|
| 01          | 0                | 100                | 34                     | 01          | 32               | 226                | 5                      | 02          | 15               | 195                | 5                      |
| 01          | 1                | 143                | 17                     | 01          | 33               | 227                | 5                      | 02          | 16               | 197                | 5                      |
| 01          | 2                | 155                | 12                     | 01          | 34               | 229                | 5                      | 02          | 17               | 199                | 5                      |
| 01          | 3                | 162                | 10                     | 01          | 35               | 231                | 6                      | 02          | 18               | 200                | 5                      |
| 01          | 4                | 168                | 9                      | 01          | 36               | 233                | 6                      | 02          | 19               | 202                | 5                      |
| 01          | 5                | 172                | 8                      | 01          | 37               | 235                | 6                      | 02          | 20               | 204                | 5                      |
| 01          | 6                | 176                | 8                      | 01          | 38               | 237                | 6                      | 02          | 21               | 205                | 5                      |
| 01          | 7                | 179                | 7                      | 01          | 39               | 239                | 6                      | 02          | 22               | 207                | 5                      |
| 01          | 8                | 182                | 7                      | 01          | 40               | 241                | 7                      | 02          | 23               | 208                | 5                      |
| 01          | 9                | 185                | 7                      | 01          | 41               | 244                | 7                      | 02          | 24               | 210                | 5                      |
| 01          | 10               | 188                | 6                      | 01          | 42               | 247                | 7                      | 02          | 25               | 211                | 5                      |
| 01          | 11               | 190                | 6                      | 01          | 43               | 251                | 8                      | 02          | 26               | 213                | 5                      |
| 01          | 12               | 192                | 6                      | 01          | 44               | 255                | 9                      | 02          | 27               | 214                | 5                      |
| 01          | 13               | 194                | 6                      | 01          | 45               | 260                | 10                     | 02          | 28               | 216                | 5                      |
| 01          | 14               | 196                | 6                      | 01          | 46               | 267                | 12                     | 02          | 29               | 217                | 5                      |
| 01          | 15               | 198                | 6                      | 01          | 47               | 280                | 17                     | 02          | 30               | 218                | 5                      |
| 01          | 16               | 200                | 5                      | 01          | 48               | 300                | 33                     | 02          | 31               | 220                | 5                      |
| 01          | 17               | 202                | 5                      | 02          | 0                | 100                | 34                     | 02          | 32               | 221                | 5                      |
| 01          | 18               | 203                | 5                      | 02          | 1                | 141                | 17                     | 02          | 33               | 223                | 5                      |
| 01          | 19               | 205                | 5                      | 02          | 2                | 153                | 12                     | 02          | 34               | 225                | 5                      |
| 01          | 20               | 207                | 5                      | 02          | 3                | 161                | 10                     | 02          | 35               | 226                | 5                      |
| 01          | 21               | 208                | 5                      | 02          | 4                | 166                | 9                      | 02          | 36               | 228                | 5                      |
| 01          | 22               | 210                | 5                      | 02          | 5                | 171                | 8                      | 02          | 37               | 230                | 5                      |
| 01          | 23               | 212                | 5                      | 02          | 6                | 174                | 8                      | 02          | 38               | 231                | 6                      |
| 01          | 24               | 213                | 5                      | 02          | 7                | 178                | 7                      | 02          | 39               | 233                | 6                      |
| 01          | 25               | 215                | 5                      | 02          | 8                | 180                | 7                      | 02          | 40               | 235                | 6                      |
| 01          | 26               | 216                | 5                      | 02          | 9                | 183                | 6                      | 02          | 41               | 237                | 6                      |
| 01          | 27               | 218                | 5                      | 02          | 10               | 185                | 6                      | 02          | 42               | 240                | 6                      |
| 01          | 28               | 219                | 5                      | 02          | 11               | 188                | 6                      | 02          | 43               | 242                | 7                      |
| 01          | 29               | 221                | 5                      | 02          | 12               | 190                | 6                      | 02          | 44               | 245                | 7                      |
| 01          | 30               | 222                | 5                      | 02          | 13               | 192                | 6                      | 02          | 45               | 248                | 7                      |
| 01          | 31               | 224                | 5                      | 02          | 14               | 194                | 6                      | 02          | 46               | 251                | 8                      |

| Form | Raw Score | Scale Score | Conditional SEM | Form | Raw Score | Scale Score | Conditional SEM | Form | Raw Score | Scale Score | Conditional SEM |
|------|-----------|-------------|-----------------|------|-----------|-------------|-----------------|------|-----------|-------------|-----------------|
| 02   | 47        | 255         | 9               | 03   | 28        | 219         | 5               | 04   | 12        | 190         | 6               |
| 02   | 48        | 261         | 10              | 03   | 29        | 221         | 5               | 04   | 13        | 192         | 6               |
| 02   | 49        | 268         | 12              | 03   | 30        | 222         | 5               | 04   | 14        | 194         | 6               |
| 02   | 50        | 280         | 17              | 03   | 31        | 224         | 5               | 04   | 15        | 195         | 5               |
| 02   | 51        | 300         | 33              | 03   | 32        | 226         | 5               | 04   | 16        | 197         | 5               |
| 03   | 0         | 100         | 34              | 03   | 33        | 227         | 5               | 04   | 17        | 199         | 5               |
| 03   | 1         | 143         | 17              | 03   | 34        | 229         | 5               | 04   | 18        | 200         | 5               |
| 03   | 2         | 155         | 12              | 03   | 35        | 231         | 6               | 04   | 19        | 202         | 5               |
| 03   | 3         | 162         | 10              | 03   | 36        | 233         | 6               | 04   | 20        | 204         | 5               |
| 03   | 4         | 168         | 9               | 03   | 37        | 235         | 6               | 04   | 21        | 205         | 5               |
| 03   | 5         | 172         | 8               | 03   | 38        | 237         | 6               | 04   | 22        | 207         | 5               |
| 03   | 6         | 176         | 8               | 03   | 39        | 239         | 6               | 04   | 23        | 208         | 5               |
| 03   | 7         | 179         | 7               | 03   | 40        | 241         | 7               | 04   | 24        | 210         | 5               |
| 03   | 8         | 182         | 7               | 03   | 41        | 244         | 7               | 04   | 25        | 211         | 5               |
| 03   | 9         | 185         | 7               | 03   | 42        | 247         | 7               | 04   | 26        | 213         | 5               |
| 03   | 10        | 188         | 6               | 03   | 43        | 251         | 8               | 04   | 27        | 214         | 5               |
| 03   | 11        | 190         | 6               | 03   | 44        | 255         | 9               | 04   | 28        | 216         | 5               |
| 03   | 12        | 192         | 6               | 03   | 45        | 260         | 10              | 04   | 29        | 217         | 5               |
| 03   | 13        | 194         | 6               | 03   | 46        | 267         | 12              | 04   | 30        | 218         | 5               |
| 03   | 14        | 196         | 6               | 03   | 47        | 280         | 17              | 04   | 31        | 220         | 5               |
| 03   | 15        | 198         | 6               | 03   | 48        | 300         | 33              | 04   | 32        | 221         | 5               |
| 03   | 16        | 200         | 5               | 04   | 0         | 100         | 34              | 04   | 33        | 223         | 5               |
| 03   | 17        | 202         | 5               | 04   | 1         | 141         | 17              | 04   | 34        | 225         | 5               |
| 03   | 18        | 203         | 5               | 04   | 2         | 153         | 12              | 04   | 35        | 226         | 5               |
| 03   | 19        | 205         | 5               | 04   | 3         | 161         | 10              | 04   | 36        | 228         | 5               |
| 03   | 20        | 207         | 5               | 04   | 4         | 166         | 9               | 04   | 37        | 230         | 5               |
| 03   | 21        | 208         | 5               | 04   | 5         | 171         | 8               | 04   | 38        | 231         | 6               |
| 03   | 22        | 210         | 5               | 04   | 6         | 174         | 8               | 04   | 39        | 233         | 6               |
| 03   | 23        | 212         | 5               | 04   | 7         | 178         | 7               | 04   | 40        | 235         | 6               |
| 03   | 24        | 213         | 5               | 04   | 8         | 180         | 7               | 04   | 41        | 237         | 6               |
| 03   | 25        | 215         | 5               | 04   | 9         | 183         | 6               | 04   | 42        | 240         | 6               |
| 03   | 26        | 216         | 5               | 04   | 10        | 185         | 6               | 04   | 43        | 242         | 7               |
| 03   | 27        | 218         | 5               | 04   | 11        | 188         | 6               | 04   | 44        | 245         | 7               |

| <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> | <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> | <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|------------------|--------------------|------------------------|-------------|------------------|--------------------|------------------------|-------------|------------------|--------------------|------------------------|
| 04          | 45               | 248                | 7                      | 04          | 48               | 261                | 10                     | 04          | 51               | 300                | 33                     |
| 04          | 46               | 251                | 8                      | 04          | 49               | 268                | 12                     |             |                  |                    |                        |
| 04          | 47               | 255                | 9                      | 04          | 50               | 280                | 17                     |             |                  |                    |                        |

**Grade 11 Science**

| <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|------------------|--------------------|------------------------|
| 01          | 0                | 100                | 34                     |
| 01          | 1                | 138                | 17                     |
| 01          | 2                | 151                | 13                     |
| 01          | 3                | 159                | 11                     |
| 01          | 4                | 165                | 9                      |
| 01          | 5                | 170                | 8                      |
| 01          | 6                | 174                | 8                      |
| 01          | 7                | 177                | 7                      |
| 01          | 8                | 180                | 7                      |
| 01          | 9                | 183                | 7                      |
| 01          | 10               | 185                | 6                      |
| 01          | 11               | 188                | 6                      |
| 01          | 12               | 190                | 6                      |
| 01          | 13               | 192                | 6                      |
| 01          | 14               | 194                | 6                      |
| 01          | 15               | 196                | 6                      |
| 01          | 16               | 198                | 6                      |
| 01          | 17               | 200                | 5                      |
| 01          | 18               | 202                | 5                      |
| 01          | 19               | 203                | 5                      |
| 01          | 20               | 205                | 5                      |
| 01          | 21               | 207                | 5                      |
| 01          | 22               | 208                | 5                      |
| 01          | 23               | 210                | 5                      |
| 01          | 24               | 212                | 5                      |
| 01          | 25               | 213                | 5                      |
| 01          | 26               | 215                | 5                      |
| 01          | 27               | 217                | 5                      |
| 01          | 28               | 218                | 5                      |
| 01          | 29               | 220                | 5                      |
| 01          | 30               | 222                | 5                      |
| 01          | 31               | 223                | 5                      |

| <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|------------------|--------------------|------------------------|
| 01          | 32               | 225                | 5                      |
| 01          | 33               | 227                | 6                      |
| 01          | 34               | 229                | 6                      |
| 01          | 35               | 231                | 6                      |
| 01          | 36               | 233                | 6                      |
| 01          | 37               | 235                | 6                      |
| 01          | 38               | 237                | 6                      |
| 01          | 39               | 239                | 6                      |
| 01          | 40               | 242                | 7                      |
| 01          | 41               | 245                | 7                      |
| 01          | 42               | 248                | 7                      |
| 01          | 43               | 251                | 8                      |
| 01          | 44               | 255                | 9                      |
| 01          | 45               | 261                | 10                     |
| 01          | 46               | 268                | 12                     |
| 01          | 47               | 280                | 17                     |
| 01          | 48               | 300                | 33                     |
| 02          | 0                | 100                | 34                     |
| 02          | 1                | 136                | 17                     |
| 02          | 2                | 149                | 12                     |
| 02          | 3                | 157                | 10                     |
| 02          | 4                | 162                | 9                      |
| 02          | 5                | 167                | 8                      |
| 02          | 6                | 171                | 8                      |
| 02          | 7                | 174                | 7                      |
| 02          | 8                | 177                | 7                      |
| 02          | 9                | 180                | 7                      |
| 02          | 10               | 183                | 6                      |
| 02          | 11               | 185                | 6                      |
| 02          | 12               | 187                | 6                      |
| 02          | 13               | 189                | 6                      |
| 02          | 14               | 191                | 6                      |

| <b>Form</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|------------------|--------------------|------------------------|
| 02          | 15               | 193                | 6                      |
| 02          | 16               | 195                | 6                      |
| 02          | 17               | 197                | 5                      |
| 02          | 18               | 199                | 5                      |
| 02          | 19               | 201                | 5                      |
| 02          | 20               | 202                | 5                      |
| 02          | 21               | 204                | 5                      |
| 02          | 22               | 206                | 5                      |
| 02          | 23               | 207                | 5                      |
| 02          | 24               | 209                | 5                      |
| 02          | 25               | 211                | 5                      |
| 02          | 26               | 212                | 5                      |
| 02          | 27               | 214                | 5                      |
| 02          | 28               | 216                | 5                      |
| 02          | 29               | 217                | 5                      |
| 02          | 30               | 219                | 5                      |
| 02          | 31               | 221                | 5                      |
| 02          | 32               | 222                | 5                      |
| 02          | 33               | 224                | 6                      |
| 02          | 34               | 226                | 6                      |
| 02          | 35               | 228                | 6                      |
| 02          | 36               | 230                | 6                      |
| 02          | 37               | 232                | 6                      |
| 02          | 38               | 234                | 6                      |
| 02          | 39               | 237                | 6                      |
| 02          | 40               | 239                | 7                      |
| 02          | 41               | 242                | 7                      |
| 02          | 42               | 245                | 7                      |
| 02          | 43               | 249                | 8                      |
| 02          | 44               | 253                | 9                      |
| 02          | 45               | 258                | 10                     |
| 02          | 46               | 265                | 12                     |

| Form | Raw Score | Scale Score | Conditional SEM |
|------|-----------|-------------|-----------------|
| 02   | 47        | 277         | 17              |
| 02   | 48        | 300         | 33              |
| 03   | 0         | 100         | 34              |
| 03   | 1         | 135         | 17              |
| 03   | 2         | 148         | 13              |
| 03   | 3         | 156         | 10              |
| 03   | 4         | 162         | 9               |
| 03   | 5         | 166         | 8               |
| 03   | 6         | 170         | 8               |
| 03   | 7         | 174         | 7               |
| 03   | 8         | 177         | 7               |
| 03   | 9         | 180         | 7               |
| 03   | 10        | 183         | 7               |
| 03   | 11        | 185         | 6               |
| 03   | 12        | 188         | 6               |
| 03   | 13        | 190         | 6               |
| 03   | 14        | 192         | 6               |
| 03   | 15        | 194         | 6               |
| 03   | 16        | 196         | 6               |
| 03   | 17        | 198         | 6               |
| 03   | 18        | 200         | 6               |
| 03   | 19        | 202         | 5               |
| 03   | 20        | 203         | 5               |
| 03   | 21        | 205         | 5               |
| 03   | 22        | 207         | 5               |
| 03   | 23        | 209         | 5               |
| 03   | 24        | 210         | 5               |
| 03   | 25        | 212         | 5               |
| 03   | 26        | 214         | 5               |
| 03   | 27        | 215         | 5               |
| 03   | 28        | 217         | 5               |
| 03   | 29        | 219         | 5               |
| 03   | 30        | 221         | 5               |
| 03   | 31        | 222         | 5               |

| Form | Raw Score | Scale Score | Conditional SEM |
|------|-----------|-------------|-----------------|
| 03   | 32        | 224         | 6               |
| 03   | 33        | 226         | 6               |
| 03   | 34        | 228         | 6               |
| 03   | 35        | 230         | 6               |
| 03   | 36        | 232         | 6               |
| 03   | 37        | 234         | 6               |
| 03   | 38        | 236         | 6               |
| 03   | 39        | 239         | 6               |
| 03   | 40        | 241         | 7               |
| 03   | 41        | 244         | 7               |
| 03   | 42        | 247         | 7               |
| 03   | 43        | 251         | 8               |
| 03   | 44        | 255         | 9               |
| 03   | 45        | 260         | 10              |
| 03   | 46        | 267         | 12              |
| 03   | 47        | 279         | 17              |
| 03   | 48        | 300         | 33              |
| 04   | 0         | 100         | 34              |
| 04   | 1         | 137         | 17              |
| 04   | 2         | 149         | 12              |
| 04   | 3         | 157         | 10              |
| 04   | 4         | 163         | 9               |
| 04   | 5         | 167         | 8               |
| 04   | 6         | 171         | 8               |
| 04   | 7         | 175         | 7               |
| 04   | 8         | 178         | 7               |
| 04   | 9         | 180         | 7               |
| 04   | 10        | 183         | 6               |
| 04   | 11        | 185         | 6               |
| 04   | 12        | 187         | 6               |
| 04   | 13        | 189         | 6               |
| 04   | 14        | 191         | 6               |
| 04   | 15        | 193         | 6               |
| 04   | 16        | 195         | 5               |

| Form | Raw Score | Scale Score | Conditional SEM |
|------|-----------|-------------|-----------------|
| 04   | 17        | 197         | 5               |
| 04   | 18        | 199         | 5               |
| 04   | 19        | 200         | 5               |
| 04   | 20        | 202         | 5               |
| 04   | 21        | 203         | 5               |
| 04   | 22        | 205         | 5               |
| 04   | 23        | 207         | 5               |
| 04   | 24        | 208         | 5               |
| 04   | 25        | 210         | 5               |
| 04   | 26        | 211         | 5               |
| 04   | 27        | 213         | 5               |
| 04   | 28        | 215         | 5               |
| 04   | 29        | 216         | 5               |
| 04   | 30        | 218         | 5               |
| 04   | 31        | 220         | 5               |
| 04   | 32        | 221         | 5               |
| 04   | 33        | 223         | 5               |
| 04   | 34        | 225         | 6               |
| 04   | 35        | 227         | 6               |
| 04   | 36        | 229         | 6               |
| 04   | 37        | 231         | 6               |
| 04   | 38        | 233         | 6               |
| 04   | 39        | 235         | 6               |
| 04   | 40        | 238         | 7               |
| 04   | 41        | 241         | 7               |
| 04   | 42        | 244         | 7               |
| 04   | 43        | 247         | 8               |
| 04   | 44        | 251         | 9               |
| 04   | 45        | 256         | 10              |
| 04   | 46        | 263         | 12              |
| 04   | 47        | 275         | 17              |
| 04   | 48        | 298         | 33              |

**Grade 5 Social Studies**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 134         | 17              |
| 2         | 146         | 12              |
| 3         | 153         | 10              |
| 4         | 158         | 9               |
| 5         | 162         | 8               |
| 6         | 165         | 7               |
| 7         | 168         | 7               |
| 8         | 171         | 6               |
| 9         | 174         | 6               |
| 10        | 176         | 6               |
| 11        | 178         | 6               |
| 12        | 180         | 6               |
| 13        | 181         | 5               |
| 14        | 183         | 5               |
| 15        | 185         | 5               |
| 16        | 186         | 5               |
| 17        | 188         | 5               |
| 18        | 189         | 5               |
| 19        | 191         | 5               |
| 20        | 192         | 5               |
| 21        | 194         | 5               |
| 22        | 195         | 5               |
| 23        | 196         | 5               |
| 24        | 198         | 5               |
| 25        | 199         | 5               |
| 26        | 200         | 5               |
| 27        | 202         | 5               |
| 28        | 203         | 5               |
| 29        | 205         | 5               |
| 30        | 206         | 5               |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 31        | 207         | 5               |
| 32        | 209         | 5               |
| 33        | 210         | 5               |
| 34        | 211         | 5               |
| 35        | 213         | 5               |
| 36        | 214         | 5               |
| 37        | 216         | 5               |
| 38        | 218         | 5               |
| 39        | 219         | 5               |
| 40        | 221         | 5               |
| 41        | 223         | 6               |
| 42        | 225         | 6               |
| 43        | 227         | 6               |
| 44        | 229         | 6               |
| 45        | 231         | 6               |
| 46        | 234         | 6               |
| 47        | 236         | 7               |
| 48        | 239         | 7               |
| 49        | 242         | 8               |
| 50        | 246         | 8               |
| 51        | 250         | 9               |
| 52        | 255         | 10              |
| 53        | 261         | 11              |
| 54        | 269         | 13              |
| 55        | 283         | 18              |
| 56        | 300         | 34              |

**Grade 8 Social Studies**

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 0         | 100         | 33              |
| 1         | 136         | 17              |
| 2         | 148         | 12              |

| Raw Score | Scale Score | Conditional SEM |
|-----------|-------------|-----------------|
| 3         | 154         | 10              |
| 4         | 159         | 8               |
| 5         | 163         | 8               |
| 6         | 166         | 7               |
| 7         | 169         | 7               |
| 8         | 172         | 6               |
| 9         | 174         | 6               |
| 10        | 176         | 6               |
| 11        | 178         | 6               |
| 12        | 180         | 5               |
| 13        | 181         | 5               |
| 14        | 183         | 5               |
| 15        | 185         | 5               |
| 16        | 186         | 5               |
| 17        | 188         | 5               |
| 18        | 189         | 5               |
| 19        | 191         | 5               |
| 20        | 192         | 5               |
| 21        | 194         | 5               |
| 22        | 195         | 5               |
| 23        | 197         | 5               |
| 24        | 198         | 5               |
| 25        | 200         | 5               |
| 26        | 201         | 5               |
| 27        | 202         | 5               |
| 28        | 204         | 5               |
| 29        | 205         | 5               |
| 30        | 207         | 5               |
| 31        | 208         | 5               |
| 32        | 210         | 5               |
| 33        | 211         | 5               |
| 34        | 212         | 5               |
| 35        | 214         | 5               |

| <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|--------------------|------------------------|
| 36               | 216                | 5                      |
| 37               | 217                | 5                      |
| 38               | 219                | 5                      |
| 39               | 220                | 5                      |
| 40               | 222                | 5                      |
| 41               | 224                | 5                      |
| 42               | 226                | 6                      |
| 43               | 228                | 6                      |

| <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|--------------------|------------------------|
| 44               | 230                | 6                      |
| 45               | 232                | 6                      |
| 46               | 234                | 6                      |
| 47               | 236                | 6                      |
| 48               | 239                | 7                      |
| 49               | 242                | 7                      |
| 50               | 245                | 8                      |
| 51               | 249                | 8                      |

| <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|--------------------|------------------------|
| 52               | 253                | 9                      |
| 53               | 259                | 10                     |
| 54               | 266                | 12                     |
| 55               | 278                | 17                     |
| 56               | 300                | 33                     |

**Grade 5 On Demand Writing**

| <b>Writing Task Choice</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------------|------------------------|
| 01                         | 0                | 100                | 19                     |
| 01                         | 1                | 126                | 14                     |
| 01                         | 2                | 156                | 20                     |
| 01                         | 3                | 185                | 13                     |
| 01                         | 4                | 212                | 19                     |
| 01                         | 5                | 238                | 13                     |
| 01                         | 6                | 264                | 18                     |
| 01                         | 7                | 288                | 12                     |
| 01                         | 8                | 300                | 18                     |
| 02                         | 0                | 100                | 19                     |
| 02                         | 1                | 120                | 18                     |
| 02                         | 2                | 156                | 20                     |
| 02                         | 3                | 185                | 13                     |
| 02                         | 4                | 215                | 22                     |
| 02                         | 5                | 242                | 12                     |
| 02                         | 6                | 267                | 20                     |
| 02                         | 7                | 293                | 12                     |
| 02                         | 8                | 300                | 18                     |

**Grade 8 On Demand Writing**

| <b>Writing Task Choice</b> | <b>Raw Score</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------------|------------------------|
| 01                         | 0                | 100                | 18                     |
| 01                         | 1                | 118                | 12                     |
| 01                         | 2                | 151                | 30                     |
| 01                         | 3                | 185                | 12                     |
| 01                         | 4                | 206                | 15                     |
| 01                         | 5                | 226                | 12                     |
| 01                         | 6                | 247                | 15                     |
| 01                         | 7                | 268                | 12                     |
| 01                         | 8                | 285                | 18                     |
| 02                         | 0                | 100                | 18                     |
| 02                         | 1                | 112                | 13                     |
| 02                         | 2                | 151                | 36                     |
| 02                         | 3                | 187                | 12                     |
| 02                         | 4                | 208                | 15                     |
| 02                         | 5                | 228                | 12                     |
| 02                         | 6                | 250                | 16                     |
| 02                         | 7                | 271                | 12                     |
| 02                         | 8                | 287                | 18                     |

### Grade 11 On Demand Writing

| Writing Task Choice | Raw Score | Scale Score | Conditional SEM |
|---------------------|-----------|-------------|-----------------|
| 01                  | 0         | 100         | 18              |
| 01                  | 1         | 154         | 12              |
| 01                  | 2         | 177         | 16              |
| 01                  | 3         | 200         | 12              |
| 01                  | 4         | 220         | 14              |
| 01                  | 5         | 240         | 12              |
| 01                  | 6         | 260         | 14              |
| 01                  | 7         | 280         | 12              |
| 01                  | 8         | 296         | 18              |
| 02                  | 0         | 100         | 19              |
| 02                  | 1         | 146         | 15              |
| 02                  | 2         | 169         | 13              |
| 02                  | 3         | 192         | 15              |
| 02                  | 4         | 213         | 12              |
| 02                  | 5         | 234         | 14              |
| 02                  | 6         | 256         | 13              |
| 02                  | 7         | 276         | 13              |
| 02                  | 8         | 294         | 18              |

## Appendix H. Raw Score to Scale Score Tables— Subdomain

### Grade 3 Reading

| Subdomain            | Raw Score | Theta   | Scale Score | Conditional SEM |
|----------------------|-----------|---------|-------------|-----------------|
| Key Ideas            | 0         | -4.1836 | 100         | 34              |
|                      | 1         | -2.6613 | 154         | 18              |
|                      | 2         | -1.7661 | 169         | 14              |
|                      | 3         | -1.1269 | 180         | 13              |
|                      | 4         | -0.5597 | 189         | 12              |
|                      | 5         | 0.0142  | 199         | 13              |
|                      | 6         | 0.6736  | 210         | 14              |
|                      | 7         | 1.6029  | 225         | 18              |
|                      | 8         | 3.1592  | 251         | 34              |
| Craft and Structure  | 0         | -3.9837 | 100         | 34              |
|                      | 1         | -2.4783 | 157         | 18              |
|                      | 2         | -1.6210 | 171         | 14              |
|                      | 3         | -1.0429 | 181         | 12              |
|                      | 4         | -0.5703 | 189         | 11              |
|                      | 5         | -0.1448 | 196         | 11              |
|                      | 6         | 0.2654  | 203         | 11              |
|                      | 7         | 0.6862  | 210         | 11              |
|                      | 8         | 1.1492  | 218         | 12              |
|                      | 9         | 1.7133  | 227         | 13              |
|                      | 10        | 2.5520  | 241         | 18              |
|                      | 11        | 4.0407  | 266         | 34              |
| Integration of Ideas | 0         | -3.7984 | 100         | 34              |
|                      | 1         | -2.3164 | 160         | 18              |
|                      | 2         | -1.4858 | 174         | 13              |
|                      | 3         | -0.9294 | 183         | 12              |
|                      | 4         | -0.4737 | 191         | 11              |
|                      | 5         | -0.0606 | 197         | 11              |
|                      | 6         | 0.3414  | 204         | 11              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 7                | 0.7579       | 211                | 11                     |
|                            | 8                | 1.2205       | 219                | 12                     |
|                            | 9                | 1.7877       | 228                | 14                     |
|                            | 10               | 2.6332       | 242                | 18                     |
|                            | 11               | 4.1293       | 267                | 34                     |
| Vocabulary and Acquisition | 0                | -4.2694      | 100                | 34                     |
|                            | 1                | -2.7686      | 152                | 18                     |
|                            | 2                | -1.9065      | 167                | 14                     |
|                            | 3                | -1.3090      | 177                | 12                     |
|                            | 4                | -0.7995      | 185                | 12                     |
|                            | 5                | -0.3149      | 193                | 12                     |
|                            | 6                | 0.1842       | 202                | 12                     |
|                            | 7                | 0.7375       | 211                | 13                     |
|                            | 8                | 1.4091       | 222                | 15                     |
|                            | 9                | 2.3756       | 238                | 19                     |
|                            | 10               | 3.9713       | 265                | 34                     |

### Grade 3 Reading-Braille

| <b>Subdomain</b>    | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|---------------------|------------------|--------------|--------------------|------------------------|
| Key Ideas           | 0                | -4.1836      | 100                | 34                     |
|                     | 1                | -2.6613      | 154                | 18                     |
|                     | 2                | -1.7661      | 169                | 14                     |
|                     | 3                | -1.1269      | 180                | 13                     |
|                     | 4                | -0.5597      | 189                | 12                     |
|                     | 5                | 0.0142       | 199                | 13                     |
|                     | 6                | 0.6736       | 210                | 14                     |
|                     | 7                | 1.6029       | 225                | 18                     |
|                     | 8                | 3.1592       | 251                | 34                     |
| Craft and Structure | 0                | -3.9837      | 100                | 34                     |
|                     | 1                | -2.4783      | 157                | 18                     |
|                     | 2                | -1.6210      | 171                | 14                     |

| <b>Subdomain</b>           | <b>Raw Score</b>     | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |    |
|----------------------------|----------------------|--------------|--------------------|------------------------|----|
|                            | 3                    | -1.0429      | 181                | 12                     |    |
|                            | 4                    | -0.5703      | 189                | 11                     |    |
|                            | 5                    | -0.1448      | 196                | 11                     |    |
|                            | 6                    | 0.2654       | 203                | 11                     |    |
|                            | 7                    | 0.6862       | 210                | 11                     |    |
|                            | 8                    | 1.1492       | 218                | 12                     |    |
|                            | 9                    | 1.7133       | 227                | 13                     |    |
|                            | 10                   | 2.5520       | 241                | 18                     |    |
|                            | 11                   | 4.0407       | 266                | 34                     |    |
|                            | Integration of Ideas | 0            | -3.7049            | 100                    | 34 |
|                            |                      | 1            | -2.2061            | 162                    | 18 |
| 2                          |                      | -1.3470      | 176                | 14                     |    |
| 3                          |                      | -0.7525      | 186                | 12                     |    |
| 4                          |                      | -0.2442      | 194                | 12                     |    |
| 5                          |                      | 0.2448       | 203                | 12                     |    |
| 6                          |                      | 0.7635       | 211                | 12                     |    |
| 7                          |                      | 1.3799       | 221                | 14                     |    |
| 8                          |                      | 2.2739       | 236                | 18                     |    |
| 9                          |                      | 3.8086       | 262                | 34                     |    |
| Vocabulary and Acquisition | 0                    | -4.2694      | 100                | 34                     |    |
|                            | 1                    | -2.7686      | 152                | 18                     |    |
|                            | 2                    | -1.9065      | 167                | 14                     |    |
|                            | 3                    | -1.3090      | 177                | 12                     |    |
|                            | 4                    | -0.7995      | 185                | 12                     |    |
|                            | 5                    | -0.3149      | 193                | 12                     |    |
|                            | 6                    | 0.1842       | 202                | 12                     |    |
|                            | 7                    | 0.7375       | 211                | 13                     |    |
|                            | 8                    | 1.4091       | 222                | 15                     |    |
|                            | 9                    | 2.3756       | 238                | 19                     |    |
|                            | 10                   | 3.9713       | 265                | 34                     |    |

## Grade 4 Reading

| Subdomain            | Raw Score | Theta   | Scale Score | Conditional SEM |
|----------------------|-----------|---------|-------------|-----------------|
| Key Ideas            | 0         | -3.4637 | 100         | 34              |
|                      | 1         | -1.9723 | 165         | 18              |
|                      | 2         | -1.1388 | 178         | 13              |
|                      | 3         | -0.5900 | 188         | 12              |
|                      | 4         | -0.1526 | 195         | 11              |
|                      | 5         | 0.2307  | 201         | 10              |
|                      | 6         | 0.5888  | 207         | 10              |
|                      | 7         | 0.9418  | 213         | 10              |
|                      | 8         | 1.3099  | 219         | 10              |
|                      | 9         | 1.7216  | 226         | 11              |
|                      | 10        | 2.2331  | 235         | 13              |
|                      | 11        | 3.0166  | 248         | 17              |
|                      | 12        | 4.4614  | 272         | 34              |
| Craft and Structure  | 0         | -3.3245 | 100         | 34              |
|                      | 1         | -1.7720 | 168         | 18              |
|                      | 2         | -0.8358 | 183         | 14              |
|                      | 3         | -0.1592 | 195         | 13              |
|                      | 4         | 0.4364  | 205         | 13              |
|                      | 5         | 1.0257  | 214         | 13              |
|                      | 6         | 1.6847  | 225         | 14              |
|                      | 7         | 2.5965  | 241         | 18              |
|                      | 8         | 4.1289  | 266         | 34              |
| Integration of Ideas | 0         | -3.0270 | 100         | 34              |
|                      | 1         | -1.5454 | 172         | 18              |
|                      | 2         | -0.7382 | 185         | 13              |
|                      | 3         | -0.2308 | 194         | 11              |
|                      | 4         | 0.1558  | 200         | 10              |
|                      | 5         | 0.4856  | 205         | 9               |
|                      | 6         | 0.7916  | 211         | 9               |
|                      | 7         | 1.0940  | 216         | 9               |
|                      | 8         | 1.4078  | 221         | 9               |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 9                | 1.7478       | 227                | 10                     |
|                            | 10               | 2.1377       | 233                | 11                     |
|                            | 11               | 2.6316       | 241                | 13                     |
|                            | 12               | 3.4022       | 254                | 17                     |
|                            | 13               | 4.8434       | 278                | 34                     |
| Vocabulary and Acquisition | 0                | -4.2769      | 100                | 34                     |
|                            | 1                | -2.7541      | 151                | 18                     |
|                            | 2                | -1.8678      | 166                | 14                     |
|                            | 3                | -1.2541      | 176                | 12                     |
|                            | 4                | -0.7386      | 185                | 12                     |
|                            | 5                | -0.2604      | 193                | 11                     |
|                            | 6                | 0.2173       | 201                | 12                     |
|                            | 7                | 0.7318       | 210                | 12                     |
|                            | 8                | 1.3445       | 220                | 14                     |
|                            | 9                | 2.2311       | 235                | 18                     |
|                            | 10               | 3.7559       | 260                | 34                     |

### Grade 4 Reading-Braille

| <b>Subdomain</b> | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|------------------|--------------|--------------------|------------------------|
| Key Ideas        | 0                | -3.4637      | 100                | 34                     |
|                  | 1                | -1.9723      | 165                | 18                     |
|                  | 2                | -1.1388      | 178                | 13                     |
|                  | 3                | -0.5900      | 188                | 12                     |
|                  | 4                | -0.1526      | 195                | 11                     |
|                  | 5                | 0.2307       | 201                | 10                     |
|                  | 6                | 0.5888       | 207                | 10                     |
|                  | 7                | 0.9418       | 213                | 10                     |
|                  | 8                | 1.3099       | 219                | 10                     |
|                  | 9                | 1.7216       | 226                | 11                     |
|                  | 10               | 2.2331       | 235                | 13                     |
|                  | 11               | 3.0166       | 248                | 17                     |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 12               | 4.4614       | 272                | 34                     |
| Craft and Structure        | 0                | -3.3245      | 100                | 34                     |
|                            | 1                | -1.7720      | 168                | 18                     |
|                            | 2                | -0.8358      | 183                | 14                     |
|                            | 3                | -0.1592      | 195                | 13                     |
|                            | 4                | 0.4364       | 205                | 13                     |
|                            | 5                | 1.0257       | 214                | 13                     |
|                            | 6                | 1.6847       | 225                | 14                     |
|                            | 7                | 2.5965       | 241                | 18                     |
|                            | 8                | 4.1289       | 266                | 34                     |
| Integration of Ideas       | 0                | -2.9701      | 100                | 34                     |
|                            | 1                | -1.4800      | 173                | 18                     |
|                            | 2                | -0.6638      | 186                | 13                     |
|                            | 3                | -0.1490      | 195                | 11                     |
|                            | 4                | 0.2465       | 202                | 10                     |
|                            | 5                | 0.5896       | 207                | 10                     |
|                            | 6                | 0.9155       | 213                | 10                     |
|                            | 7                | 1.2465       | 218                | 10                     |
|                            | 8                | 1.6010       | 224                | 10                     |
|                            | 9                | 2.0030       | 231                | 11                     |
|                            | 10               | 2.5057       | 239                | 13                     |
|                            | 11               | 3.2815       | 252                | 17                     |
|                            | 12               | 4.7251       | 276                | 34                     |
| Vocabulary and Acquisition | 0                | -4.2769      | 100                | 34                     |
|                            | 1                | -2.7541      | 151                | 18                     |
|                            | 2                | -1.8678      | 166                | 14                     |
|                            | 3                | -1.2541      | 176                | 12                     |
|                            | 4                | -0.7386      | 185                | 12                     |
|                            | 5                | -0.2604      | 193                | 11                     |
|                            | 6                | 0.2173       | 201                | 12                     |
|                            | 7                | 0.7318       | 210                | 12                     |
|                            | 8                | 1.3445       | 220                | 14                     |

| Subdomain | Raw Score | Theta  | Scale Score | Conditional SEM |
|-----------|-----------|--------|-------------|-----------------|
|           | 9         | 2.2311 | 235         | 18              |
|           | 10        | 3.7559 | 260         | 34              |

### Grade 5 Reading

| Subdomain            | Raw Score | Theta   | Scale Score | Conditional SEM |
|----------------------|-----------|---------|-------------|-----------------|
| Key Ideas            | 0         | -4.4849 | 100         | 34              |
|                      | 1         | -2.9639 | 150         | 18              |
|                      | 2         | -2.0791 | 164         | 14              |
|                      | 3         | -1.4644 | 175         | 12              |
|                      | 4         | -0.9436 | 183         | 12              |
|                      | 5         | -0.4549 | 191         | 12              |
|                      | 6         | 0.0383  | 200         | 12              |
|                      | 7         | 0.5717  | 209         | 13              |
|                      | 8         | 1.2039  | 219         | 14              |
|                      | 9         | 2.1065  | 234         | 18              |
|                      | 10        | 3.6387  | 260         | 34              |
| Craft and Structure  | 0         | -3.7428 | 100         | 34              |
|                      | 1         | -2.2055 | 162         | 18              |
|                      | 2         | -1.2969 | 177         | 14              |
|                      | 3         | -0.6599 | 188         | 13              |
|                      | 4         | -0.1231 | 197         | 12              |
|                      | 5         | 0.3718  | 205         | 12              |
|                      | 6         | 0.8592  | 213         | 12              |
|                      | 7         | 1.3750  | 222         | 12              |
|                      | 8         | 1.9801  | 232         | 14              |
|                      | 9         | 2.8498  | 247         | 18              |
|                      | 10        | 4.3559  | 272         | 34              |
| Integration of Ideas | 0         | -3.2473 | 100         | 34              |
|                      | 1         | -1.7998 | 169         | 17              |
|                      | 2         | -1.0236 | 182         | 13              |
|                      | 3         | -0.5287 | 190         | 11              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 4                | -0.1394      | 197                | 10                     |
|                            | 5                | 0.2037       | 202                | 10                     |
|                            | 6                | 0.5307       | 208                | 10                     |
|                            | 7                | 0.8614       | 213                | 10                     |
|                            | 8                | 1.2113       | 219                | 10                     |
|                            | 9                | 1.5942       | 226                | 11                     |
|                            | 10               | 2.0276       | 233                | 11                     |
|                            | 11               | 2.5507       | 242                | 13                     |
|                            | 12               | 3.3133       | 254                | 17                     |
|                            | 13               | 4.6985       | 277                | 33                     |
| Vocabulary and Acquisition | 0                | -3.8542      | 100                | 34                     |
|                            | 1                | -2.2870      | 161                | 19                     |
|                            | 2                | -1.3565      | 176                | 14                     |
|                            | 3                | -0.7150      | 187                | 13                     |
|                            | 4                | -0.1844      | 196                | 12                     |
|                            | 5                | 0.2998       | 204                | 11                     |
|                            | 6                | 0.7771       | 212                | 12                     |
|                            | 7                | 1.2863       | 221                | 12                     |
|                            | 8                | 1.8897       | 231                | 14                     |
|                            | 9                | 2.7631       | 245                | 18                     |
|                            | 10               | 4.2753       | 270                | 34                     |

### Grade 6 Reading

| <b>Subdomain</b> | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|------------------|--------------|--------------------|------------------------|
| Key Ideas        | 0                | -3.3686      | 100                | 34                     |
|                  | 1                | -1.8909      | 165                | 18                     |
|                  | 2                | -1.0647      | 179                | 13                     |
|                  | 3                | -0.5103      | 188                | 12                     |
|                  | 4                | -0.0531      | 196                | 11                     |
|                  | 5                | 0.3678       | 203                | 11                     |
|                  | 6                | 0.7886       | 210                | 11                     |

| <b>Subdomain</b>     | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------|------------------|--------------|--------------------|------------------------|
|                      | 7                | 1.2457       | 218                | 12                     |
|                      | 8                | 1.8000       | 227                | 13                     |
|                      | 9                | 2.6260       | 241                | 18                     |
|                      | 10               | 4.1036       | 265                | 34                     |
| Craft and Structure  | 0                | -3.5989      | 100                | 34                     |
|                      | 1                | -2.1177      | 162                | 18                     |
|                      | 2                | -1.2955      | 175                | 13                     |
|                      | 3                | -0.7572      | 184                | 11                     |
|                      | 4                | -0.3319      | 191                | 10                     |
|                      | 5                | 0.0361       | 197                | 10                     |
|                      | 6                | 0.3737       | 203                | 10                     |
|                      | 7                | 0.6988       | 209                | 9                      |
|                      | 8                | 1.0269       | 214                | 10                     |
|                      | 9                | 1.3760       | 220                | 10                     |
|                      | 10               | 1.7741       | 226                | 11                     |
|                      | 11               | 2.2778       | 235                | 13                     |
|                      | 12               | 3.0598       | 248                | 17                     |
|                      | 13               | 4.5083       | 272                | 34                     |
| Integration of Ideas | 0                | -3.3850      | 100                | 34                     |
|                      | 1                | -1.9289      | 165                | 17                     |
|                      | 2                | -1.1410      | 178                | 13                     |
|                      | 3                | -0.6387      | 186                | 11                     |
|                      | 4                | -0.2516      | 193                | 10                     |
|                      | 5                | 0.0742       | 198                | 9                      |
|                      | 6                | 0.3632       | 203                | 9                      |
|                      | 7                | 0.6292       | 207                | 8                      |
|                      | 8                | 0.8813       | 212                | 8                      |
|                      | 9                | 1.1260       | 216                | 8                      |
|                      | 10               | 1.3693       | 220                | 8                      |
|                      | 11               | 1.6178       | 224                | 8                      |
|                      | 12               | 1.8800       | 228                | 9                      |
|                      | 13               | 2.1692       | 233                | 9                      |
|                      | 14               | 2.5101       | 239                | 10                     |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 15               | 2.9572       | 246                | 12                     |
|                            | 16               | 3.6834       | 258                | 17                     |
|                            | 17               | 5.0916       | 282                | 33                     |
| Vocabulary and Acquisition | 0                | -3.4457      | 100                | 34                     |
|                            | 1                | -1.9609      | 164                | 18                     |
|                            | 2                | -1.1263      | 178                | 13                     |
|                            | 3                | -0.5642      | 187                | 12                     |
|                            | 4                | -0.0995      | 195                | 11                     |
|                            | 5                | 0.3291       | 202                | 11                     |
|                            | 6                | 0.7585       | 210                | 11                     |
|                            | 7                | 1.2256       | 217                | 12                     |
|                            | 8                | 1.7918       | 227                | 13                     |
|                            | 9                | 2.6327       | 241                | 18                     |
|                            | 10               | 4.1238       | 266                | 34                     |

### Grade 6 Reading-Braille

| <b>Subdomain</b>    | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|---------------------|------------------|--------------|--------------------|------------------------|
| Key Ideas           | 0                | -3.3686      | 100                | 34                     |
|                     | 1                | -1.8909      | 165                | 18                     |
|                     | 2                | -1.0647      | 179                | 13                     |
|                     | 3                | -0.5103      | 188                | 12                     |
|                     | 4                | -0.0531      | 196                | 11                     |
|                     | 5                | 0.3678       | 203                | 11                     |
|                     | 6                | 0.7886       | 210                | 11                     |
|                     | 7                | 1.2457       | 218                | 12                     |
|                     | 8                | 1.8000       | 227                | 13                     |
|                     | 9                | 2.6260       | 241                | 18                     |
|                     | 10               | 4.1036       | 265                | 34                     |
| Craft and Structure | 0                | -3.5989      | 100                | 34                     |
|                     | 1                | -2.1177      | 162                | 18                     |
|                     | 2                | -1.2955      | 175                | 13                     |
|                     | 3                | -0.7572      | 184                | 11                     |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 4                | -0.3319      | 191                | 10                     |
|                            | 5                | 0.0361       | 197                | 10                     |
|                            | 6                | 0.3737       | 203                | 10                     |
|                            | 7                | 0.6988       | 209                | 9                      |
|                            | 8                | 1.0269       | 214                | 10                     |
|                            | 9                | 1.3760       | 220                | 10                     |
|                            | 10               | 1.7741       | 226                | 11                     |
|                            | 11               | 2.2778       | 235                | 13                     |
|                            | 12               | 3.0598       | 248                | 17                     |
|                            | 13               | 4.5083       | 272                | 34                     |
| Integration of Ideas       | 0                | -3.3299      | 100                | 34                     |
|                            | 1                | -1.8681      | 166                | 17                     |
|                            | 2                | -1.0723      | 179                | 13                     |
|                            | 3                | -0.5617      | 188                | 11                     |
|                            | 4                | -0.1660      | 194                | 10                     |
|                            | 5                | 0.1689       | 200                | 9                      |
|                            | 6                | 0.4677       | 205                | 9                      |
|                            | 7                | 0.7444       | 209                | 9                      |
|                            | 8                | 1.0085       | 214                | 9                      |
|                            | 9                | 1.2673       | 218                | 8                      |
|                            | 10               | 1.5282       | 222                | 9                      |
|                            | 11               | 1.8001       | 227                | 9                      |
|                            | 12               | 2.0966       | 232                | 9                      |
|                            | 13               | 2.4425       | 238                | 10                     |
|                            | 14               | 2.8924       | 245                | 12                     |
|                            | 15               | 3.6193       | 257                | 17                     |
| 16                         | 5.0273           | 281          | 33                 |                        |
| Vocabulary and Acquisition | 0                | -3.4457      | 100                | 34                     |
|                            | 1                | -1.9609      | 164                | 18                     |
|                            | 2                | -1.1263      | 178                | 13                     |
|                            | 3                | -0.5642      | 187                | 12                     |
|                            | 4                | -0.0995      | 195                | 11                     |
|                            | 5                | 0.3291       | 202                | 11                     |

| Subdomain | Raw Score | Theta  | Scale Score | Conditional SEM |
|-----------|-----------|--------|-------------|-----------------|
|           | 6         | 0.7585 | 210         | 11              |
|           | 7         | 1.2256 | 217         | 12              |
|           | 8         | 1.7918 | 227         | 13              |
|           | 9         | 2.6327 | 241         | 18              |
|           | 10        | 4.1238 | 266         | 34              |

### Grade 7 Reading

| Subdomain           | Raw Score | Theta   | Scale Score | Conditional SEM |
|---------------------|-----------|---------|-------------|-----------------|
| Key Ideas           | 0         | -4.2042 | 100         | 34              |
|                     | 1         | -2.6890 | 155         | 18              |
|                     | 2         | -1.8228 | 169         | 14              |
|                     | 3         | -1.2409 | 179         | 12              |
|                     | 4         | -0.7700 | 187         | 11              |
|                     | 5         | -0.3526 | 194         | 11              |
|                     | 6         | 0.0405  | 200         | 10              |
|                     | 7         | 0.4305  | 207         | 10              |
|                     | 8         | 0.8381  | 213         | 11              |
|                     | 9         | 1.2927  | 221         | 12              |
|                     | 10        | 1.8516  | 230         | 13              |
|                     | 11        | 2.6880  | 244         | 18              |
|                     | 12        | 4.1765  | 269         | 34              |
| Craft and Structure | 0         | -4.1254 | 100         | 34              |
|                     | 1         | -2.6395 | 156         | 18              |
|                     | 2         | -1.8048 | 169         | 13              |
|                     | 3         | -1.2466 | 179         | 12              |
|                     | 4         | -0.7933 | 186         | 11              |
|                     | 5         | -0.3895 | 193         | 10              |
|                     | 6         | -0.0078 | 199         | 10              |
|                     | 7         | 0.3699  | 206         | 10              |
|                     | 8         | 0.7600  | 212         | 11              |
|                     | 9         | 1.1827  | 219         | 11              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 10               | 1.6703       | 227                | 12                     |
|                            | 11               | 2.2881       | 238                | 14                     |
|                            | 12               | 3.2225       | 253                | 19                     |
|                            | 13               | 4.8159       | 280                | 35                     |
| Integration of Ideas       | 0                | -3.5184      | 100                | 34                     |
|                            | 1                | -2.0783      | 165                | 17                     |
|                            | 2                | -1.3153      | 178                | 13                     |
|                            | 3                | -0.8319      | 186                | 11                     |
|                            | 4                | -0.4503      | 192                | 10                     |
|                            | 5                | -0.1123      | 198                | 10                     |
|                            | 6                | 0.2092       | 203                | 9                      |
|                            | 7                | 0.5292       | 208                | 9                      |
|                            | 8                | 0.8580       | 214                | 10                     |
|                            | 9                | 1.2051       | 220                | 10                     |
|                            | 10               | 1.5841       | 226                | 11                     |
|                            | 11               | 2.0195       | 233                | 12                     |
|                            | 12               | 2.5655       | 242                | 13                     |
|                            | 13               | 3.3931       | 256                | 18                     |
|                            | 14               | 4.8767       | 281                | 34                     |
| Vocabulary and Acquisition | 0                | -3.5673      | 100                | 34                     |
|                            | 1                | -2.0881      | 165                | 18                     |
|                            | 2                | -1.2604      | 179                | 13                     |
|                            | 3                | -0.7059      | 188                | 12                     |
|                            | 4                | -0.2514      | 195                | 11                     |
|                            | 5                | 0.1612       | 202                | 11                     |
|                            | 6                | 0.5632       | 209                | 11                     |
|                            | 7                | 0.9797       | 216                | 11                     |
|                            | 8                | 1.4414       | 224                | 12                     |
|                            | 9                | 2.0061       | 233                | 13                     |
|                            | 10               | 2.8463       | 247                | 18                     |
|                            | 11               | 4.3360       | 272                | 34                     |

## Grade 7 Reading-Braille

| Subdomain            | Raw Score | Theta   | Scale Score | Conditional SEM |
|----------------------|-----------|---------|-------------|-----------------|
| Key Ideas            | 0         | -4.2042 | 100         | 34              |
|                      | 1         | -2.6890 | 155         | 18              |
|                      | 2         | -1.8228 | 169         | 14              |
|                      | 3         | -1.2409 | 179         | 12              |
|                      | 4         | -0.7700 | 187         | 11              |
|                      | 5         | -0.3526 | 194         | 11              |
|                      | 6         | 0.0405  | 200         | 10              |
|                      | 7         | 0.4305  | 207         | 10              |
|                      | 8         | 0.8381  | 213         | 11              |
|                      | 9         | 1.2927  | 221         | 12              |
|                      | 10        | 1.8516  | 230         | 13              |
|                      | 11        | 2.6880  | 244         | 18              |
|                      | 12        | 4.1765  | 269         | 34              |
| Craft and Structure  | 0         | -4.1254 | 100         | 34              |
|                      | 1         | -2.6395 | 156         | 18              |
|                      | 2         | -1.8048 | 169         | 13              |
|                      | 3         | -1.2466 | 179         | 12              |
|                      | 4         | -0.7933 | 186         | 11              |
|                      | 5         | -0.3895 | 193         | 10              |
|                      | 6         | -0.0078 | 199         | 10              |
|                      | 7         | 0.3699  | 206         | 10              |
|                      | 8         | 0.7600  | 212         | 11              |
|                      | 9         | 1.1827  | 219         | 11              |
|                      | 10        | 1.6703  | 227         | 12              |
|                      | 11        | 2.2881  | 238         | 14              |
|                      | 12        | 3.2225  | 253         | 19              |
|                      | 13        | 4.8159  | 280         | 35              |
| Integration of Ideas | 0         | -3.4736 | 100         | 34              |
|                      | 1         | -2.0303 | 166         | 17              |
|                      | 2         | -1.2626 | 178         | 13              |
|                      | 3         | -0.7722 | 187         | 11              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 4                | -0.3802      | 193                | 10                     |
|                            | 5                | -0.0269      | 199                | 10                     |
|                            | 6                | 0.3158       | 205                | 10                     |
|                            | 7                | 0.6644       | 211                | 10                     |
|                            | 8                | 1.0309       | 217                | 10                     |
|                            | 9                | 1.4293       | 223                | 11                     |
|                            | 10               | 1.8837       | 231                | 12                     |
|                            | 11               | 2.4480       | 240                | 13                     |
|                            | 12               | 3.2929       | 254                | 18                     |
|                            | 13               | 4.7887       | 279                | 34                     |
| Vocabulary and Acquisition | 0                | -3.5673      | 100                | 34                     |
|                            | 1                | -2.0881      | 165                | 18                     |
|                            | 2                | -1.2604      | 179                | 13                     |
|                            | 3                | -0.7059      | 188                | 12                     |
|                            | 4                | -0.2514      | 195                | 11                     |
|                            | 5                | 0.1612       | 202                | 11                     |
|                            | 6                | 0.5632       | 209                | 11                     |
|                            | 7                | 0.9797       | 216                | 11                     |
|                            | 8                | 1.4414       | 224                | 12                     |
|                            | 9                | 2.0061       | 233                | 13                     |
|                            | 10               | 2.8463       | 247                | 18                     |
|                            | 11               | 4.3360       | 272                | 34                     |

### Grade 8 Reading

| <b>Subdomain</b> | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|------------------|--------------|--------------------|------------------------|
| Key Ideas        | 0                | -4.0579      | 100                | 34                     |
|                  | 1                | -2.5803      | 157                | 18                     |
|                  | 2                | -1.7592      | 170                | 13                     |
|                  | 3                | -1.2171      | 179                | 11                     |
|                  | 4                | -0.7821      | 187                | 11                     |
|                  | 5                | -0.3983      | 193                | 10                     |

| <b>Subdomain</b>     | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------|------------------|--------------|--------------------|------------------------|
|                      | 6                | -0.0385      | 199                | 10                     |
|                      | 7                | 0.3149       | 205                | 10                     |
|                      | 8                | 0.6770       | 211                | 10                     |
|                      | 9                | 1.0650       | 217                | 11                     |
|                      | 10               | 1.5057       | 225                | 12                     |
|                      | 11               | 2.0542       | 234                | 13                     |
|                      | 12               | 2.8815       | 248                | 18                     |
|                      | 13               | 4.3632       | 272                | 34                     |
| Craft and Structure  | 0                | -4.3337      | 100                | 34                     |
|                      | 1                | -2.8203      | 153                | 18                     |
|                      | 2                | -1.9444      | 167                | 14                     |
|                      | 3                | -1.3417      | 177                | 12                     |
|                      | 4                | -0.8435      | 186                | 11                     |
|                      | 5                | -0.3970      | 193                | 11                     |
|                      | 6                | 0.0248       | 200                | 11                     |
|                      | 7                | 0.4433       | 207                | 11                     |
|                      | 8                | 0.8825       | 214                | 11                     |
|                      | 9                | 1.3755       | 223                | 12                     |
|                      | 10               | 1.9827       | 233                | 14                     |
|                      | 11               | 2.8775       | 248                | 18                     |
|                      | 12               | 4.4144       | 273                | 34                     |
| Integration of Ideas | 0                | -2.7262      | 100                | 34                     |
|                      | 1                | -1.2991      | 178                | 17                     |
|                      | 2                | -0.5428      | 191                | 13                     |
|                      | 3                | -0.0560      | 199                | 11                     |
|                      | 4                | 0.3367       | 205                | 10                     |
|                      | 5                | 0.6928       | 211                | 10                     |
|                      | 6                | 1.0399       | 217                | 10                     |
|                      | 7                | 1.3957       | 223                | 10                     |
|                      | 8                | 1.7770       | 229                | 11                     |
|                      | 9                | 2.2094       | 236                | 11                     |
|                      | 10               | 2.7468       | 245                | 13                     |
|                      | 11               | 3.5602       | 259                | 18                     |

| Subdomain                  | Raw Score | Theta   | Scale Score | Conditional SEM |
|----------------------------|-----------|---------|-------------|-----------------|
|                            | 12        | 5.0296  | 283         | 34              |
| Vocabulary and Acquisition | 0         | -3.6084 | 100         | 34              |
|                            | 1         | -2.1402 | 164         | 18              |
|                            | 2         | -1.3315 | 177         | 13              |
|                            | 3         | -0.8020 | 186         | 11              |
|                            | 4         | -0.3801 | 193         | 10              |
|                            | 5         | -0.0104 | 199         | 10              |
|                            | 6         | 0.3342  | 205         | 10              |
|                            | 7         | 0.6711  | 211         | 10              |
|                            | 8         | 1.0157  | 217         | 10              |
|                            | 9         | 1.3855  | 223         | 10              |
|                            | 10        | 1.8078  | 230         | 11              |
|                            | 11        | 2.3387  | 239         | 13              |
|                            | 12        | 3.1501  | 252         | 18              |
|                            | 13        | 4.6214  | 277         | 34              |

### Grade 3 Mathematics

| Subdomain                         | Raw Score | Theta   | Scale Score | Conditional SEM |
|-----------------------------------|-----------|---------|-------------|-----------------|
| Operations and Algebraic Thinking | 0         | -4.2228 | 100         | 34              |
|                                   | 1         | -2.7506 | 148         | 18              |
|                                   | 2         | -1.9329 | 161         | 13              |
|                                   | 3         | -1.3889 | 170         | 12              |
|                                   | 4         | -0.9454 | 178         | 11              |
|                                   | 5         | -0.5444 | 184         | 10              |
|                                   | 6         | -0.1555 | 191         | 10              |
|                                   | 7         | 0.2441  | 197         | 11              |
|                                   | 8         | 0.6780  | 205         | 11              |
|                                   | 9         | 1.1782  | 213         | 12              |
|                                   | 10        | 1.8033  | 223         | 14              |
|                                   | 11        | 2.7226  | 239         | 18              |
|                                   | 12        | 4.2778  | 265         | 34              |

| <b>Subdomain</b>                  | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-----------------------------------|------------------|--------------|--------------------|------------------------|
| Number and Operations in Base Ten | 0                | -3.9168      | 100                | 34                     |
|                                   | 1                | -2.4427      | 153                | 18                     |
|                                   | 2                | -1.6270      | 166                | 13                     |
|                                   | 3                | -1.0910      | 175                | 11                     |
|                                   | 4                | -0.6625      | 182                | 11                     |
|                                   | 5                | -0.2847      | 189                | 10                     |
|                                   | 6                | 0.0713       | 195                | 10                     |
|                                   | 7                | 0.4263       | 200                | 10                     |
|                                   | 8                | 0.8014       | 207                | 10                     |
|                                   | 9                | 1.2263       | 214                | 11                     |
|                                   | 10               | 1.7588       | 223                | 13                     |
|                                   | 11               | 2.5727       | 236                | 18                     |
|                                   | 12               | 4.0477       | 261                | 34                     |
| Number and Operations - Fractions | 0                | -4.4151      | 100                | 34                     |
|                                   | 1                | -2.9161      | 145                | 18                     |
|                                   | 2                | -2.0611      | 159                | 14                     |
|                                   | 3                | -1.4791      | 169                | 12                     |
|                                   | 4                | -0.9990      | 177                | 11                     |
|                                   | 5                | -0.5652      | 184                | 11                     |
|                                   | 6                | -0.1506      | 191                | 11                     |
|                                   | 7                | 0.2633       | 198                | 11                     |
|                                   | 8                | 0.6948       | 205                | 11                     |
|                                   | 9                | 1.1682       | 213                | 12                     |
|                                   | 10               | 1.7253       | 222                | 13                     |
|                                   | 11               | 2.4568       | 234                | 16                     |
|                                   | 12               | 3.6067       | 254                | 21                     |
|                                   | 13               | 5.4256       | 284                | 36                     |
| Measurement and Data/Geometry     | 0                | -3.4287      | 100                | 34                     |
|                                   | 1                | -1.9389      | 161                | 18                     |
|                                   | 2                | -1.1154      | 175                | 13                     |
|                                   | 3                | -0.5863      | 184                | 11                     |
|                                   | 4                | -0.1786      | 190                | 10                     |
|                                   | 5                | 0.1654       | 196                | 9                      |

| Subdomain | Raw Score | Theta  | Scale Score | Conditional SEM |
|-----------|-----------|--------|-------------|-----------------|
|           | 6         | 0.4752 | 201         | 9               |
|           | 7         | 0.7713 | 206         | 9               |
|           | 8         | 1.0717 | 211         | 9               |
|           | 9         | 1.3969 | 217         | 10              |
|           | 10        | 1.7769 | 223         | 11              |
|           | 11        | 2.2699 | 231         | 13              |
|           | 12        | 3.0494 | 244         | 17              |
|           | 13        | 4.5008 | 268         | 34              |

### Grade 4 Mathematics

| Subdomain                         | Raw Score | Theta   | Scale Score | Conditional SEM |
|-----------------------------------|-----------|---------|-------------|-----------------|
| Operations and Algebraic Thinking | 0         | -4.0531 | 100         | 34              |
|                                   | 1         | -2.5414 | 159         | 18              |
|                                   | 2         | -1.6727 | 174         | 14              |
|                                   | 3         | -1.0802 | 184         | 12              |
|                                   | 4         | -0.5929 | 192         | 11              |
|                                   | 5         | -0.1584 | 199         | 11              |
|                                   | 6         | 0.2426  | 206         | 10              |
|                                   | 7         | 0.6149  | 212         | 10              |
|                                   | 8         | 0.9613  | 218         | 10              |
|                                   | 9         | 1.2942  | 223         | 10              |
|                                   | 10        | 1.6429  | 229         | 10              |
|                                   | 11        | 2.0687  | 236         | 12              |
|                                   | 12        | 2.7551  | 248         | 17              |
| 13                                | 4.1403    | 271     | 33          |                 |
| Number and Operations in Base Ten | 0         | -4.5839 | 100         | 34              |
|                                   | 1         | -3.0210 | 151         | 19              |
|                                   | 2         | -2.0877 | 167         | 14              |
|                                   | 3         | -1.4422 | 178         | 13              |
|                                   | 4         | -0.9143 | 186         | 12              |
|                                   | 5         | -0.4451 | 194         | 11              |

| <b>Subdomain</b>                  | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-----------------------------------|------------------|--------------|--------------------|------------------------|
|                                   | 6                | -0.0036      | 202                | 11                     |
|                                   | 7                | 0.4292       | 209                | 11                     |
|                                   | 8                | 0.8665       | 216                | 11                     |
|                                   | 9                | 1.3245       | 224                | 12                     |
|                                   | 10               | 1.8467       | 232                | 13                     |
|                                   | 11               | 2.5911       | 245                | 17                     |
|                                   | 12               | 3.9579       | 268                | 33                     |
| Number and Operations - Fractions | 0                | -4.2928      | 100                | 34                     |
|                                   | 1                | -2.8143      | 155                | 18                     |
|                                   | 2                | -1.9926      | 168                | 13                     |
|                                   | 3                | -1.4512      | 177                | 11                     |
|                                   | 4                | -1.0183      | 185                | 11                     |
|                                   | 5                | -0.6377      | 191                | 10                     |
|                                   | 6                | -0.2823      | 197                | 10                     |
|                                   | 7                | 0.0659       | 203                | 10                     |
|                                   | 8                | 0.4225       | 209                | 10                     |
|                                   | 9                | 0.8051       | 215                | 11                     |
|                                   | 10               | 1.2411       | 222                | 12                     |
|                                   | 11               | 1.7860       | 231                | 13                     |
|                                   | 12               | 2.6116       | 245                | 18                     |
|                                   | 13               | 4.0931       | 270                | 34                     |
| Measurement and Data/Geometry     | 0                | -4.2336      | 100                | 34                     |
|                                   | 1                | -2.7487      | 156                | 18                     |
|                                   | 2                | -1.9281      | 169                | 13                     |
|                                   | 3                | -1.3974      | 178                | 11                     |
|                                   | 4                | -0.9845      | 185                | 10                     |
|                                   | 5                | -0.6338      | 191                | 10                     |
|                                   | 6                | -0.3195      | 196                | 9                      |
|                                   | 7                | -0.0268      | 201                | 9                      |
|                                   | 8                | 0.2548       | 206                | 9                      |
|                                   | 9                | 0.5334       | 211                | 9                      |
|                                   | 10               | 0.8175       | 215                | 9                      |
|                                   | 11               | 1.1171       | 220                | 9                      |

| Subdomain | Raw Score | Theta  | Scale Score | Conditional SEM |
|-----------|-----------|--------|-------------|-----------------|
|           | 12        | 1.4466 | 226         | 10              |
|           | 13        | 1.8313 | 232         | 11              |
|           | 14        | 2.3255 | 240         | 13              |
|           | 15        | 3.1002 | 253         | 17              |
|           | 16        | 4.5435 | 277         | 34              |

### Grade 5 Mathematics

| Subdomain                         | Raw Score | Theta   | Scale Score | Conditional SEM |
|-----------------------------------|-----------|---------|-------------|-----------------|
| Operations and Algebraic Thinking | 0         | -4.2895 | 100         | 34              |
|                                   | 1         | -2.7840 | 156         | 18              |
|                                   | 2         | -1.9212 | 170         | 14              |
|                                   | 3         | -1.3321 | 180         | 12              |
|                                   | 4         | -0.8447 | 188         | 11              |
|                                   | 5         | -0.4029 | 195         | 11              |
|                                   | 6         | 0.0208  | 202         | 11              |
|                                   | 7         | 0.4449  | 209         | 11              |
|                                   | 8         | 0.8877  | 217         | 11              |
|                                   | 9         | 1.3761  | 225         | 12              |
|                                   | 10        | 1.9653  | 235         | 14              |
|                                   | 11        | 2.8265  | 249         | 18              |
|                                   | 12        | 4.3295  | 274         | 34              |
| Number and Operations in Base Ten | 0         | -3.9929 | 100         | 34              |
|                                   | 1         | -2.5341 | 160         | 17              |
|                                   | 2         | -1.7380 | 173         | 13              |
|                                   | 3         | -1.2211 | 182         | 11              |
|                                   | 4         | -0.8118 | 189         | 10              |
|                                   | 5         | -0.4547 | 194         | 10              |
|                                   | 6         | -0.1229 | 200         | 10              |
|                                   | 7         | 0.2010  | 205         | 10              |
|                                   | 8         | 0.5318  | 211         | 10              |
|                                   | 9         | 0.8867  | 217         | 10              |

| <b>Subdomain</b>                  | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-----------------------------------|------------------|--------------|--------------------|------------------------|
|                                   | 10               | 1.2925       | 224                | 11                     |
|                                   | 11               | 1.8044       | 232                | 13                     |
|                                   | 12               | 2.5938       | 245                | 17                     |
|                                   | 13               | 4.0461       | 270                | 34                     |
| Number and Operations - Fractions | 0                | -3.7836      | 100                | 34                     |
|                                   | 1                | -2.2362      | 165                | 18                     |
|                                   | 2                | -1.3290      | 180                | 14                     |
|                                   | 3                | -0.7079      | 190                | 12                     |
|                                   | 4                | -0.1979      | 199                | 12                     |
|                                   | 5                | 0.2594       | 206                | 11                     |
|                                   | 6                | 0.6914       | 214                | 11                     |
|                                   | 7                | 1.1124       | 221                | 11                     |
|                                   | 8                | 1.5285       | 228                | 11                     |
|                                   | 9                | 1.9462       | 235                | 11                     |
|                                   | 10               | 2.3861       | 242                | 11                     |
|                                   | 11               | 2.9061       | 251                | 13                     |
|                                   | 12               | 3.6922       | 264                | 17                     |
|                                   | 13               | 5.1567       | 288                | 34                     |
| Measurement and Data/Geometry     | 0                | -4.6716      | 100                | 34                     |
|                                   | 1                | -3.1939      | 149                | 18                     |
|                                   | 2                | -2.3727      | 163                | 13                     |
|                                   | 3                | -1.8315      | 172                | 11                     |
|                                   | 4                | -1.3997      | 179                | 11                     |
|                                   | 5                | -1.0233      | 185                | 10                     |
|                                   | 6                | -0.6776      | 191                | 10                     |
|                                   | 7                | -0.3492      | 196                | 9                      |
|                                   | 8                | -0.0294      | 202                | 9                      |
|                                   | 9                | 0.2879       | 207                | 9                      |
|                                   | 10               | 0.6085       | 212                | 9                      |
|                                   | 11               | 0.9395       | 218                | 10                     |
|                                   | 12               | 1.2931       | 224                | 10                     |
|                                   | 13               | 1.6930       | 230                | 11                     |
|                                   | 14               | 2.1937       | 239                | 13                     |

| Subdomain | Raw Score | Theta  | Scale Score | Conditional SEM |
|-----------|-----------|--------|-------------|-----------------|
|           | 15        | 2.9679 | 252         | 17              |
|           | 16        | 4.4088 | 276         | 34              |

### Grade 5 Mathematics-Braille

| Subdomain                         | Raw Score | Theta   | Scale Score | Conditional SEM |
|-----------------------------------|-----------|---------|-------------|-----------------|
| Operations and Algebraic Thinking | 0         | -4.2895 | 100         | 34              |
|                                   | 1         | -2.7840 | 156         | 18              |
|                                   | 2         | -1.9212 | 170         | 14              |
|                                   | 3         | -1.3321 | 180         | 12              |
|                                   | 4         | -0.8447 | 188         | 11              |
|                                   | 5         | -0.4029 | 195         | 11              |
|                                   | 6         | 0.0208  | 202         | 11              |
|                                   | 7         | 0.4449  | 209         | 11              |
|                                   | 8         | 0.8877  | 217         | 11              |
|                                   | 9         | 1.3761  | 225         | 12              |
|                                   | 10        | 1.9653  | 235         | 14              |
|                                   | 11        | 2.8265  | 249         | 18              |
|                                   | 12        | 4.3295  | 274         | 34              |
| Number and Operations in Base Ten | 0         | -3.9929 | 100         | 34              |
|                                   | 1         | -2.5341 | 160         | 17              |
|                                   | 2         | -1.7380 | 173         | 13              |
|                                   | 3         | -1.2211 | 182         | 11              |
|                                   | 4         | -0.8118 | 189         | 10              |
|                                   | 5         | -0.4547 | 194         | 10              |
|                                   | 6         | -0.1229 | 200         | 10              |
|                                   | 7         | 0.2010  | 205         | 10              |
|                                   | 8         | 0.5318  | 211         | 10              |
|                                   | 9         | 0.8867  | 217         | 10              |
|                                   | 10        | 1.2925  | 224         | 11              |
|                                   | 11        | 1.8044  | 232         | 13              |
|                                   | 12        | 2.5938  | 245         | 17              |

| <b>Subdomain</b>                  | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-----------------------------------|------------------|--------------|--------------------|------------------------|
|                                   | 13               | 4.0461       | 270                | 34                     |
| Number and Operations - Fractions | 0                | -3.7677      | 100                | 34                     |
|                                   | 1                | -2.2148      | 165                | 18                     |
|                                   | 2                | -1.2985      | 180                | 14                     |
|                                   | 3                | -0.6650      | 191                | 13                     |
|                                   | 4                | -0.1383      | 200                | 12                     |
|                                   | 5                | 0.3422       | 208                | 11                     |
|                                   | 6                | 0.8057       | 216                | 11                     |
|                                   | 7                | 1.2664       | 223                | 11                     |
|                                   | 8                | 1.7288       | 231                | 11                     |
|                                   | 9                | 2.2048       | 239                | 12                     |
|                                   | 10               | 2.7462       | 248                | 13                     |
|                                   | 11               | 3.5391       | 261                | 17                     |
|                                   | 12               | 5.0072       | 286                | 34                     |
| Measurement and Data/Geometry     | 0                | -4.6716      | 100                | 34                     |
|                                   | 1                | -3.1939      | 149                | 18                     |
|                                   | 2                | -2.3727      | 163                | 13                     |
|                                   | 3                | -1.8315      | 172                | 11                     |
|                                   | 4                | -1.3997      | 179                | 11                     |
|                                   | 5                | -1.0233      | 185                | 10                     |
|                                   | 6                | -0.6776      | 191                | 10                     |
|                                   | 7                | -0.3492      | 196                | 9                      |
|                                   | 8                | -0.0294      | 202                | 9                      |
|                                   | 9                | 0.2879       | 207                | 9                      |
|                                   | 10               | 0.6085       | 212                | 9                      |
|                                   | 11               | 0.9395       | 218                | 10                     |
|                                   | 12               | 1.2931       | 224                | 10                     |
|                                   | 13               | 1.6930       | 230                | 11                     |
|                                   | 14               | 2.1937       | 239                | 13                     |
|                                   | 15               | 2.9679       | 252                | 17                     |
| 16                                | 4.4088           | 276          | 34                 |                        |

## Grade 6 Mathematics

| Subdomain                             | Raw Score | Theta   | Scale Score | Conditional SEM |
|---------------------------------------|-----------|---------|-------------|-----------------|
| Ratios and Proportional Relationships | 0         | -4.1215 | 100         | 34              |
|                                       | 1         | -2.5854 | 159         | 18              |
|                                       | 2         | -1.6884 | 174         | 14              |
|                                       | 3         | -1.0730 | 184         | 12              |
|                                       | 4         | -0.5663 | 193         | 11              |
|                                       | 5         | -0.1101 | 200         | 11              |
|                                       | 6         | 0.3273  | 208         | 11              |
|                                       | 7         | 0.7716  | 215         | 11              |
|                                       | 8         | 1.2546  | 223         | 12              |
|                                       | 9         | 1.8349  | 233         | 14              |
|                                       | 10        | 2.6860  | 247         | 18              |
|                                       | 11        | 4.1815  | 272         | 34              |
| The Number System                     | 0         | -3.6653 | 100         | 34              |
|                                       | 1         | -2.1559 | 166         | 18              |
|                                       | 2         | -1.2920 | 181         | 14              |
|                                       | 3         | -0.7060 | 190         | 12              |
|                                       | 4         | -0.2263 | 198         | 11              |
|                                       | 5         | 0.2023  | 205         | 11              |
|                                       | 6         | 0.6065  | 212         | 11              |
|                                       | 7         | 1.0063  | 219         | 11              |
|                                       | 8         | 1.4286  | 226         | 11              |
|                                       | 9         | 1.9276  | 234         | 13              |
|                                       | 10        | 2.6715  | 247         | 17              |
|                                       | 11        | 4.0632  | 270         | 33              |
| Expressions and Equations             | 0         | -3.2316 | 100         | 34              |
|                                       | 1         | -1.7494 | 173         | 18              |
|                                       | 2         | -0.9216 | 187         | 13              |
|                                       | 3         | -0.3713 | 196         | 12              |
|                                       | 4         | 0.0749  | 203         | 11              |
|                                       | 5         | 0.4753  | 210         | 10              |
|                                       | 6         | 0.8614  | 216         | 10              |
|                                       | 7         | 1.2588  | 223         | 11              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 8                | 1.6987       | 230                | 12                     |
|                            | 9                | 2.2395       | 239                | 13                     |
|                            | 10               | 3.0545       | 253                | 18                     |
|                            | 11               | 4.5248       | 278                | 34                     |
| Geometry                   | 0                | -3.4436      | 100                | 34                     |
|                            | 1                | -1.9670      | 169                | 18                     |
|                            | 2                | -1.1433      | 183                | 13                     |
|                            | 3                | -0.5932      | 192                | 12                     |
|                            | 4                | -0.1437      | 200                | 11                     |
|                            | 5                | 0.2636       | 206                | 11                     |
|                            | 6                | 0.6600       | 213                | 11                     |
|                            | 7                | 1.0707       | 220                | 11                     |
|                            | 8                | 1.5270       | 228                | 12                     |
|                            | 9                | 2.0873       | 237                | 13                     |
|                            | 10               | 2.9246       | 251                | 18                     |
|                            | 11               | 4.4136       | 276                | 34                     |
| Statistics and Probability | 0                | -3.7379      | 100                | 34                     |
|                            | 1                | -2.2207      | 165                | 18                     |
|                            | 2                | -1.3411      | 180                | 14                     |
|                            | 3                | -0.7323      | 190                | 12                     |
|                            | 4                | -0.2188      | 198                | 12                     |
|                            | 5                | 0.2619       | 206                | 12                     |
|                            | 6                | 0.7497       | 215                | 12                     |
|                            | 7                | 1.2874       | 224                | 13                     |
|                            | 8                | 1.9474       | 235                | 15                     |
|                            | 9                | 2.9222       | 251                | 19                     |
|                            | 10               | 4.5458       | 278                | 35                     |

## Grade 7 Mathematics

| Subdomain                             | Raw Score | Theta   | Scale Score | Conditional SEM |
|---------------------------------------|-----------|---------|-------------|-----------------|
| Ratios and Proportional Relationships | 0         | -3.5741 | 100         | 34              |
|                                       | 1         | -2.0724 | 172         | 18              |
|                                       | 2         | -1.2282 | 186         | 13              |
|                                       | 3         | -0.6715 | 195         | 12              |
|                                       | 4         | -0.2244 | 203         | 11              |
|                                       | 5         | 0.1782  | 209         | 10              |
|                                       | 6         | 0.5769  | 216         | 11              |
|                                       | 7         | 1.0124  | 223         | 11              |
|                                       | 8         | 1.5494  | 232         | 13              |
|                                       | 9         | 2.3659  | 246         | 18              |
|                                       | 10        | 3.8425  | 270         | 34              |
| The Number System                     | 0         | -3.7286 | 100         | 34              |
|                                       | 1         | -2.1635 | 170         | 19              |
|                                       | 2         | -1.2437 | 186         | 14              |
|                                       | 3         | -0.6217 | 196         | 12              |
|                                       | 4         | -0.1219 | 204         | 11              |
|                                       | 5         | 0.3145  | 212         | 11              |
|                                       | 6         | 0.7179  | 218         | 10              |
|                                       | 7         | 1.1122  | 225         | 11              |
|                                       | 8         | 1.5280  | 232         | 11              |
|                                       | 9         | 2.0237  | 240         | 13              |
|                                       | 10        | 2.7730  | 253         | 17              |
|                                       | 11        | 4.1819  | 276         | 33              |
| Expressions and Equations             | 0         | -3.7796 | 100         | 34              |
|                                       | 1         | -2.2494 | 169         | 18              |
|                                       | 2         | -1.3645 | 184         | 14              |
|                                       | 3         | -0.7779 | 193         | 12              |
|                                       | 4         | -0.3228 | 201         | 11              |
|                                       | 5         | 0.0646  | 207         | 10              |
|                                       | 6         | 0.4286  | 213         | 10              |
|                                       | 7         | 0.8096  | 220         | 11              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 8                | 1.2568       | 227                | 12                     |
|                            | 9                | 1.8482       | 237                | 14                     |
|                            | 10               | 2.7714       | 252                | 19                     |
|                            | 11               | 4.3590       | 279                | 34                     |
| Geometry                   | 0                | -3.7178      | 100                | 34                     |
|                            | 1                | -2.2313      | 169                | 18                     |
|                            | 2                | -1.3945      | 183                | 13                     |
|                            | 3                | -0.8312      | 192                | 12                     |
|                            | 4                | -0.3674      | 200                | 11                     |
|                            | 5                | 0.0560       | 207                | 11                     |
|                            | 6                | 0.4720       | 214                | 11                     |
|                            | 7                | 0.9084       | 221                | 11                     |
|                            | 8                | 1.4003       | 230                | 12                     |
|                            | 9                | 2.0121       | 240                | 14                     |
|                            | 10               | 2.9247       | 255                | 18                     |
|                            | 11               | 4.4889       | 281                | 34                     |
| Statistics and Probability | 0                | -4.4745      | 100                | 34                     |
|                            | 1                | -2.9780      | 157                | 18                     |
|                            | 2                | -2.1286      | 171                | 14                     |
|                            | 3                | -1.5547      | 180                | 12                     |
|                            | 4                | -1.0832      | 188                | 11                     |
|                            | 5                | -0.6564      | 195                | 11                     |
|                            | 6                | -0.2435      | 202                | 11                     |
|                            | 7                | 0.1805       | 209                | 11                     |
|                            | 8                | 0.6465       | 217                | 12                     |
|                            | 9                | 1.2125       | 227                | 13                     |
|                            | 10               | 2.0516       | 240                | 18                     |
|                            | 11               | 3.5392       | 265                | 34                     |

## Grade 8 Mathematics

| Subdomain                                   | Raw Score | Theta   | Scale Score | Conditional SEM |
|---|-----------|---------|-------------|-----------------|
| The Number System/Expressions and Equations | 0         | -4.0465 | 100         | 34              |
|   | 1         | -2.5909 | 160         | 17              |
|   | 2         | -1.8027 | 173         | 13              |
|   | 3         | -1.2991 | 181         | 11              |
|   | 4         | -0.9096 | 188         | 10              |
|   | 5         | -0.5803 | 193         | 9               |
|   | 6         | -0.2860 | 198         | 9               |
|   | 7         | -0.0122 | 203         | 9               |
|   | 8         | 0.2515  | 207         | 9               |
|   | 9         | 0.5142  | 211         | 9               |
|   | 10        | 0.7848  | 216         | 9               |
|   | 11        | 1.0740  | 221         | 9               |
|   | 12        | 1.3971  | 226         | 10              |
|   | 13        | 1.7797  | 233         | 11              |
|   | 14        | 2.2765  | 241         | 13              |
|   | 15        | 3.0582  | 254         | 17              |
|   | 16        | 4.5093  | 278         | 34              |
| Functions                                   | 0         | -3.7309 | 100         | 34              |
|   | 1         | -2.2198 | 166         | 18              |
|   | 2         | -1.3636 | 180         | 14              |
|   | 3         | -0.7977 | 190         | 12              |
|   | 4         | -0.3502 | 197         | 11              |
|   | 5         | 0.0353  | 203         | 10              |
|   | 6         | 0.3882  | 209         | 10              |
|   | 7         | 0.7307  | 215         | 10              |
|   | 8         | 1.0861  | 221         | 10              |
|   | 9         | 1.4871  | 228         | 11              |
|   | 10        | 1.9951  | 236         | 13              |
|   | 11        | 2.7882  | 249         | 17              |
|   | 12        | 4.2517  | 274         | 34              |
| Geometry                                    | 0         | -4.1736 | 100         | 34              |

| <b>Subdomain</b>           | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|----------------------------|------------------|--------------|--------------------|------------------------|
|                            | 1                | -2.6918      | 158                | 18                     |
|                            | 2                | -1.8746      | 172                | 13                     |
|                            | 3                | -1.3478      | 180                | 11                     |
|                            | 4                | -0.9401      | 187                | 10                     |
|                            | 5                | -0.5960      | 193                | 9                      |
|                            | 6                | -0.2890      | 198                | 9                      |
|                            | 7                | -0.0030      | 203                | 9                      |
|                            | 8                | 0.2741       | 207                | 9                      |
|                            | 9                | 0.5532       | 212                | 9                      |
|                            | 10               | 0.8464       | 217                | 9                      |
|                            | 11               | 1.1696       | 222                | 10                     |
|                            | 12               | 1.5494       | 229                | 11                     |
|                            | 13               | 2.0409       | 237                | 13                     |
|                            | 14               | 2.8158       | 250                | 17                     |
|                            | 15               | 4.2612       | 274                | 34                     |
| Statistics and Probability | 0                | -4.0542      | 100                | 34                     |
|                            | 1                | -2.5220      | 161                | 18                     |
|                            | 2                | -1.6132      | 176                | 14                     |
|                            | 3                | -0.9649      | 187                | 13                     |
|                            | 4                | -0.4052      | 196                | 12                     |
|                            | 5                | 0.1171       | 205                | 12                     |
|                            | 6                | 0.6180       | 213                | 12                     |
|                            | 7                | 1.1027       | 221                | 12                     |
|                            | 8                | 1.5866       | 229                | 12                     |
|                            | 9                | 2.1217       | 238                | 13                     |
|                            | 10               | 2.8794       | 251                | 17                     |
|                            | 11               | 4.2705       | 274                | 33                     |

## Grade 4 Science

| Form | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|-------------------------|-----------|---------|-------------|-----------------|
| 01   | Life Science            | 0         | -4.6114 | 100         | 34              |
|      |                         | 1         | -3.0727 | 154         | 18              |
|      |                         | 2         | -2.1752 | 169         | 14              |
|      |                         | 3         | -1.5629 | 179         | 12              |
|      |                         | 4         | -1.0642 | 188         | 11              |
|      |                         | 5         | -0.6237 | 195         | 11              |
|      |                         | 6         | -0.2156 | 202         | 11              |
|      |                         | 7         | 0.1750  | 208         | 10              |
|      |                         | 8         | 0.5592  | 215         | 10              |
|      |                         | 9         | 0.9498  | 221         | 11              |
|      |                         | 10        | 1.3705  | 228         | 11              |
|      |                         | 11        | 1.8747  | 237         | 13              |
|      |                         | 12        | 2.6331  | 249         | 17              |
|      |                         | 13        | 4.0473  | 273         | 33              |
|      | Physical Science        | 0         | -4.4105 | 100         | 34              |
|      |                         | 1         | -2.9273 | 157         | 18              |
|      |                         | 2         | -2.1013 | 170         | 13              |
|      |                         | 3         | -1.5580 | 179         | 11              |
|      |                         | 4         | -1.1255 | 187         | 11              |
|      |                         | 5         | -0.7482 | 193         | 10              |
|      |                         | 6         | -0.3993 | 199         | 10              |
|      |                         | 7         | -0.0625 | 204         | 10              |
|      |                         | 8         | 0.2747  | 210         | 10              |
|      |                         | 9         | 0.6228  | 216         | 10              |
|      |                         | 10        | 0.9916  | 222         | 10              |
|      |                         | 11        | 1.3904  | 229         | 11              |
|      |                         | 12        | 1.8315  | 236         | 11              |
|      |                         | 13        | 2.3505  | 245         | 13              |
|      |                         | 14        | 3.0949  | 257         | 17              |
|      | 15                      | 4.4542    | 280     | 33          |                 |
|      | Earth and Space Science | 0         | -4.6037 | 100         | 34              |

| Form | Subdomain          | Raw Score | Theta            | Scale Score | Conditional SEM |
|------|--------------------|-----------|------------------|-------------|-----------------|
|      |                    | 1         | -3.1301          | 153         | 18              |
|      |                    | 2         | -2.3216          | 167         | 13              |
|      |                    | 3         | -1.7992          | 175         | 11              |
|      |                    | 4         | -1.3911          | 182         | 10              |
|      |                    | 5         | -1.0425          | 188         | 10              |
|      |                    | 6         | -0.7288          | 193         | 9               |
|      |                    | 7         | -0.4361          | 198         | 9               |
|      |                    | 8         | -0.1553          | 203         | 9               |
|      |                    | 9         | 0.1213           | 207         | 9               |
|      |                    | 10        | 0.4010           | 212         | 9               |
|      |                    | 11        | 0.6918           | 217         | 9               |
|      |                    | 12        | 1.0040           | 222         | 10              |
|      |                    | 13        | 1.3521           | 228         | 10              |
|      |                    | 14        | 1.7613           | 235         | 11              |
|      |                    | 15        | 2.2862           | 243         | 13              |
|      |                    | 16        | 3.0987           | 257         | 18              |
|      |                    | 17        | 4.5763           | 282         | 34              |
|      | Engineering Design | 0         | -1.7148          | 100         | 35              |
|      |                    | 1         | 0.0296           | 206         | 21              |
|      |                    | 2         | 1.4822           | 230         | 21              |
|      |                    | 3         | 3.2445           | 259         | 35              |
| 02   | Life Science       | 0         | -3.9014          | 100         | 34              |
|      |                    | 1         | -2.3393          | 166         | 19              |
|      |                    | 2         | -1.3767          | 182         | 15              |
|      |                    | 3         | -0.6577          | 194         | 14              |
|      |                    | 4         | -0.0137          | 205         | 13              |
|      |                    | 5         | 0.6042           | 215         | 13              |
|      |                    | 6         | 1.2284           | 226         | 13              |
|      |                    | 7         | 1.9200           | 237         | 15              |
|      |                    | 8         | 2.8585           | 253         | 18              |
|      |                    | 9         | 4.4077           | 279         | 34              |
|      |                    |           | Physical Science | 0           | -4.0890         |
| 1    | -2.6259            |           |                  | 162         | 18              |

| Form | Subdomain | Raw Score               | Theta   | Scale Score | Conditional SEM |
|------|-----------|-------------------------|---------|-------------|-----------------|
|      |           | 2                       | -1.8264 | 175         | 13              |
|      |           | 3                       | -1.3091 | 184         | 11              |
|      |           | 4                       | -0.9027 | 190         | 10              |
|      |           | 5                       | -0.5529 | 196         | 10              |
|      |           | 6                       | -0.2350 | 201         | 9               |
|      |           | 7                       | 0.0640  | 206         | 9               |
|      |           | 8                       | 0.3509  | 211         | 9               |
|      |           | 9                       | 0.6281  | 216         | 9               |
|      |           | 10                      | 0.8969  | 220         | 9               |
|      |           | 11                      | 1.1614  | 225         | 9               |
|      |           | 12                      | 1.4333  | 229         | 9               |
|      |           | 13                      | 1.7377  | 234         | 10              |
|      |           | 14                      | 2.1316  | 241         | 12              |
|      |           | 15                      | 2.7957  | 252         | 16              |
|      |           | 16                      | 4.1684  | 275         | 33              |
|      |           | Earth and Space Science | 0       | -4.0219     | 100             |
|      | 1         |                         | -2.5760 | 162         | 17              |
|      | 2         |                         | -1.8065 | 175         | 13              |
|      | 3         |                         | -1.3280 | 183         | 11              |
|      | 4         |                         | -0.9690 | 189         | 9               |
|      | 5         |                         | -0.6739 | 194         | 9               |
|      | 6         |                         | -0.4162 | 198         | 8               |
|      | 7         |                         | -0.1805 | 202         | 8               |
|      | 8         |                         | 0.0440  | 206         | 8               |
|      | 9         |                         | 0.2652  | 210         | 8               |
|      | 10        |                         | 0.4901  | 214         | 8               |
|      | 11        |                         | 0.7255  | 217         | 8               |
|      | 12        |                         | 0.9787  | 222         | 9               |
|      | 13        |                         | 1.2589  | 226         | 9               |
|      | 14        |                         | 1.5800  | 232         | 10              |
|      | 15        |                         | 1.9664  | 238         | 11              |
|      | 16        |                         | 2.4718  | 247         | 13              |
|      | 17        |                         | 3.2668  | 260         | 18              |

| Form | Subdomain          | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|--------------------|-----------|---------|-------------|-----------------|
|      |                    | 18        | 4.7313  | 284         | 34              |
|      | Engineering Design | 0         | -1.6428 | 100         | 32              |
|      |                    | 1         | -0.3365 | 200         | 17              |
|      |                    | 2         | 0.5520  | 215         | 16              |
|      |                    | 3         | 1.6413  | 233         | 20              |
|      |                    | 4         | 3.4377  | 263         | 36              |
| 03   | Life Science       | 0         | -4.6114 | 100         | 34              |
|      |                    | 1         | -3.0727 | 154         | 18              |
|      |                    | 2         | -2.1752 | 169         | 14              |
|      |                    | 3         | -1.5629 | 179         | 12              |
|      |                    | 4         | -1.0642 | 188         | 11              |
|      |                    | 5         | -0.6237 | 195         | 11              |
|      |                    | 6         | -0.2156 | 202         | 11              |
|      |                    | 7         | 0.1750  | 208         | 10              |
|      |                    | 8         | 0.5592  | 215         | 10              |
|      |                    | 9         | 0.9498  | 221         | 11              |
|      |                    | 10        | 1.3705  | 228         | 11              |
|      |                    | 11        | 1.8747  | 237         | 13              |
|      |                    | 12        | 2.6331  | 249         | 17              |
|      | 13                 | 4.0473    | 273     | 33          |                 |
|      | Physical Science   | 0         | -4.4105 | 100         | 34              |
|      |                    | 1         | -2.9273 | 157         | 18              |
|      |                    | 2         | -2.1013 | 170         | 13              |
|      |                    | 3         | -1.5580 | 179         | 11              |
|      |                    | 4         | -1.1255 | 187         | 11              |
|      |                    | 5         | -0.7482 | 193         | 10              |
|      |                    | 6         | -0.3993 | 199         | 10              |
|      |                    | 7         | -0.0625 | 204         | 10              |
|      |                    | 8         | 0.2747  | 210         | 10              |
|      |                    | 9         | 0.6228  | 216         | 10              |
| 10   |                    | 0.9916    | 222     | 10          |                 |
| 11   | 1.3904             | 229       | 11      |             |                 |
| 12   | 1.8315             | 236       | 11      |             |                 |

| Form               | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|--------------------|-------------------------|-----------|---------|-------------|-----------------|
|                    |                         | 13        | 2.3505  | 245         | 13              |
|                    |                         | 14        | 3.0949  | 257         | 17              |
|                    |                         | 15        | 4.4542  | 280         | 33              |
|                    | Earth and Space Science | 0         | -4.6037 | 100         | 34              |
|                    |                         | 1         | -3.1301 | 153         | 18              |
|                    |                         | 2         | -2.3216 | 167         | 13              |
|                    |                         | 3         | -1.7992 | 175         | 11              |
|                    |                         | 4         | -1.3911 | 182         | 10              |
|                    |                         | 5         | -1.0425 | 188         | 10              |
|                    |                         | 6         | -0.7288 | 193         | 9               |
|                    |                         | 7         | -0.4361 | 198         | 9               |
|                    |                         | 8         | -0.1553 | 203         | 9               |
|                    |                         | 9         | 0.1213  | 207         | 9               |
|                    |                         | 10        | 0.4010  | 212         | 9               |
|                    |                         | 11        | 0.6918  | 217         | 9               |
|                    |                         | 12        | 1.0040  | 222         | 10              |
|                    |                         | 13        | 1.3521  | 228         | 10              |
|                    |                         | 14        | 1.7613  | 235         | 11              |
|                    |                         | 15        | 2.2862  | 243         | 13              |
|                    |                         | 16        | 3.0987  | 257         | 18              |
| 17                 | 4.5763                  | 282       | 34      |             |                 |
| Engineering Design | 0                       | -1.7148   | 100     | 35          |                 |
|                    | 1                       | 0.0296    | 206     | 21          |                 |
|                    | 2                       | 1.4822    | 230     | 21          |                 |
|                    | 3                       | 3.2445    | 259     | 35          |                 |
| 04                 | Life Science            | 0         | -3.9014 | 100         | 34              |
|                    |                         | 1         | -2.3393 | 166         | 19              |
|                    |                         | 2         | -1.3767 | 182         | 15              |
|                    |                         | 3         | -0.6577 | 194         | 14              |
|                    |                         | 4         | -0.0137 | 205         | 13              |
|                    |                         | 5         | 0.6042  | 215         | 13              |
|                    |                         | 6         | 1.2284  | 226         | 13              |
|                    |                         | 7         | 1.9200  | 237         | 15              |

| Form | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|-------------------------|-----------|---------|-------------|-----------------|
|      |                         | 8         | 2.8585  | 253         | 18              |
|      |                         | 9         | 4.4077  | 279         | 34              |
|      | Physical Science        | 0         | -4.0890 | 100         | 34              |
|      |                         | 1         | -2.6259 | 162         | 18              |
|      |                         | 2         | -1.8264 | 175         | 13              |
|      |                         | 3         | -1.3091 | 184         | 11              |
|      |                         | 4         | -0.9027 | 190         | 10              |
|      |                         | 5         | -0.5529 | 196         | 10              |
|      |                         | 6         | -0.2350 | 201         | 9               |
|      |                         | 7         | 0.0640  | 206         | 9               |
|      |                         | 8         | 0.3509  | 211         | 9               |
|      |                         | 9         | 0.6281  | 216         | 9               |
|      |                         | 10        | 0.8969  | 220         | 9               |
|      |                         | 11        | 1.1614  | 225         | 9               |
|      |                         | 12        | 1.4333  | 229         | 9               |
|      |                         | 13        | 1.7377  | 234         | 10              |
|      |                         | 14        | 2.1316  | 241         | 12              |
|      |                         | 15        | 2.7957  | 252         | 16              |
|      | 16                      | 4.1684    | 275     | 33          |                 |
|      | Earth and Space Science | 0         | -4.0219 | 100         | 34              |
|      |                         | 1         | -2.5760 | 162         | 17              |
|      |                         | 2         | -1.8065 | 175         | 13              |
|      |                         | 3         | -1.3280 | 183         | 11              |
|      |                         | 4         | -0.9690 | 189         | 9               |
|      |                         | 5         | -0.6739 | 194         | 9               |
|      |                         | 6         | -0.4162 | 198         | 8               |
|      |                         | 7         | -0.1805 | 202         | 8               |
|      |                         | 8         | 0.0440  | 206         | 8               |
|      |                         | 9         | 0.2652  | 210         | 8               |
|      |                         | 10        | 0.4901  | 214         | 8               |
|      |                         | 11        | 0.7255  | 217         | 8               |
|      |                         | 12        | 0.9787  | 222         | 9               |
|      |                         | 13        | 1.2589  | 226         | 9               |

| Form | Subdomain          | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|--------------------|-----------|---------|-------------|-----------------|
|      |                    | 14        | 1.5800  | 232         | 10              |
|      |                    | 15        | 1.9664  | 238         | 11              |
|      |                    | 16        | 2.4718  | 247         | 13              |
|      |                    | 17        | 3.2668  | 260         | 18              |
|      |                    | 18        | 4.7313  | 284         | 34              |
|      | Engineering Design | 0         | -1.6428 | 100         | 32              |
|      |                    | 1         | -0.3365 | 200         | 17              |
|      |                    | 2         | 0.5520  | 215         | 16              |
|      |                    | 3         | 1.6413  | 233         | 20              |
|      |                    | 4         | 3.4377  | 263         | 36              |

### Grade 7 Science

| Form | Subdomain        | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|------------------|-----------|---------|-------------|-----------------|
| 01   | Life Science     | 0         | -4.1102 | 100         | 34              |
|      |                  | 1         | -2.5687 | 167         | 18              |
|      |                  | 2         | -1.6733 | 182         | 14              |
|      |                  | 3         | -1.0742 | 192         | 12              |
|      |                  | 4         | -0.6022 | 200         | 11              |
|      |                  | 5         | -0.2025 | 207         | 10              |
|      |                  | 6         | 0.1522  | 213         | 10              |
|      |                  | 7         | 0.4811  | 218         | 9               |
|      |                  | 8         | 0.8021  | 224         | 9               |
|      |                  | 9         | 1.1369  | 229         | 10              |
|      |                  | 10        | 1.5169  | 236         | 11              |
|      |                  | 11        | 2.0033  | 244         | 13              |
|      |                  | 12        | 2.7734  | 256         | 17              |
|      | 13               | 4.2189    | 281     | 34          |                 |
|      | Physical Science | 0         | -4.3157 | 100         | 34              |
|      |                  | 1         | -2.8392 | 163         | 18              |
|      |                  | 2         | -2.0275 | 176         | 13              |
|      |                  | 3         | -1.5047 | 185         | 11              |
|      |                  | 4         | -1.1001 | 192         | 10              |

| Form | Subdomain          | Raw Score               | Theta   | Scale Score | Conditional SEM |    |
|------|--------------------|-------------------------|---------|-------------|-----------------|----|
|      |                    | 5                       | -0.7596 | 198         | 9               |    |
|      |                    | 6                       | -0.4585 | 203         | 9               |    |
|      |                    | 7                       | -0.1831 | 207         | 9               |    |
|      |                    | 8                       | 0.0755  | 211         | 8               |    |
|      |                    | 9                       | 0.3240  | 216         | 8               |    |
|      |                    | 10                      | 0.5684  | 220         | 8               |    |
|      |                    | 11                      | 0.8149  | 224         | 8               |    |
|      |                    | 12                      | 1.0708  | 228         | 9               |    |
|      |                    | 13                      | 1.3458  | 233         | 9               |    |
|      |                    | 14                      | 1.6548  | 238         | 10              |    |
|      |                    | 15                      | 2.0238  | 244         | 11              |    |
|      |                    | 16                      | 2.5081  | 252         | 13              |    |
|      |                    | 17                      | 3.2797  | 265         | 17              |    |
|      |                    | 18                      | 4.7258  | 289         | 34              |    |
|      |                    | Earth and Space Science | 0       | -3.6902     | 100             | 34 |
|      |                    |                         | 1       | -2.1891     | 174             | 18 |
|      |                    |                         | 2       | -1.3462     | 188             | 13 |
|      |                    |                         | 3       | -0.7928     | 197             | 12 |
|      | 4                  |                         | -0.3530 | 204         | 11              |    |
|      | 5                  |                         | 0.0361  | 211         | 10              |    |
|      | 6                  |                         | 0.4110  | 217         | 10              |    |
|      | 7                  |                         | 0.8023  | 224         | 11              |    |
|      | 8                  |                         | 1.2460  | 231         | 12              |    |
|      | 9                  |                         | 1.8032  | 240         | 13              |    |
|      | 10                 |                         | 2.6475  | 254         | 18              |    |
|      | 11                 |                         | 4.1466  | 279         | 34              |    |
|      | Engineering Design | 0                       | -4.0261 | 100         | 34              |    |
|      |                    | 1                       | -2.4590 | 169         | 19              |    |
|      |                    | 2                       | -1.4854 | 185         | 15              |    |
|      |                    | 3                       | -0.7341 | 198         | 14              |    |
|      |                    | 4                       | 0.0153  | 210         | 15              |    |
|      |                    | 5                       | 0.9839  | 227         | 19              |    |
|      |                    | 6                       | 2.5458  | 253         | 34              |    |

| Form | Subdomain        | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|------------------|-----------|---------|-------------|-----------------|
| 02   | Life Science     | 0         | -4.2292 | 100         | 34              |
|      |                  | 1         | -2.7519 | 164         | 18              |
|      |                  | 2         | -1.9444 | 178         | 13              |
|      |                  | 3         | -1.4244 | 186         | 11              |
|      |                  | 4         | -1.0140 | 193         | 10              |
|      |                  | 5         | -0.6539 | 199         | 10              |
|      |                  | 6         | -0.3165 | 205         | 10              |
|      |                  | 7         | 0.0136  | 210         | 10              |
|      |                  | 8         | 0.3465  | 216         | 10              |
|      |                  | 9         | 0.6920  | 222         | 10              |
|      |                  | 10        | 1.0641  | 228         | 10              |
|      |                  | 11        | 1.4888  | 235         | 11              |
|      |                  | 12        | 2.0228  | 244         | 13              |
|      |                  | 13        | 2.8406  | 258         | 18              |
|      | 14               | 4.3210    | 282     | 34          |                 |
|      | Physical Science | 0         | -4.7387 | 100         | 34              |
|      |                  | 1         | -3.2352 | 156         | 18              |
|      |                  | 2         | -2.3876 | 170         | 13              |
|      |                  | 3         | -1.8302 | 180         | 12              |
|      |                  | 4         | -1.3928 | 187         | 11              |
|      |                  | 5         | -1.0214 | 193         | 10              |
|      |                  | 6         | -0.6913 | 199         | 9               |
|      |                  | 7         | -0.3886 | 204         | 9               |
|      |                  | 8         | -0.1039 | 208         | 9               |
|      |                  | 9         | 0.1699  | 213         | 9               |
|      |                  | 10        | 0.4395  | 218         | 9               |
|      |                  | 11        | 0.7123  | 222         | 9               |
|      |                  | 12        | 0.9981  | 227         | 9               |
|      |                  | 13        | 1.3117  | 232         | 10              |
|      |                  | 14        | 1.6789  | 238         | 11              |
|      |                  | 15        | 2.1553  | 246         | 13              |
|      |                  | 16        | 2.9136  | 259         | 17              |
|      | 17               | 4.3468    | 283     | 34          |                 |

| Form | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|-------------------------|-----------|---------|-------------|-----------------|
|      | Earth and Space Science | 0         | -3.7240 | 100         | 34              |
|      |                         | 1         | -2.2160 | 173         | 18              |
|      |                         | 2         | -1.3610 | 188         | 14              |
|      |                         | 3         | -0.7876 | 197         | 12              |
|      |                         | 4         | -0.3191 | 205         | 11              |
|      |                         | 5         | 0.1037  | 212         | 11              |
|      |                         | 6         | 0.5113  | 219         | 11              |
|      |                         | 7         | 0.9269  | 226         | 11              |
|      |                         | 8         | 1.3804  | 233         | 12              |
|      |                         | 9         | 1.9292  | 242         | 13              |
|      |                         | 10        | 2.7474  | 256         | 18              |
|      |                         | 11        | 4.2184  | 281         | 34              |
|      | Engineering Design      | 0         | -3.5393 | 100         | 34              |
|      |                         | 1         | -2.0205 | 177         | 18              |
|      |                         | 2         | -1.1691 | 191         | 13              |
|      |                         | 3         | -0.6056 | 200         | 12              |
|      |                         | 4         | -0.1375 | 208         | 11              |
|      |                         | 5         | 0.3103  | 215         | 11              |
|      |                         | 6         | 0.7896  | 223         | 12              |
|      |                         | 7         | 1.3657  | 233         | 14              |
|      |                         | 8         | 2.2116  | 247         | 18              |
|      |                         | 9         | 3.7008  | 272         | 34              |
| 03   | Life Science            | 0         | -4.1102 | 100         | 34              |
|      |                         | 1         | -2.5687 | 167         | 18              |
|      |                         | 2         | -1.6733 | 182         | 14              |
|      |                         | 3         | -1.0742 | 192         | 12              |
|      |                         | 4         | -0.6022 | 200         | 11              |
|      |                         | 5         | -0.2025 | 207         | 10              |
|      |                         | 6         | 0.1522  | 213         | 10              |
|      |                         | 7         | 0.4811  | 218         | 9               |
|      |                         | 8         | 0.8021  | 224         | 9               |
|      |                         | 9         | 1.1369  | 229         | 10              |
|      |                         | 10        | 1.5169  | 236         | 11              |

| Form | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|-------------------------|-----------|---------|-------------|-----------------|
|      |                         | 11        | 2.0033  | 244         | 13              |
|      |                         | 12        | 2.7734  | 256         | 17              |
|      |                         | 13        | 4.2189  | 281         | 34              |
|      | Physical Science        | 0         | -4.3157 | 100         | 34              |
|      |                         | 1         | -2.8392 | 163         | 18              |
|      |                         | 2         | -2.0275 | 176         | 13              |
|      |                         | 3         | -1.5047 | 185         | 11              |
|      |                         | 4         | -1.1001 | 192         | 10              |
|      |                         | 5         | -0.7596 | 198         | 9               |
|      |                         | 6         | -0.4585 | 203         | 9               |
|      |                         | 7         | -0.1831 | 207         | 9               |
|      |                         | 8         | 0.0755  | 211         | 8               |
|      |                         | 9         | 0.3240  | 216         | 8               |
|      |                         | 10        | 0.5684  | 220         | 8               |
|      |                         | 11        | 0.8149  | 224         | 8               |
|      |                         | 12        | 1.0708  | 228         | 9               |
|      |                         | 13        | 1.3458  | 233         | 9               |
|      |                         | 14        | 1.6548  | 238         | 10              |
|      |                         | 15        | 2.0238  | 244         | 11              |
|      |                         | 16        | 2.5081  | 252         | 13              |
|      |                         | 17        | 3.2797  | 265         | 17              |
|      | 18                      | 4.7258    | 289     | 34          |                 |
|      | Earth and Space Science | 0         | -3.6902 | 100         | 34              |
|      |                         | 1         | -2.1891 | 174         | 18              |
|      |                         | 2         | -1.3462 | 188         | 13              |
|      |                         | 3         | -0.7928 | 197         | 12              |
|      |                         | 4         | -0.3530 | 204         | 11              |
|      |                         | 5         | 0.0361  | 211         | 10              |
|      |                         | 6         | 0.4110  | 217         | 10              |
|      |                         | 7         | 0.8023  | 224         | 11              |
| 8    |                         | 1.2460    | 231     | 12          |                 |
| 9    |                         | 1.8032    | 240     | 13          |                 |
| 10   |                         | 2.6475    | 254     | 18          |                 |

| Form | Subdomain          | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|--------------------|-----------|---------|-------------|-----------------|
|      |                    | 11        | 4.1466  | 279         | 34              |
|      | Engineering Design | 0         | -4.0261 | 100         | 34              |
|      |                    | 1         | -2.4590 | 169         | 19              |
|      |                    | 2         | -1.4854 | 185         | 15              |
|      |                    | 3         | -0.7341 | 198         | 14              |
|      |                    | 4         | 0.0153  | 210         | 15              |
|      |                    | 5         | 0.9839  | 227         | 19              |
|      |                    | 6         | 2.5458  | 253         | 34              |
| 04   | Life Science       | 0         | -4.2292 | 100         | 34              |
|      |                    | 1         | -2.7519 | 164         | 18              |
|      |                    | 2         | -1.9444 | 178         | 13              |
|      |                    | 3         | -1.4244 | 186         | 11              |
|      |                    | 4         | -1.0140 | 193         | 10              |
|      |                    | 5         | -0.6539 | 199         | 10              |
|      |                    | 6         | -0.3165 | 205         | 10              |
|      |                    | 7         | 0.0136  | 210         | 10              |
|      |                    | 8         | 0.3465  | 216         | 10              |
|      |                    | 9         | 0.6920  | 222         | 10              |
|      |                    | 10        | 1.0641  | 228         | 10              |
|      |                    | 11        | 1.4888  | 235         | 11              |
|      |                    | 12        | 2.0228  | 244         | 13              |
|      |                    | 13        | 2.8406  | 258         | 18              |
|      | 14                 | 4.3210    | 282     | 34          |                 |
|      | Physical Science   | 0         | -4.7387 | 100         | 34              |
|      |                    | 1         | -3.2352 | 156         | 18              |
|      |                    | 2         | -2.3876 | 170         | 13              |
|      |                    | 3         | -1.8302 | 180         | 12              |
|      |                    | 4         | -1.3928 | 187         | 11              |
|      |                    | 5         | -1.0214 | 193         | 10              |
|      |                    | 6         | -0.6913 | 199         | 9               |
| 7    |                    | -0.3886   | 204     | 9           |                 |
| 8    |                    | -0.1039   | 208     | 9           |                 |
| 9    |                    | 0.1699    | 213     | 9           |                 |

| Form | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|-------------------------|-----------|---------|-------------|-----------------|
|      |                         | 10        | 0.4395  | 218         | 9               |
|      |                         | 11        | 0.7123  | 222         | 9               |
|      |                         | 12        | 0.9981  | 227         | 9               |
|      |                         | 13        | 1.3117  | 232         | 10              |
|      |                         | 14        | 1.6789  | 238         | 11              |
|      |                         | 15        | 2.1553  | 246         | 13              |
|      |                         | 16        | 2.9136  | 259         | 17              |
|      |                         | 17        | 4.3468  | 283         | 34              |
|      | Earth and Space Science | 0         | -3.7240 | 100         | 34              |
|      |                         | 1         | -2.2160 | 173         | 18              |
|      |                         | 2         | -1.3610 | 188         | 14              |
|      |                         | 3         | -0.7876 | 197         | 12              |
|      |                         | 4         | -0.3191 | 205         | 11              |
|      |                         | 5         | 0.1037  | 212         | 11              |
|      |                         | 6         | 0.5113  | 219         | 11              |
|      |                         | 7         | 0.9269  | 226         | 11              |
|      |                         | 8         | 1.3804  | 233         | 12              |
|      |                         | 9         | 1.9292  | 242         | 13              |
|      |                         | 10        | 2.7474  | 256         | 18              |
|      |                         | 11        | 4.2184  | 281         | 34              |
|      | Engineering Design      | 0         | -3.5393 | 100         | 34              |
|      |                         | 1         | -2.0205 | 177         | 18              |
|      |                         | 2         | -1.1691 | 191         | 13              |
|      |                         | 3         | -0.6056 | 200         | 12              |
|      |                         | 4         | -0.1375 | 208         | 11              |
|      |                         | 5         | 0.3103  | 215         | 11              |
|      |                         | 6         | 0.7896  | 223         | 12              |
|      |                         | 7         | 1.3657  | 233         | 14              |
|      |                         | 8         | 2.2116  | 247         | 18              |
|      |                         | 9         | 3.7008  | 272         | 34              |

## Grade 11 Science

| Form | Subdomain        | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|------------------|-----------|---------|-------------|-----------------|
| 01   | Life Science     | 0         | -4.7628 | 100         | 34              |
|      |                  | 1         | -3.2701 | 153         | 18              |
|      |                  | 2         | -2.4376 | 167         | 13              |
|      |                  | 3         | -1.8948 | 176         | 11              |
|      |                  | 4         | -1.4705 | 183         | 10              |
|      |                  | 5         | -1.1101 | 189         | 10              |
|      |                  | 6         | -0.7884 | 194         | 9               |
|      |                  | 7         | -0.4911 | 199         | 9               |
|      |                  | 8         | -0.2084 | 204         | 9               |
|      |                  | 9         | 0.0671  | 209         | 9               |
|      |                  | 10        | 0.3424  | 213         | 9               |
|      |                  | 11        | 0.6253  | 218         | 9               |
|      |                  | 12        | 0.9250  | 223         | 9               |
|      |                  | 13        | 1.2551  | 228         | 10              |
|      |                  | 14        | 1.6393  | 235         | 11              |
|      |                  | 15        | 2.1298  | 243         | 13              |
|      |                  | 16        | 2.8943  | 256         | 17              |
|      | 17               | 4.3233    | 280     | 34          |                 |
|      | Physical Science | 0         | -3.0559 | 100         | 33              |
|      |                  | 1         | -1.6663 | 180         | 17              |
|      |                  | 2         | -0.9256 | 192         | 13              |
|      |                  | 3         | -0.4330 | 200         | 11              |
|      |                  | 4         | -0.0229 | 207         | 10              |
|      |                  | 5         | 0.3563  | 213         | 10              |
|      |                  | 6         | 0.7284  | 220         | 10              |
|      |                  | 7         | 1.1089  | 226         | 10              |
|      |                  | 8         | 1.5128  | 233         | 11              |
|      |                  | 9         | 1.9633  | 240         | 12              |
|      |                  | 10        | 2.5116  | 249         | 13              |
|      |                  | 11        | 3.3250  | 263         | 18              |
|      |                  | 12        | 4.7847  | 287         | 34              |

| Form | Subdomain               | Raw Score    | Theta   | Scale Score | Conditional SEM |    |
|------|-------------------------|--------------|---------|-------------|-----------------|----|
|      | Earth and Space Science | 0            | -4.5497 | 100         | 35              |    |
|      |                         | 1            | -2.9111 | 159         | 19              |    |
|      |                         | 2            | -1.9207 | 175         | 15              |    |
|      |                         | 3            | -1.2571 | 187         | 13              |    |
|      |                         | 4            | -0.7296 | 195         | 12              |    |
|      |                         | 5            | -0.2679 | 203         | 11              |    |
|      |                         | 6            | 0.1635  | 210         | 11              |    |
|      |                         | 7            | 0.5864  | 217         | 11              |    |
|      |                         | 8            | 1.0194  | 224         | 11              |    |
|      |                         | 9            | 1.4882  | 232         | 12              |    |
|      |                         | 10           | 2.0464  | 242         | 13              |    |
|      |                         | 11           | 2.8643  | 255         | 18              |    |
|      |                         | 12           | 4.3260  | 280         | 34              |    |
|      | Engineering Design      | 0            | -3.2246 | 100         | 34              |    |
|      |                         | 1            | -1.6669 | 180         | 19              |    |
|      |                         | 2            | -0.7206 | 195         | 15              |    |
|      |                         | 3            | -0.0207 | 207         | 13              |    |
|      |                         | 4            | 0.6182  | 218         | 13              |    |
|      |                         | 5            | 1.2799  | 229         | 14              |    |
|      |                         | 6            | 2.1280  | 243         | 17              |    |
|      |                         | 7            | 3.5434  | 267         | 33              |    |
|      | 02                      | Life Science | 0       | -4.6391     | 100             | 34 |
|      |                         |              | 1       | -3.1545     | 155             | 18 |
| 2    |                         |              | -2.3273 | 169         | 13              |    |
| 3    |                         |              | -1.7841 | 178         | 11              |    |
| 4    |                         |              | -1.3543 | 185         | 10              |    |
| 5    |                         |              | -0.9835 | 191         | 10              |    |
| 6    |                         |              | -0.6463 | 197         | 10              |    |
| 7    |                         |              | -0.3281 | 202         | 9               |    |
| 8    |                         |              | -0.0190 | 207         | 9               |    |
| 9    |                         |              | 0.2892  | 212         | 9               |    |
| 10   |                         |              | 0.6039  | 218         | 9               |    |
| 11   |                         |              | 0.9339  | 223         | 10              |    |

| <b>Form</b> | <b>Subdomain</b>        | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|-------------|-------------------------|------------------|--------------|--------------------|------------------------|
|             |                         | 12               | 1.2915       | 229                | 10                     |
|             |                         | 13               | 1.6989       | 236                | 11                     |
|             |                         | 14               | 2.2074       | 244                | 13                     |
|             |                         | 15               | 2.9846       | 257                | 17                     |
|             |                         | 16               | 4.4199       | 281                | 34                     |
|             | Physical Science        | 0                | -3.8351      | 100                | 34                     |
|             |                         | 1                | -2.3912      | 168                | 17                     |
|             |                         | 2                | -1.6180      | 181                | 13                     |
|             |                         | 3                | -1.1241      | 189                | 11                     |
|             |                         | 4                | -0.7349      | 195                | 10                     |
|             |                         | 5                | -0.3922      | 201                | 10                     |
|             |                         | 6                | -0.0667      | 206                | 9                      |
|             |                         | 7                | 0.2617       | 212                | 10                     |
|             |                         | 8                | 0.6127       | 218                | 10                     |
|             |                         | 9                | 1.0136       | 224                | 11                     |
|             |                         | 10               | 1.5190       | 233                | 13                     |
|             |                         | 11               | 2.2992       | 246                | 17                     |
|             |                         | 12               | 3.7415       | 270                | 34                     |
|             | Earth and Space Science | 0                | -4.5497      | 100                | 35                     |
|             |                         | 1                | -2.9111      | 159                | 19                     |
|             |                         | 2                | -1.9207      | 175                | 15                     |
|             |                         | 3                | -1.2571      | 187                | 13                     |
|             |                         | 4                | -0.7296      | 195                | 12                     |
|             |                         | 5                | -0.2679      | 203                | 11                     |
|             |                         | 6                | 0.1635       | 210                | 11                     |
|             |                         | 7                | 0.5864       | 217                | 11                     |
|             |                         | 8                | 1.0194       | 224                | 11                     |
|             |                         | 9                | 1.4882       | 232                | 12                     |
|             |                         | 10               | 2.0464       | 242                | 13                     |
|             |                         | 11               | 2.8643       | 255                | 18                     |
|             |                         | 12               | 4.3260       | 280                | 34                     |
|             | Engineering Design      | 0                | -3.7340      | 100                | 35                     |
|             |                         | 1                | -2.0772      | 173                | 20                     |

| Form | Subdomain        | Raw Score | Theta   | Scale Score | Conditional SEM |    |
|------|------------------|-----------|---------|-------------|-----------------|----|
|      |                  | 2         | -0.9817 | 191         | 16              |    |
|      |                  | 3         | -0.1639 | 205         | 14              |    |
|      |                  | 4         | 0.5142  | 216         | 13              |    |
|      |                  | 5         | 1.1173  | 226         | 13              |    |
|      |                  | 6         | 1.7415  | 237         | 14              |    |
|      |                  | 7         | 2.6103  | 251         | 18              |    |
|      |                  | 8         | 4.1503  | 277         | 34              |    |
| 03   | Life Science     | 0         | -4.7482 | 100         | 34              |    |
|      |                  | 1         | -3.2419 | 153         | 18              |    |
|      |                  | 2         | -2.3923 | 168         | 13              |    |
|      |                  | 3         | -1.8335 | 177         | 12              |    |
|      |                  | 4         | -1.3942 | 184         | 11              |    |
|      |                  | 5         | -1.0195 | 190         | 10              |    |
|      |                  | 6         | -0.6839 | 196         | 9               |    |
|      |                  | 7         | -0.3728 | 201         | 9               |    |
|      |                  | 8         | -0.0754 | 206         | 9               |    |
|      |                  | 9         | 0.2177  | 211         | 9               |    |
|      |                  | 10        | 0.5168  | 216         | 9               |    |
|      |                  | 11        | 0.8342  | 221         | 10              |    |
|      |                  | 12        | 1.1859  | 227         | 10              |    |
|      |                  | 13        | 1.5964  | 234         | 11              |    |
|      |                  | 14        | 2.1149  | 243         | 13              |    |
|      |                  | 15        | 2.9004  | 256         | 17              |    |
|      | 16               | 4.3311    | 280     | 34          |                 |    |
|      | Physical Science |           | 0       | -3.9339     | 100             | 34 |
|      |                  |           | 1       | -2.4163     | 167             | 18 |
|      |                  |           | 2       | -1.5485     | 182             | 14 |
|      |                  |           | 3       | -0.9682     | 191             | 12 |
|      |                  |           | 4       | -0.5013     | 199             | 11 |
|      |                  |           | 5       | -0.0880     | 206             | 11 |
|      |                  |           | 6       | 0.3032      | 213             | 10 |
|      |                  |           | 7       | 0.6945      | 219             | 11 |
|      |                  |           | 8       | 1.1058      | 226             | 11 |

| Form            | Subdomain               | Raw Score | Theta   | Scale Score | Conditional SEM |
|-----------------|-------------------------|-----------|---------|-------------|-----------------|
|                 |                         | 9         | 1.5626  | 234         | 12              |
|                 |                         | 10        | 2.1142  | 243         | 13              |
|                 |                         | 11        | 2.9209  | 256         | 17              |
|                 |                         | 12        | 4.3606  | 280         | 34              |
|                 | Earth and Space Science | 0         | -4.5497 | 100         | 35              |
|                 |                         | 1         | -2.9111 | 159         | 19              |
|                 |                         | 2         | -1.9207 | 175         | 15              |
|                 |                         | 3         | -1.2571 | 187         | 13              |
|                 |                         | 4         | -0.7296 | 195         | 12              |
|                 |                         | 5         | -0.2679 | 203         | 11              |
|                 |                         | 6         | 0.1635  | 210         | 11              |
|                 |                         | 7         | 0.5864  | 217         | 11              |
|                 |                         | 8         | 1.0194  | 224         | 11              |
|                 |                         | 9         | 1.4882  | 232         | 12              |
|                 |                         | 10        | 2.0464  | 242         | 13              |
|                 |                         | 11        | 2.8643  | 255         | 18              |
|                 |                         | 12        | 4.3260  | 280         | 34              |
|                 | Engineering Design      | 0         | -3.7340 | 100         | 35              |
|                 |                         | 1         | -2.0772 | 173         | 20              |
|                 |                         | 2         | -0.9817 | 191         | 16              |
|                 |                         | 3         | -0.1639 | 205         | 14              |
|                 |                         | 4         | 0.5142  | 216         | 13              |
|                 |                         | 5         | 1.1173  | 226         | 13              |
|                 |                         | 6         | 1.7415  | 237         | 14              |
| 7               |                         | 2.6103    | 251     | 18          |                 |
| 8               |                         | 4.1503    | 277     | 34          |                 |
| 04 Life Science | 0                       | -4.7410   | 100     | 34          |                 |
|                 | 1                       | -3.2507   | 153     | 18          |                 |
|                 | 2                       | -2.4223   | 167     | 13          |                 |
|                 | 3                       | -1.8835   | 176     | 11          |                 |
|                 | 4                       | -1.4621   | 183     | 10          |                 |
|                 | 5                       | -1.1026   | 189     | 10          |                 |
|                 | 6                       | -0.7788   | 194     | 9           |                 |

| <b>Form</b> | <b>Subdomain</b>        | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |    |
|-------------|-------------------------|------------------|--------------|--------------------|------------------------|----|
|             |                         | 7                | -0.4759      | 200                | 9                      |    |
|             |                         | 8                | -0.1841      | 204                | 9                      |    |
|             |                         | 9                | 0.1038       | 209                | 9                      |    |
|             |                         | 10               | 0.3938       | 214                | 9                      |    |
|             |                         | 11               | 0.6918       | 219                | 9                      |    |
|             |                         | 12               | 1.0047       | 224                | 9                      |    |
|             |                         | 13               | 1.3436       | 230                | 10                     |    |
|             |                         | 14               | 1.7301       | 236                | 11                     |    |
|             |                         | 15               | 2.2154       | 244                | 13                     |    |
|             |                         | 16               | 2.9677       | 257                | 17                     |    |
|             |                         | 17               | 4.3838       | 281                | 33                     |    |
|             |                         | Physical Science | 0            | -3.8351            | 100                    | 34 |
|             |                         |                  | 1            | -2.3912            | 168                    | 17 |
|             |                         |                  | 2            | -1.6180            | 181                    | 13 |
|             |                         |                  | 3            | -1.1241            | 189                    | 11 |
|             |                         |                  | 4            | -0.7349            | 195                    | 10 |
|             |                         |                  | 5            | -0.3922            | 201                    | 10 |
|             | 6                       |                  | -0.0667      | 206                | 9                      |    |
|             | 7                       |                  | 0.2617       | 212                | 10                     |    |
|             | 8                       |                  | 0.6127       | 218                | 10                     |    |
|             | 9                       |                  | 1.0136       | 224                | 11                     |    |
|             | 10                      |                  | 1.5190       | 233                | 13                     |    |
|             | 11                      |                  | 2.2992       | 246                | 17                     |    |
|             | 12                      |                  | 3.7415       | 270                | 34                     |    |
|             | Earth and Space Science | 0                | -4.5497      | 100                | 35                     |    |
|             |                         | 1                | -2.9111      | 159                | 19                     |    |
|             |                         | 2                | -1.9207      | 175                | 15                     |    |
|             |                         | 3                | -1.2571      | 187                | 13                     |    |
|             |                         | 4                | -0.7296      | 195                | 12                     |    |
|             |                         | 5                | -0.2679      | 203                | 11                     |    |
|             |                         | 6                | 0.1635       | 210                | 11                     |    |
|             |                         | 7                | 0.5864       | 217                | 11                     |    |
|             |                         | 8                | 1.0194       | 224                | 11                     |    |

| Form | Subdomain          | Raw Score | Theta   | Scale Score | Conditional SEM |
|------|--------------------|-----------|---------|-------------|-----------------|
|      |                    | 9         | 1.4882  | 232         | 12              |
|      |                    | 10        | 2.0464  | 242         | 13              |
|      |                    | 11        | 2.8643  | 255         | 18              |
|      |                    | 12        | 4.3260  | 280         | 34              |
|      | Engineering Design | 0         | -3.2246 | 100         | 34              |
|      |                    | 1         | -1.6669 | 180         | 19              |
|      |                    | 2         | -0.7206 | 195         | 15              |
|      |                    | 3         | -0.0207 | 207         | 13              |
|      |                    | 4         | 0.6182  | 218         | 13              |
|      |                    | 5         | 1.2799  | 229         | 14              |
|      |                    | 6         | 2.1280  | 243         | 17              |
|      |                    | 7         | 3.5434  | 267         | 33              |

### Grade 5 Social Studies

| Subdomain              | Raw Score | Theta   | Scale Score | Conditional SEM |
|------------------------|-----------|---------|-------------|-----------------|
| Government Civics      | 0         | -3.7885 | 100         | 34              |
|                        | 1         | -2.3189 | 164         | 18              |
|                        | 2         | -1.5066 | 178         | 13              |
|                        | 3         | -0.9709 | 187         | 11              |
|                        | 4         | -0.5393 | 194         | 11              |
|                        | 5         | -0.1548 | 200         | 10              |
|                        | 6         | 0.2117  | 207         | 10              |
|                        | 7         | 0.5807  | 213         | 10              |
|                        | 8         | 0.9727  | 219         | 11              |
|                        | 9         | 1.4140  | 227         | 12              |
|                        | 10        | 1.9473  | 235         | 13              |
|                        | 11        | 2.6547  | 247         | 15              |
|                        | 12        | 3.7385  | 265         | 20              |
|                        | 13        | 5.4659  | 294         | 35              |
| Cultures and Societies | 0         | -3.6442 | 100         | 34              |
|                        | 1         | -2.1836 | 167         | 18              |

| <b>Subdomain</b>       | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------------|------------------|--------------|--------------------|------------------------|
|                        | 2                | -1.3794      | 180                | 13                     |
|                        | 3                | -0.8382      | 189                | 12                     |
|                        | 4                | -0.3773      | 197                | 11                     |
|                        | 5                | 0.0724       | 204                | 11                     |
|                        | 6                | 0.5565       | 212                | 12                     |
|                        | 7                | 1.1193       | 222                | 13                     |
|                        | 8                | 1.8235       | 233                | 15                     |
|                        | 9                | 2.8322       | 250                | 19                     |
|                        | 10               | 4.4529       | 277                | 35                     |
|                        | Economics        | 0            | -3.9138            | 100                    |
| 1                      |                  | -2.4084      | 163                | 18                     |
| 2                      |                  | -1.5429      | 177                | 14                     |
| 3                      |                  | -0.9445      | 187                | 12                     |
| 4                      |                  | -0.4346      | 196                | 12                     |
| 5                      |                  | 0.0526       | 204                | 12                     |
| 6                      |                  | 0.5618       | 212                | 12                     |
| 7                      |                  | 1.1411       | 222                | 13                     |
| 8                      |                  | 1.8612       | 234                | 15                     |
| 9                      |                  | 2.8893       | 251                | 19                     |
| 10                     |                  | 4.5220       | 278                | 35                     |
| Geography              | 0                | -3.9792      | 100                | 34                     |
|                        | 1                | -2.4714      | 162                | 18                     |
|                        | 2                | -1.6002      | 176                | 14                     |
|                        | 3                | -0.9944      | 186                | 12                     |
|                        | 4                | -0.4775      | 195                | 12                     |
|                        | 5                | 0.0155       | 203                | 12                     |
|                        | 6                | 0.5312       | 212                | 12                     |
|                        | 7                | 1.1349       | 222                | 14                     |
|                        | 8                | 2.0034       | 236                | 18                     |
|                        | 9                | 3.5093       | 261                | 34                     |
| Historical Perspective | 0                | -4.2510      | 100                | 34                     |
|                        | 1                | -2.8058      | 156                | 17                     |
|                        | 2                | -2.0289      | 169                | 13                     |

| <b>Subdomain</b> | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|------------------|--------------|--------------------|------------------------|
|                  | 3                | -1.5327      | 177                | 11                     |
|                  | 4                | -1.1461      | 184                | 10                     |
|                  | 5                | -0.8140      | 189                | 9                      |
|                  | 6                | -0.5102      | 194                | 9                      |
|                  | 7                | -0.2188      | 199                | 9                      |
|                  | 8                | 0.0725       | 204                | 9                      |
|                  | 9                | 0.3764       | 209                | 9                      |
|                  | 10               | 0.7087       | 215                | 10                     |
|                  | 11               | 1.0957       | 221                | 11                     |
|                  | 12               | 1.5921       | 230                | 13                     |
|                  | 13               | 2.3695       | 242                | 17                     |
|                  | 14               | 3.8150       | 267                | 34                     |

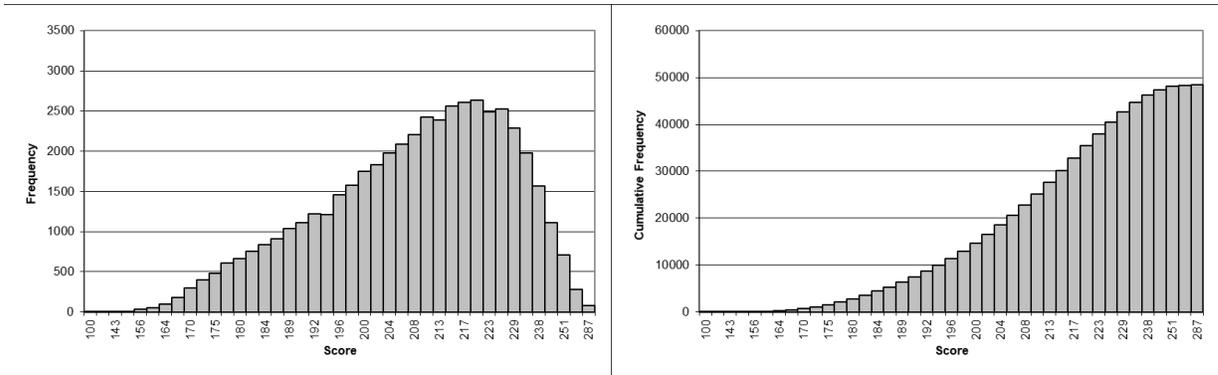
### Grade 8 Social Studies

| <b>Subdomain</b>       | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------------|------------------|--------------|--------------------|------------------------|
| Government Civics      | 0                | -3.7525      | 100                | 34                     |
|                        | 1                | -2.2815      | 165                | 18                     |
|                        | 2                | -1.4687      | 179                | 13                     |
|                        | 3                | -0.9343      | 187                | 11                     |
|                        | 4                | -0.5060      | 195                | 11                     |
|                        | 5                | -0.1275      | 201                | 10                     |
|                        | 6                | 0.2301       | 207                | 10                     |
|                        | 7                | 0.5867       | 213                | 10                     |
|                        | 8                | 0.9628       | 219                | 10                     |
|                        | 9                | 1.3869       | 226                | 11                     |
|                        | 10               | 1.9157       | 235                | 13                     |
|                        | 11               | 2.7214       | 248                | 18                     |
|                        | 12               | 4.1863       | 273                | 34                     |
| Cultures and Societies | 0                | -3.7789      | 100                | 33                     |
|                        | 1                | -2.4450      | 162                | 16                     |
|                        | 2                | -1.7324      | 174                | 13                     |

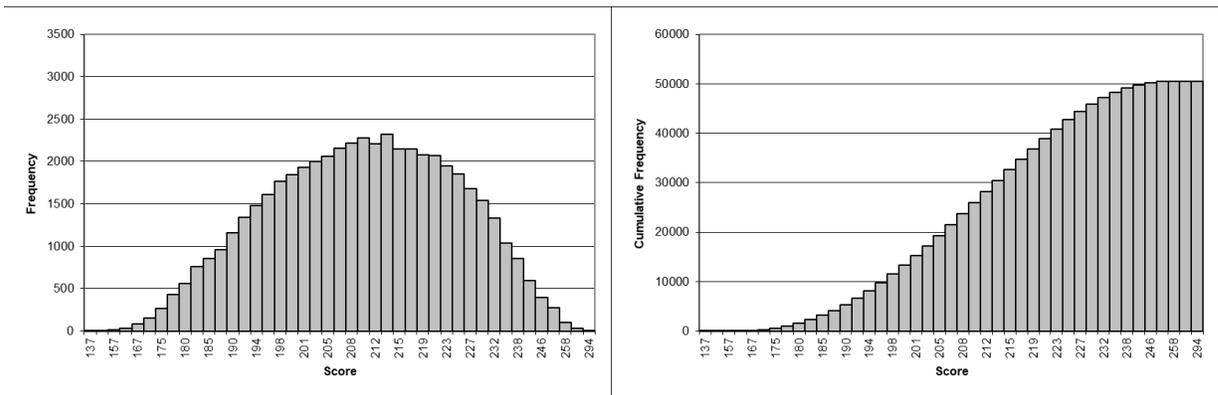
| <b>Subdomain</b>       | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------------|------------------|--------------|--------------------|------------------------|
|                        | 3                | -1.2199      | 183                | 12                     |
|                        | 4                | -0.7373      | 191                | 12                     |
|                        | 5                | -0.2271      | 199                | 12                     |
|                        | 6                | 0.3392       | 209                | 13                     |
|                        | 7                | 0.9924       | 220                | 14                     |
|                        | 8                | 1.7769       | 233                | 16                     |
|                        | 9                | 2.7991       | 250                | 19                     |
|                        | 10               | 4.3517       | 276                | 34                     |
| Economics              | 0                | -3.7632      | 100                | 32                     |
|                        | 1                | -2.4436      | 162                | 17                     |
|                        | 2                | -1.6833      | 175                | 13                     |
|                        | 3                | -1.1009      | 185                | 12                     |
|                        | 4                | -0.5584      | 194                | 12                     |
|                        | 5                | -0.0292      | 203                | 12                     |
|                        | 6                | 0.5035       | 211                | 12                     |
|                        | 7                | 1.0740       | 221                | 13                     |
|                        | 8                | 1.7508       | 232                | 15                     |
|                        | 9                | 2.7205       | 248                | 19                     |
|                        | 10               | 4.3242       | 275                | 35                     |
| Geography              | 0                | -3.7022      | 100                | 33                     |
|                        | 1                | -2.3178      | 164                | 17                     |
|                        | 2                | -1.5871      | 177                | 13                     |
|                        | 3                | -1.0878      | 185                | 11                     |
|                        | 4                | -0.6408      | 192                | 11                     |
|                        | 5                | -0.1814      | 200                | 12                     |
|                        | 6                | 0.3251       | 208                | 12                     |
|                        | 7                | 0.9053       | 218                | 13                     |
|                        | 8                | 1.6098       | 230                | 15                     |
|                        | 9                | 2.6085       | 247                | 19                     |
|                        | 10               | 4.2272       | 274                | 35                     |
| Historical Perspective | 0                | -3.9256      | 100                | 34                     |
|                        | 1                | -2.4636      | 162                | 18                     |
|                        | 2                | -1.6666      | 175                | 13                     |

| <b>Subdomain</b> | <b>Raw Score</b> | <b>Theta</b> | <b>Scale Score</b> | <b>Conditional SEM</b> |
|------------------|------------------|--------------|--------------------|------------------------|
|                  | 3                | -1.1525      | 184                | 11                     |
|                  | 4                | -0.7499      | 191                | 10                     |
|                  | 5                | -0.4035      | 196                | 10                     |
|                  | 6                | -0.0869      | 202                | 9                      |
|                  | 7                | 0.2159       | 207                | 9                      |
|                  | 8                | 0.5176       | 212                | 9                      |
|                  | 9                | 0.8308       | 217                | 9                      |
|                  | 10               | 1.1716       | 223                | 10                     |
|                  | 11               | 1.5661       | 229                | 11                     |
|                  | 12               | 2.0696       | 238                | 13                     |
|                  | 13               | 2.8532       | 251                | 17                     |
|                  | 14               | 4.3030       | 275                | 34                     |

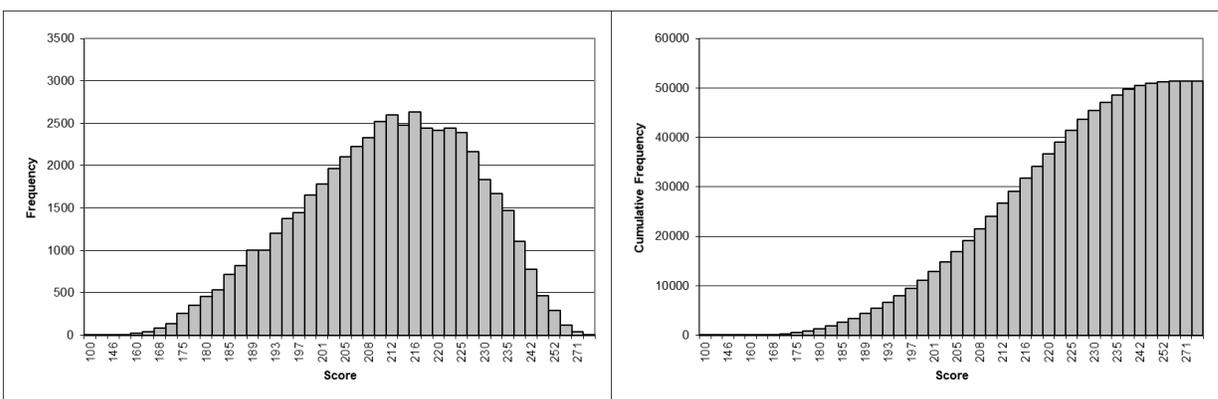
## Appendix I. Score Frequency Distributions<sup>3</sup>



**Figure 1.** Reading Grade 3 Score Frequency and Cumulative Frequency Distributions

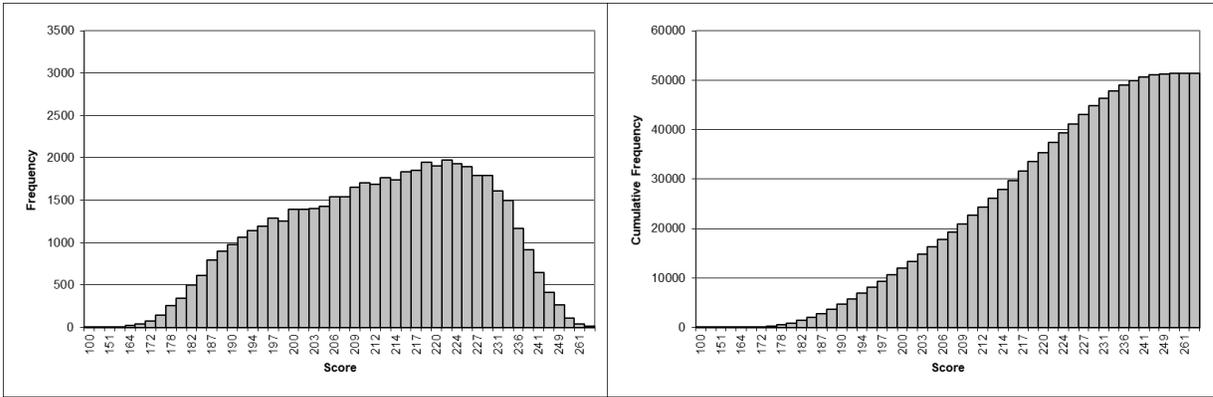


**Figure 2.** Reading Grade 4 Score Frequency and Cumulative Frequency Distributions

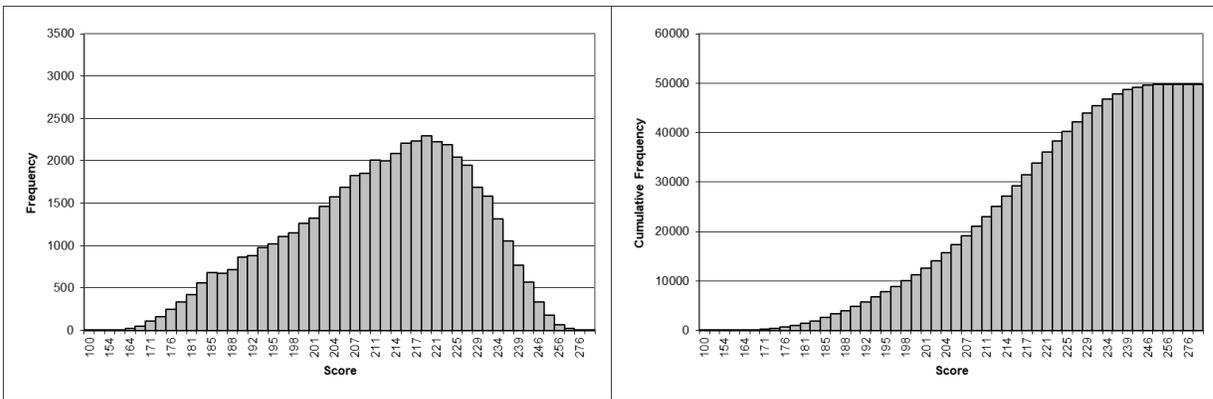


**Figure 3.** Reading Grade 5 Score Frequency and Cumulative Frequency Distributions

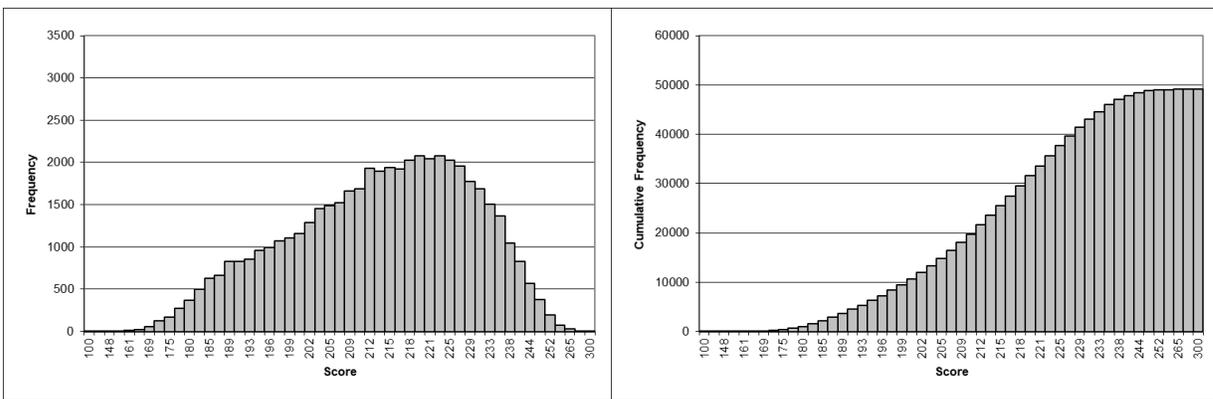
<sup>3</sup> Alternate K-PREP students are not included.



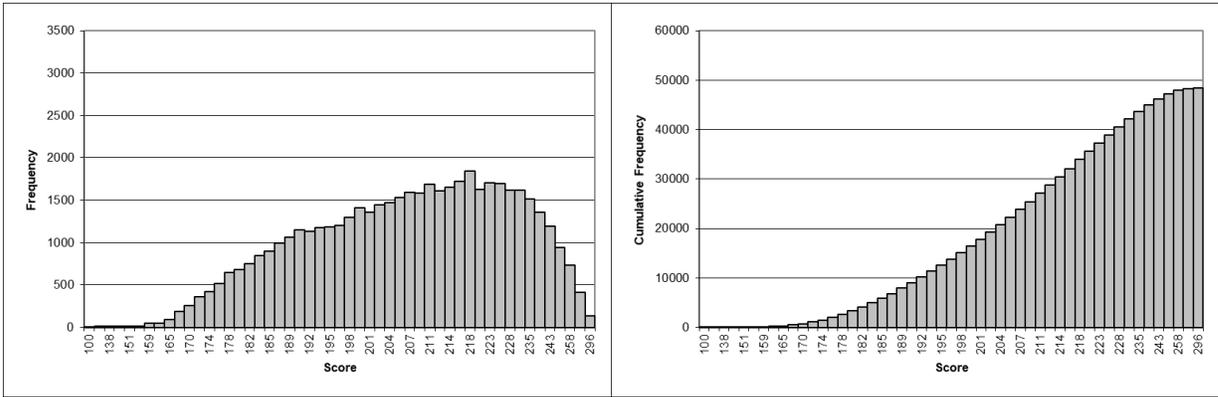
**Figure 4.** Reading Grade 6 Score Frequency and Cumulative Frequency Distributions



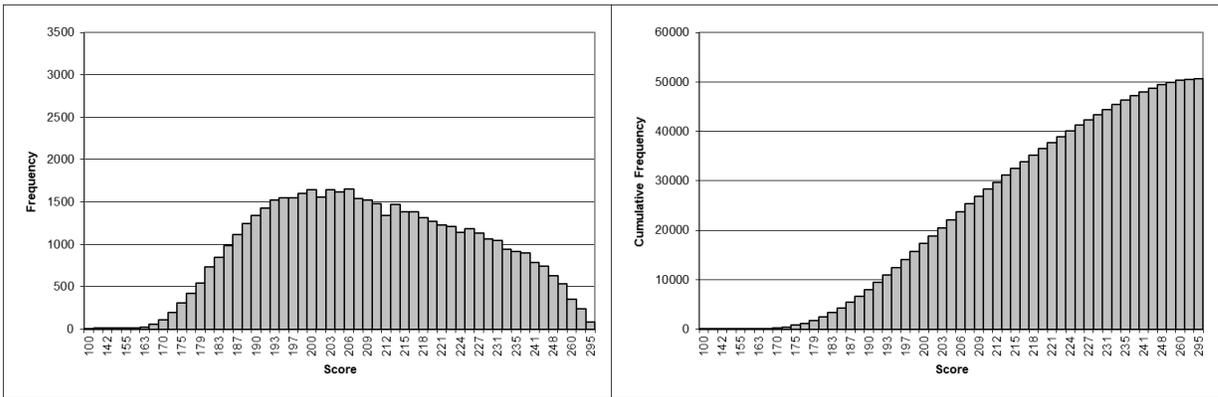
**Figure 5.** Reading Grade 7 Score Frequency and Cumulative Frequency Distributions



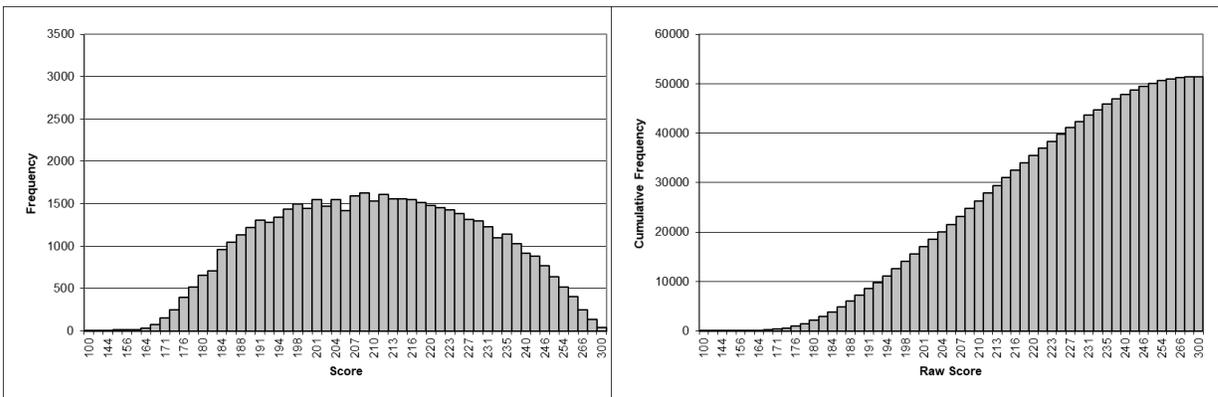
**Figure 6.** Reading Grade 8 Score Frequency and Cumulative Frequency Distributions



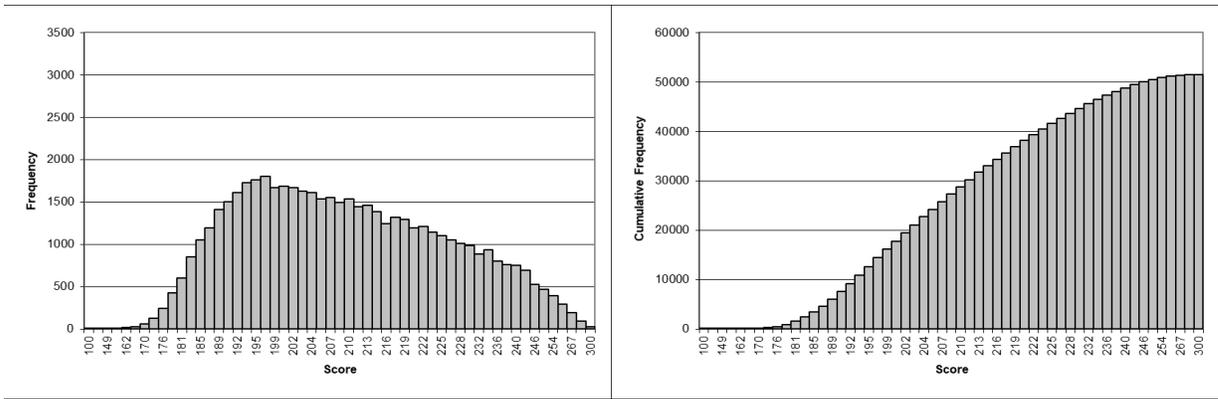
**Figure 7.** Mathematics Grade 3 Score Frequency and Cumulative Frequency Distributions



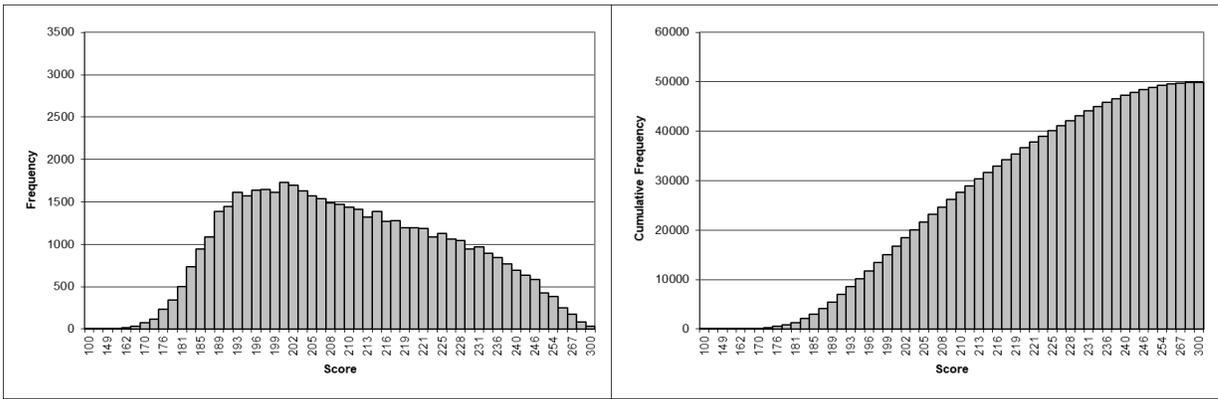
**Figure 8.** Mathematics Grade 4 Score Frequency and Cumulative Frequency Distributions



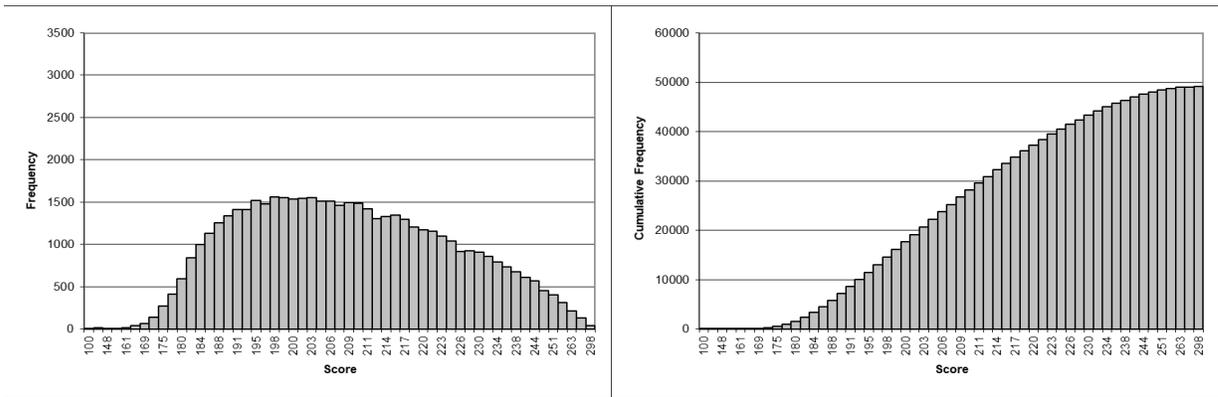
**Figure 9.** Mathematics Grade 5 Score Frequency and Cumulative Frequency Distributions



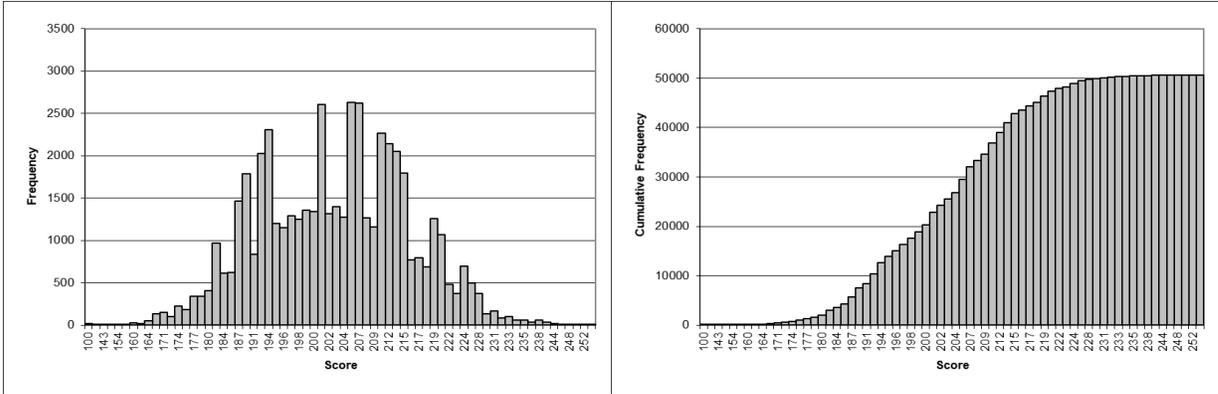
**Figure 10.** Mathematics Grade 6 Score Frequency and Cumulative Frequency Distributions



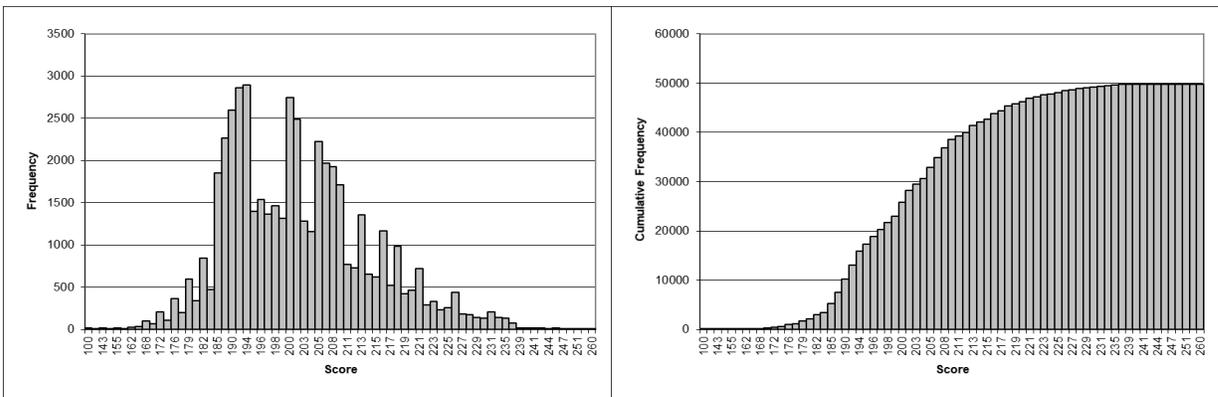
**Figure 11.** Mathematics Grade 7 Score Frequency and Cumulative Frequency Distributions



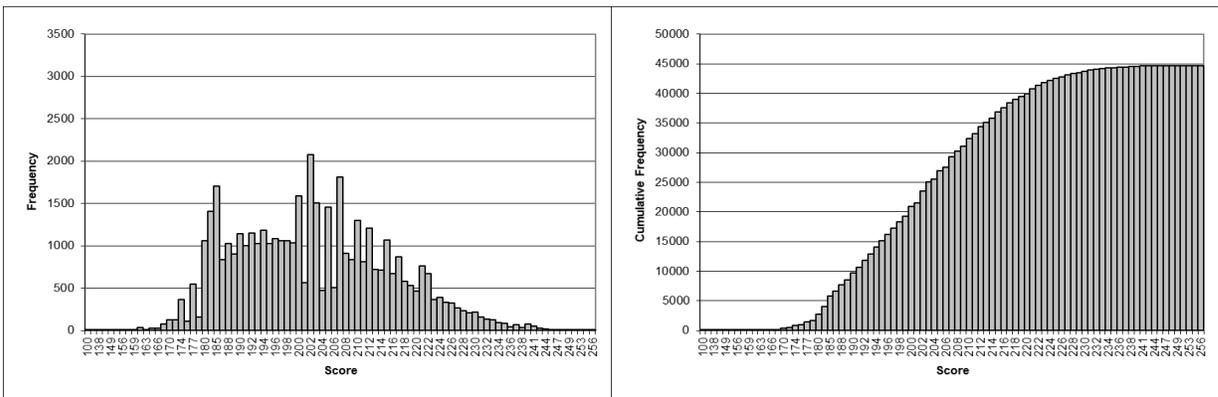
**Figure 12.** Mathematics Grade 8 Score Frequency and Cumulative Frequency Distributions



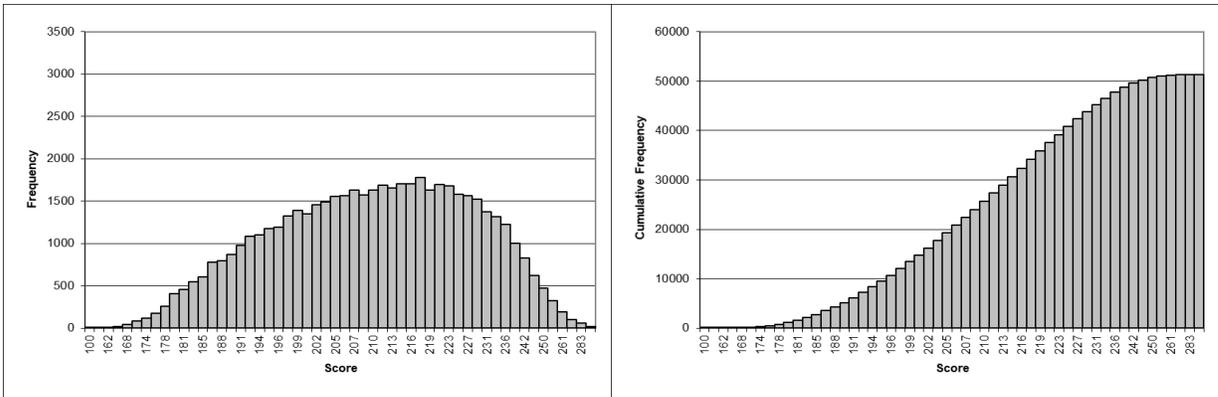
**Figure 13.** Science Grade 4 Score Frequency and Cumulative Frequency Distributions



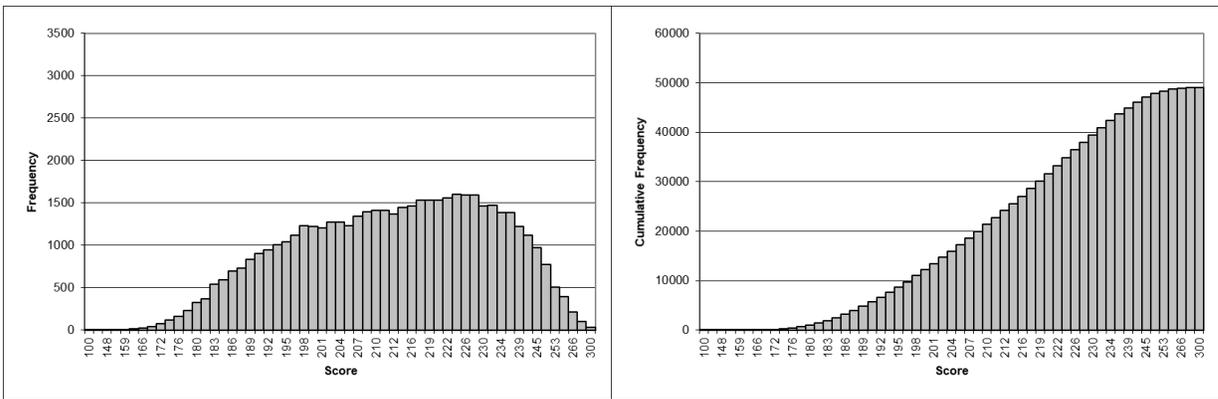
**Figure 14.** Science Grade 7 Score Frequency and Cumulative Frequency Distributions



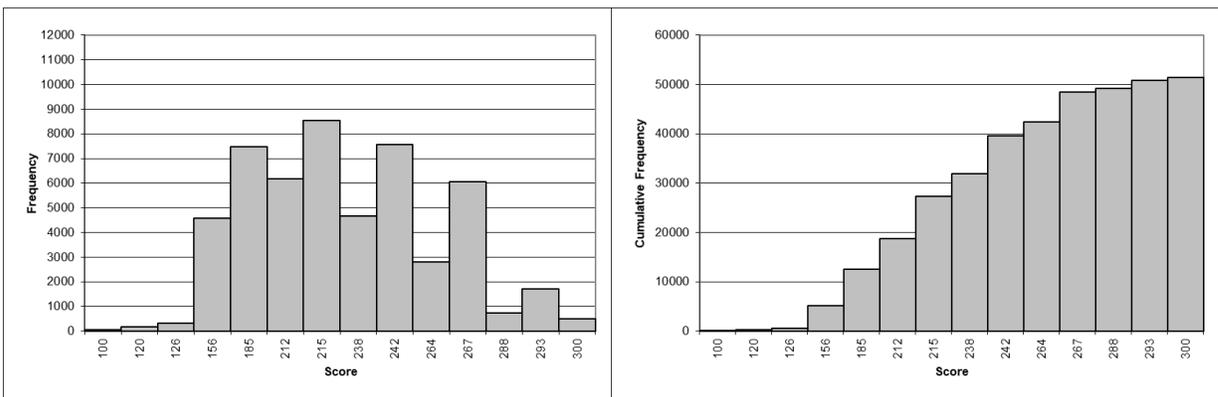
**Figure 15.** Science Grade 11 Score Frequency and Cumulative Frequency Distributions



**Figure 16.** Social Studies Grade 5 Score Frequency and Cumulative Frequency Distributions

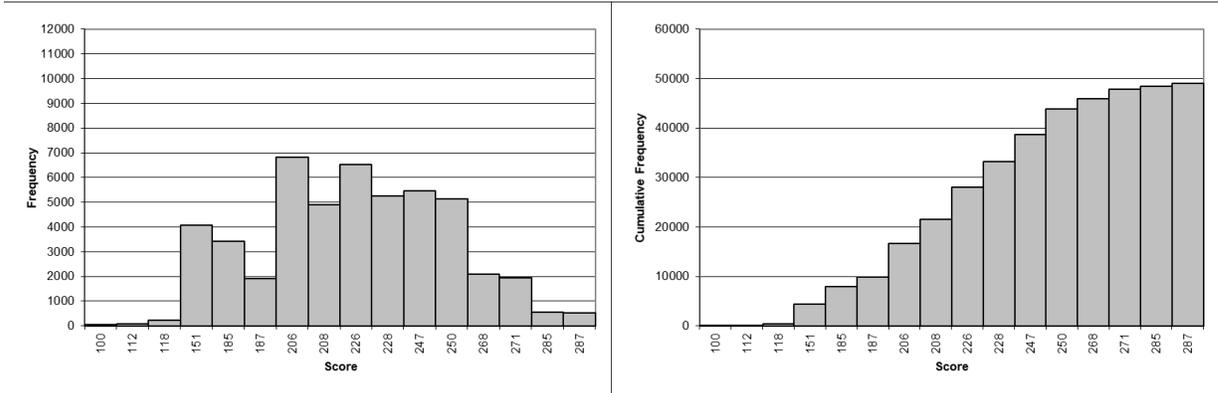


**Figure 17.** Social Studies Grade 8 Score Frequency and Cumulative Frequency Distributions

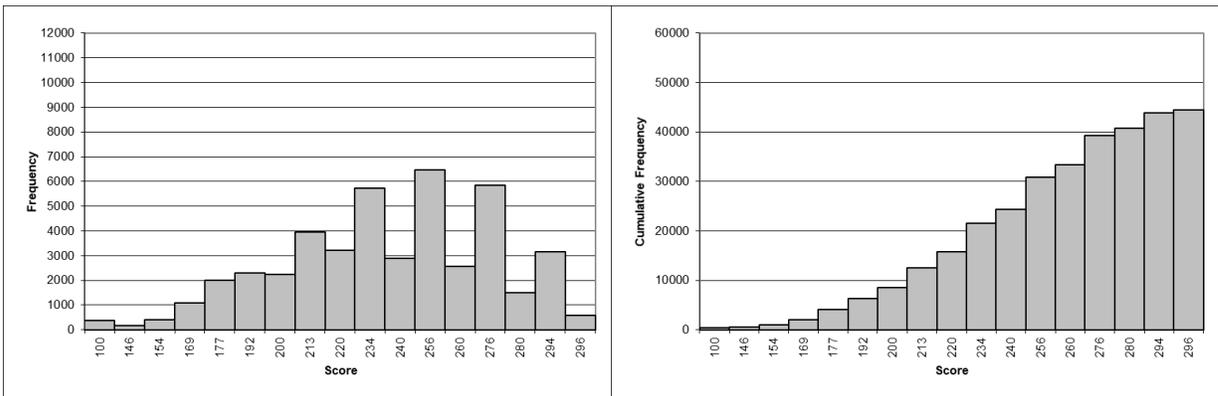


**Figure 18.** On Demand Writing Grade 5 Cumulative Frequency Distributions<sup>4</sup>

<sup>4</sup> For all grades in Writing, cumulative score distributions are presented due to score distributions from multiple test forms administered.

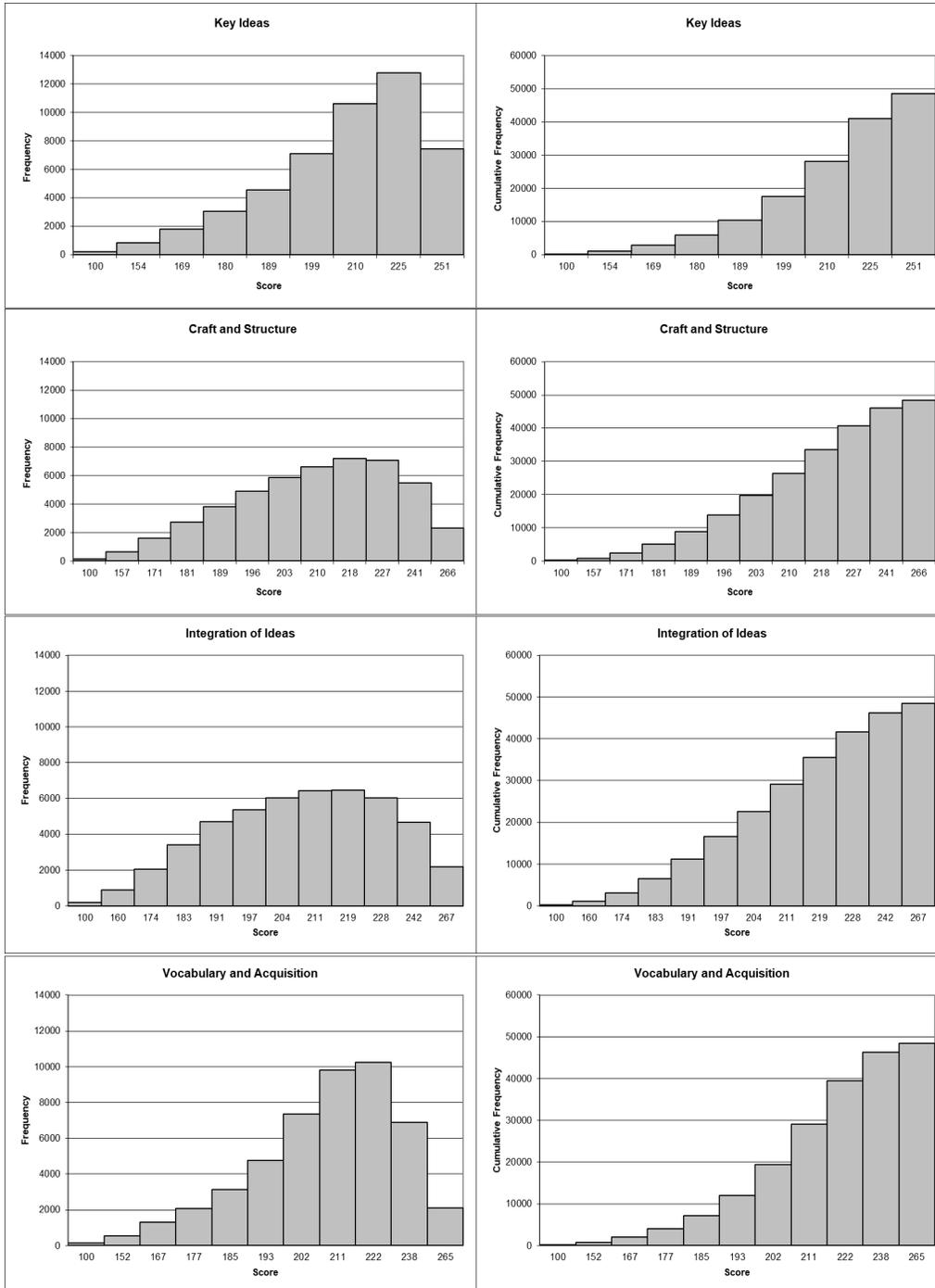


**Figure 19.** On Demand Writing Grade 8 Score Frequency and Cumulative Frequency Distributions



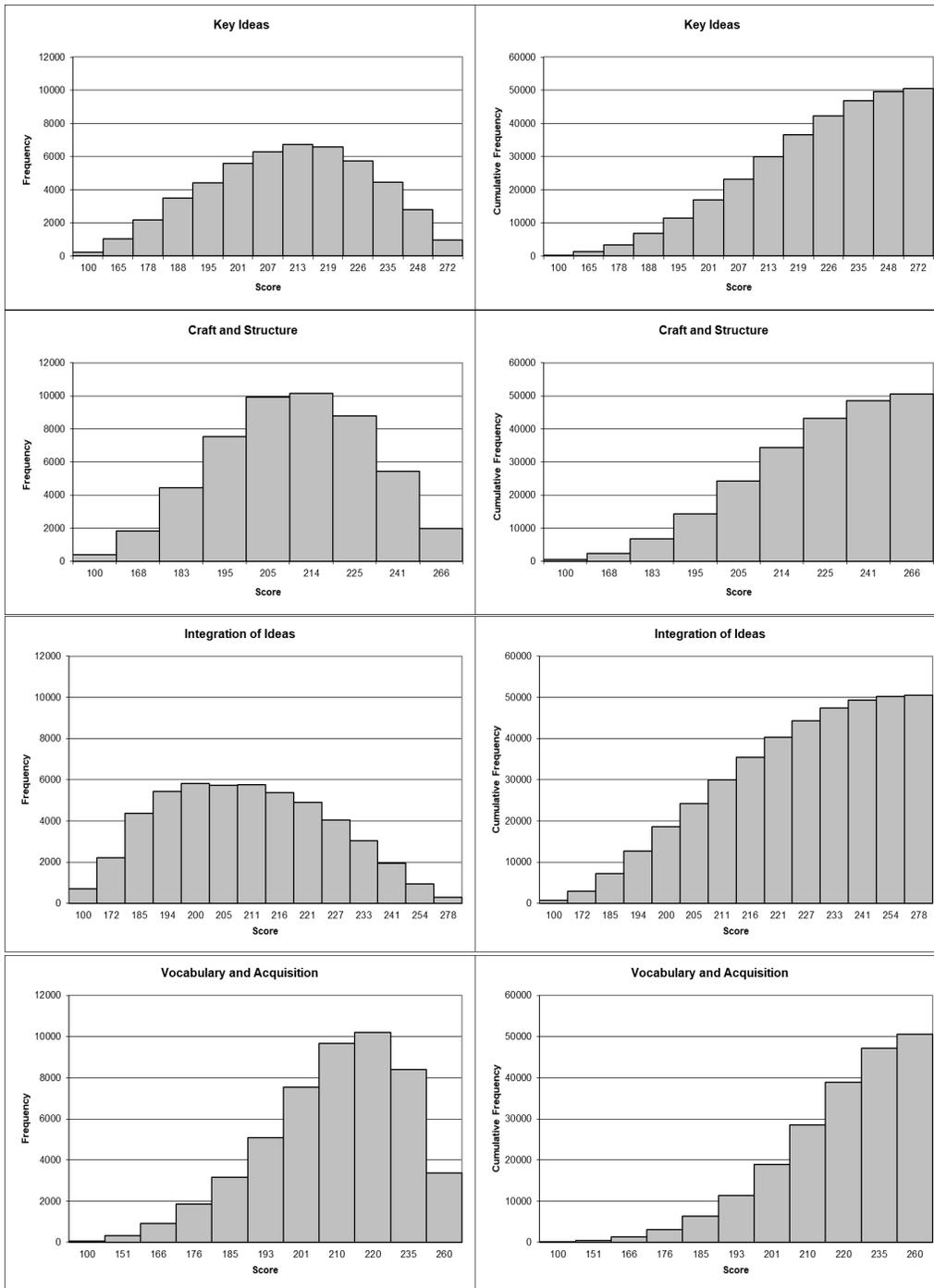
**Figure 20.** On Demand Writing Grade 11 Score Frequency and Cumulative Frequency Distributions

# Appendix J. Score Frequency Distributions— Subdomain<sup>5</sup>

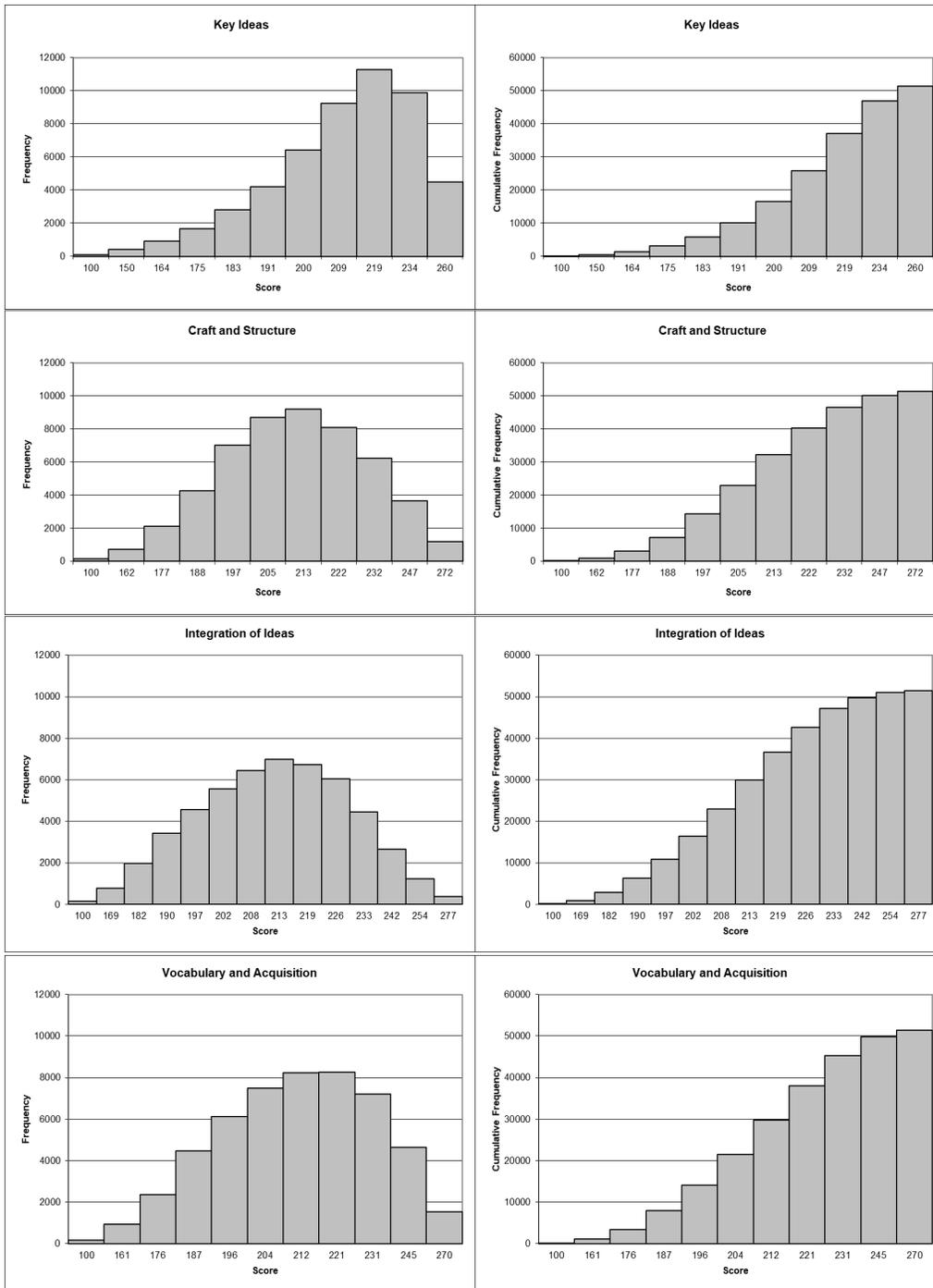


**Figure 1.** Reading Grade 3 Reporting Category Score Frequency and Cumulative Frequency Distributions

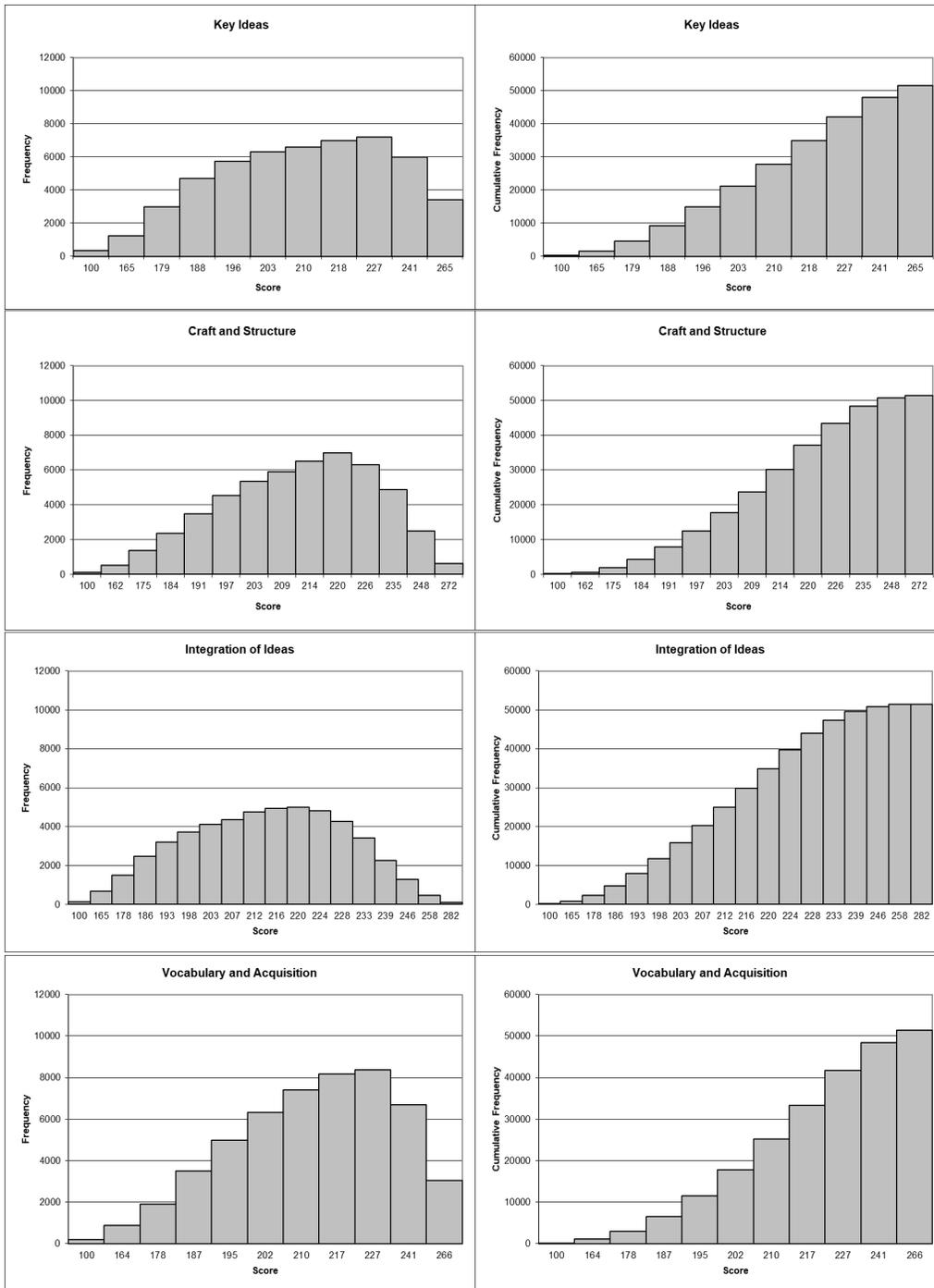
<sup>5</sup> Alternate K-PREP students are not included.



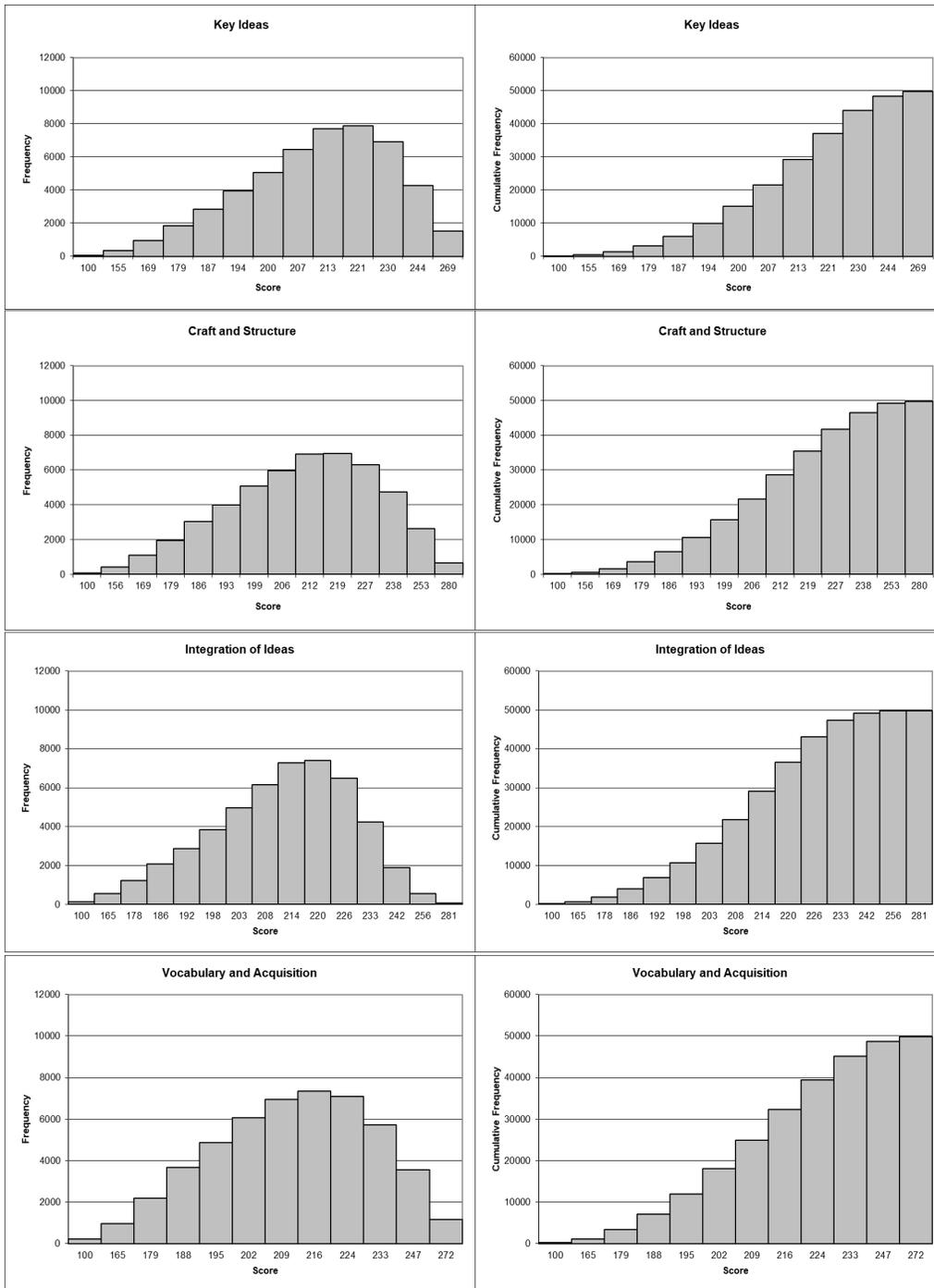
**Figure 2.** Reading Grade 4 Reporting Category Score Frequency and Cumulative Frequency Distributions



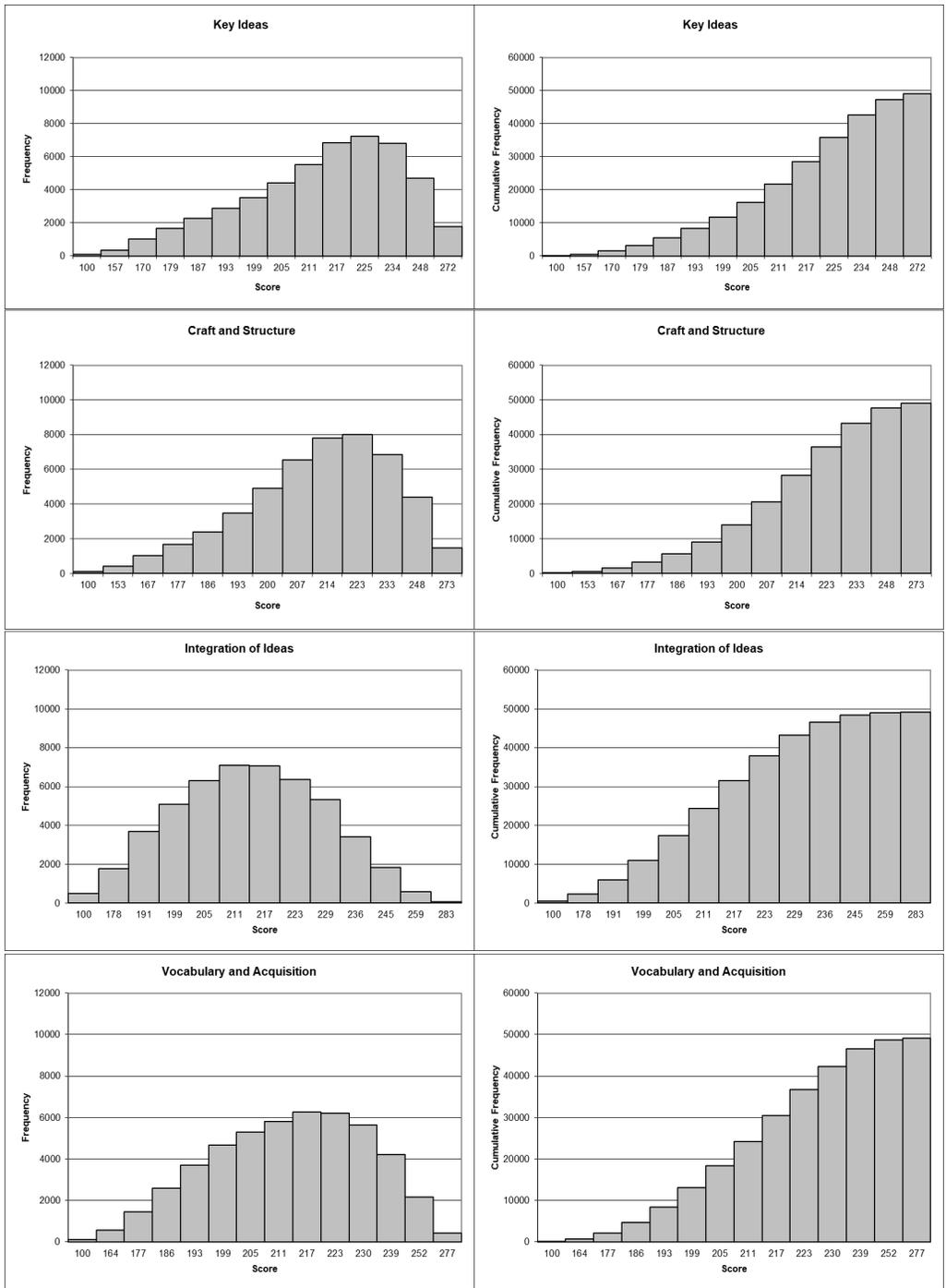
**Figure 3.** Reading Grade 5 Reporting Category Score Frequency and Cumulative Frequency Distributions



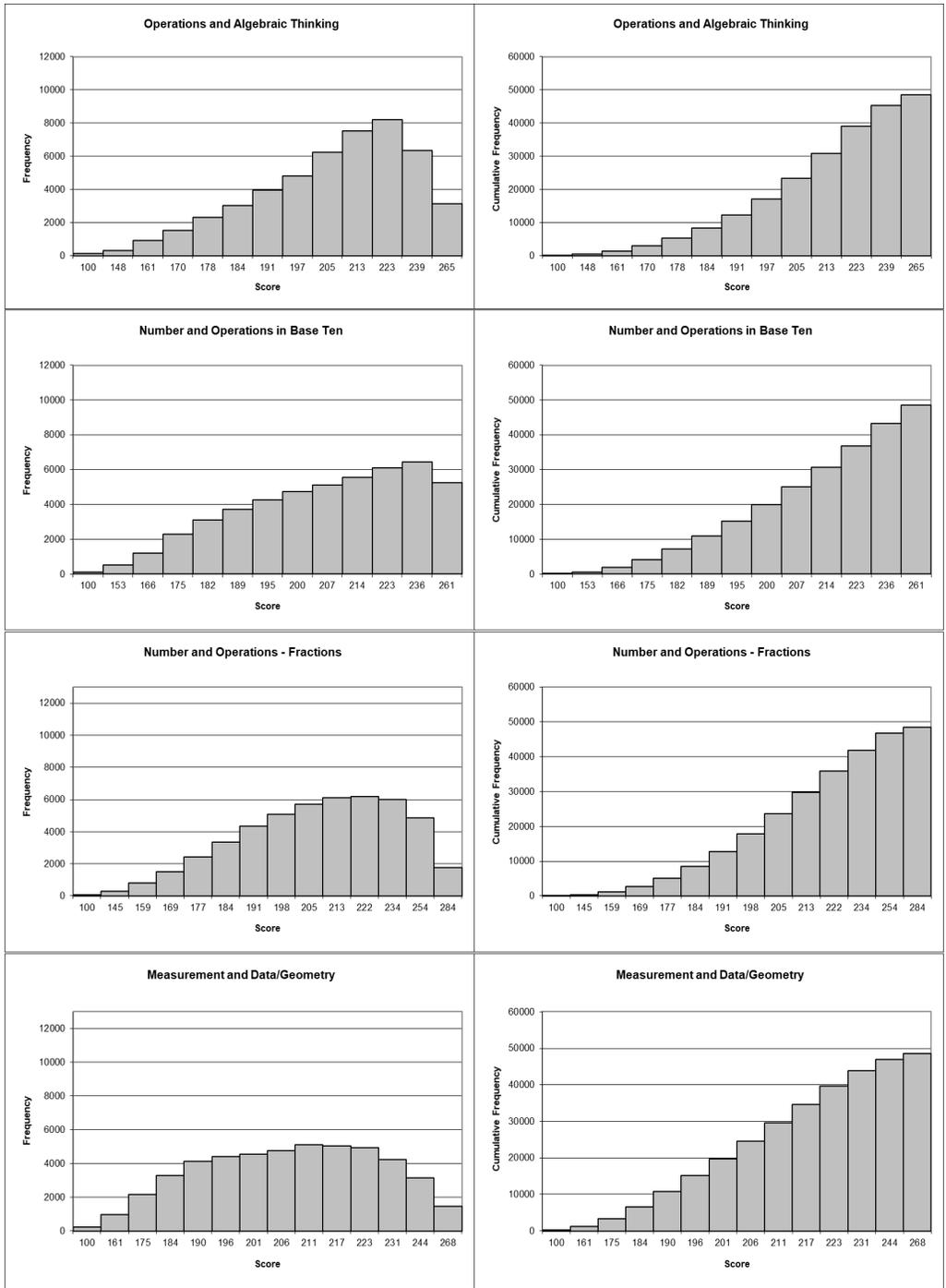
**Figure 4.** Reading Grade 6 Reporting Category Score Frequency and Cumulative Frequency Distributions



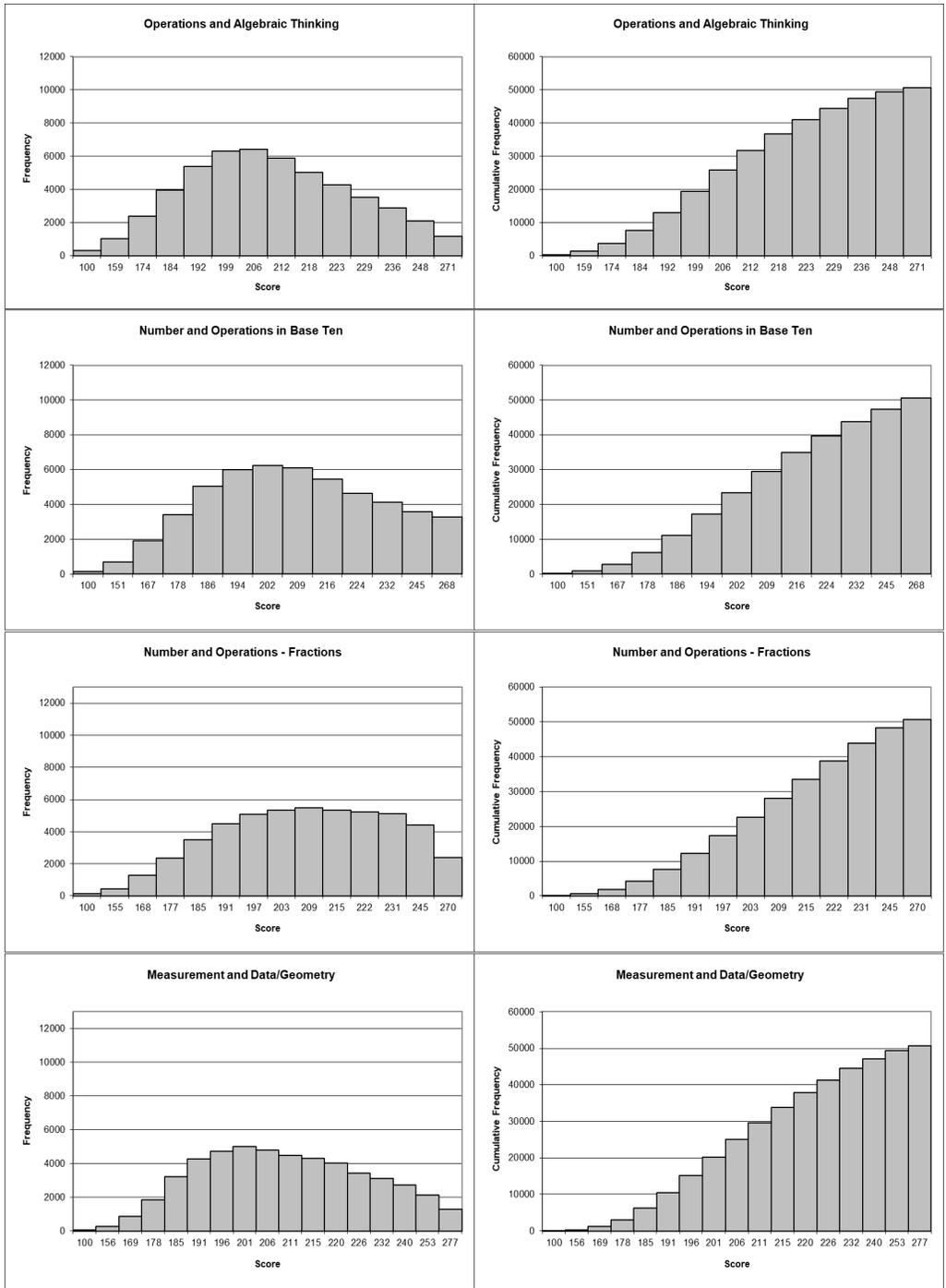
**Figure 5.** Reading Grade 7 Reporting Category Score Frequency and Cumulative Frequency Distributions



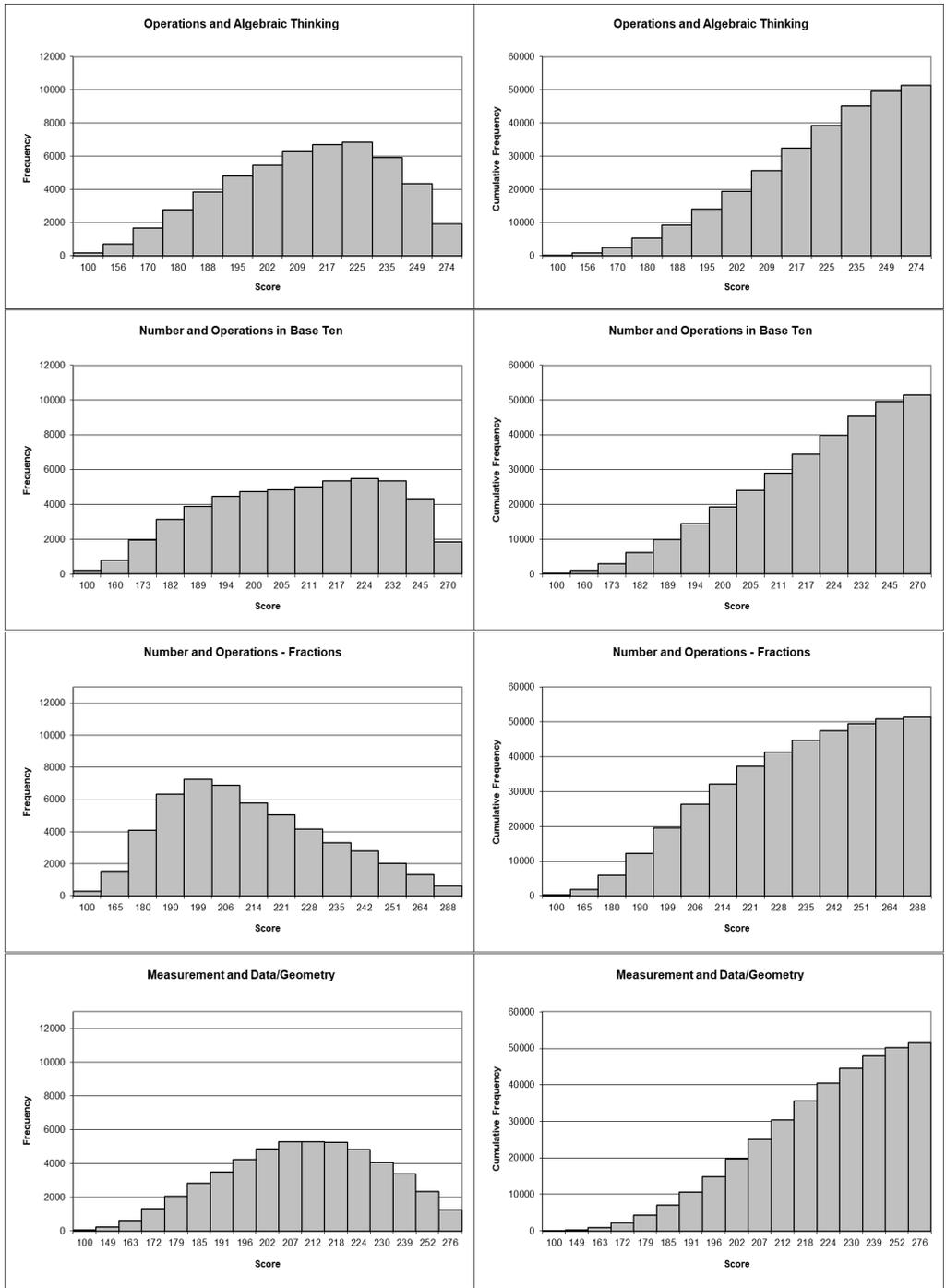
**Figure 6.** Reading Grade 8 Reporting Category Score Frequency and Cumulative Frequency Distributions



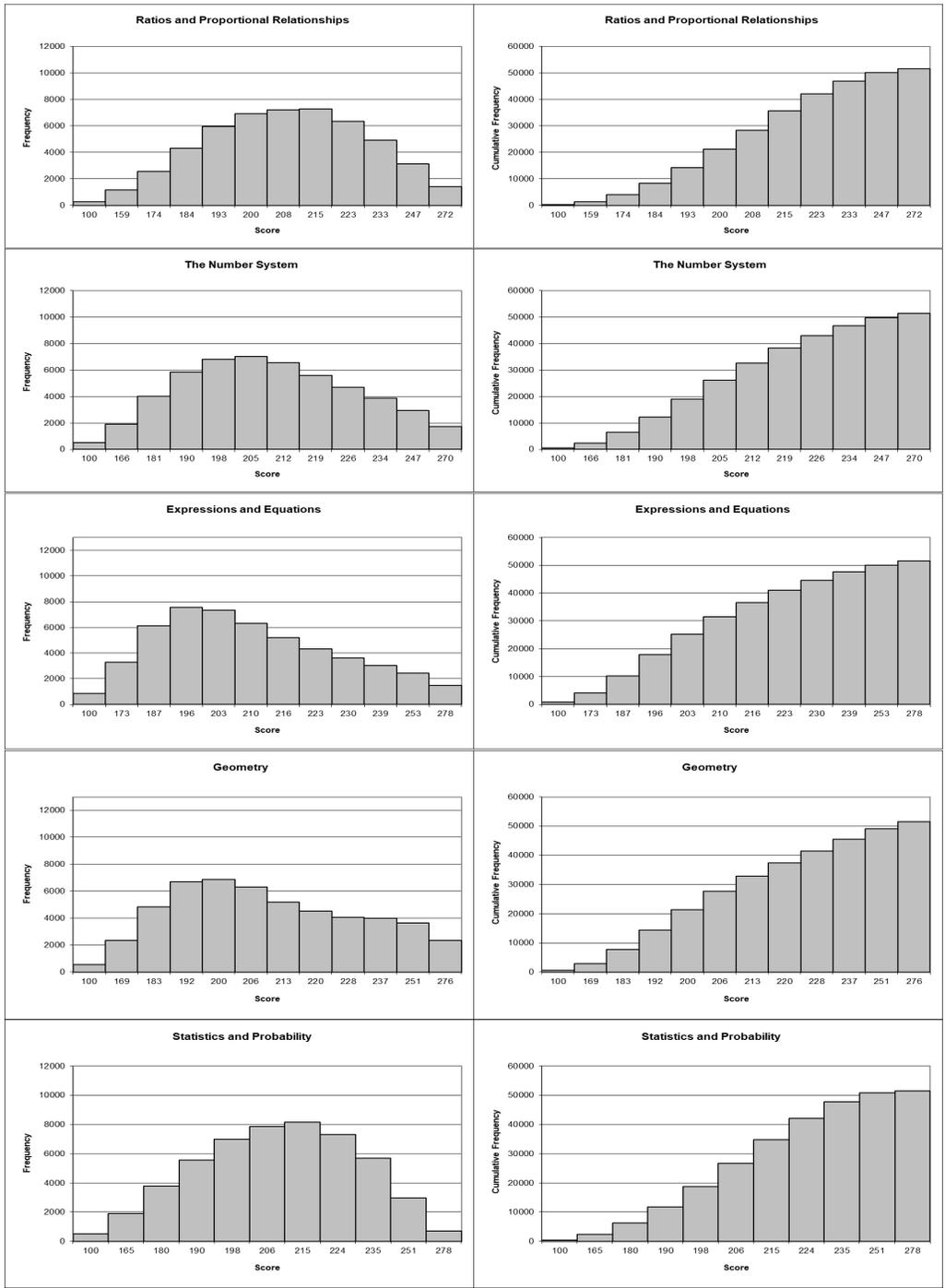
**Figure 7.** Mathematics Grade 3 Reporting Category Score Frequency and Cumulative Frequency Distributions



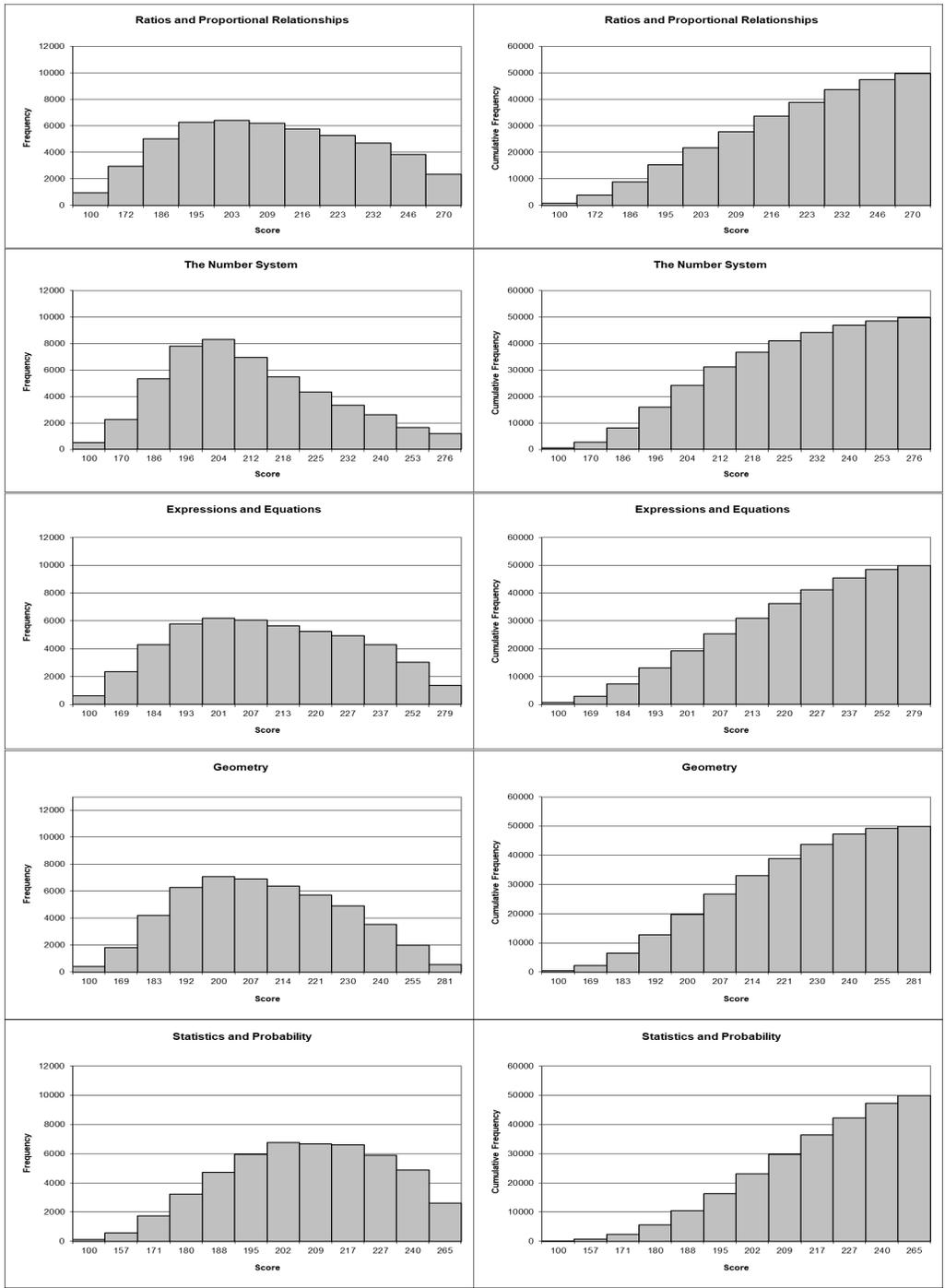
**Figure 8.** Mathematics Grade 4 Reporting Category Score Frequency and Cumulative Frequency Distributions



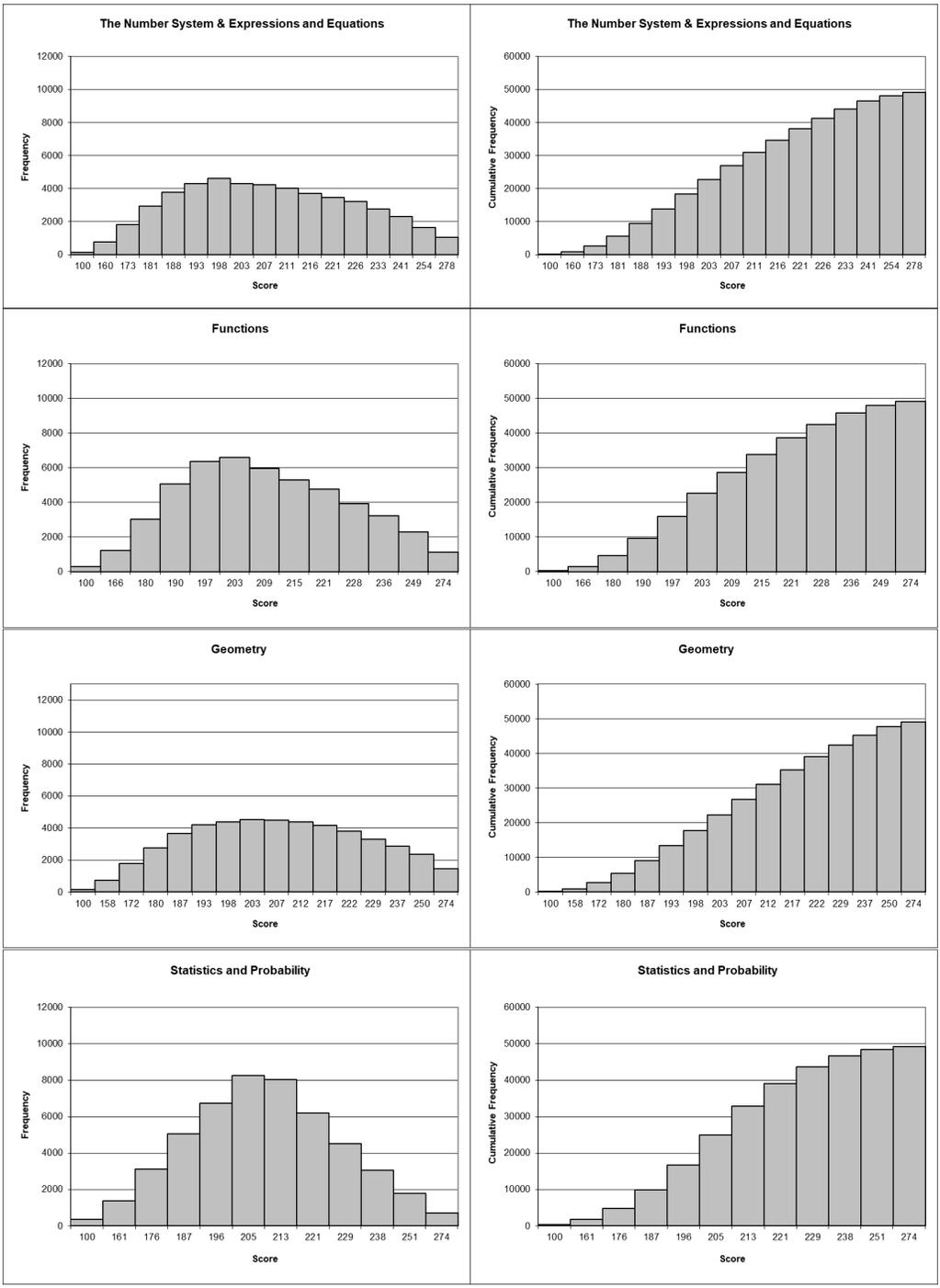
**Figure 9.** Mathematics Grade 5 Reporting Category Score Frequency and Cumulative Frequency Distributions



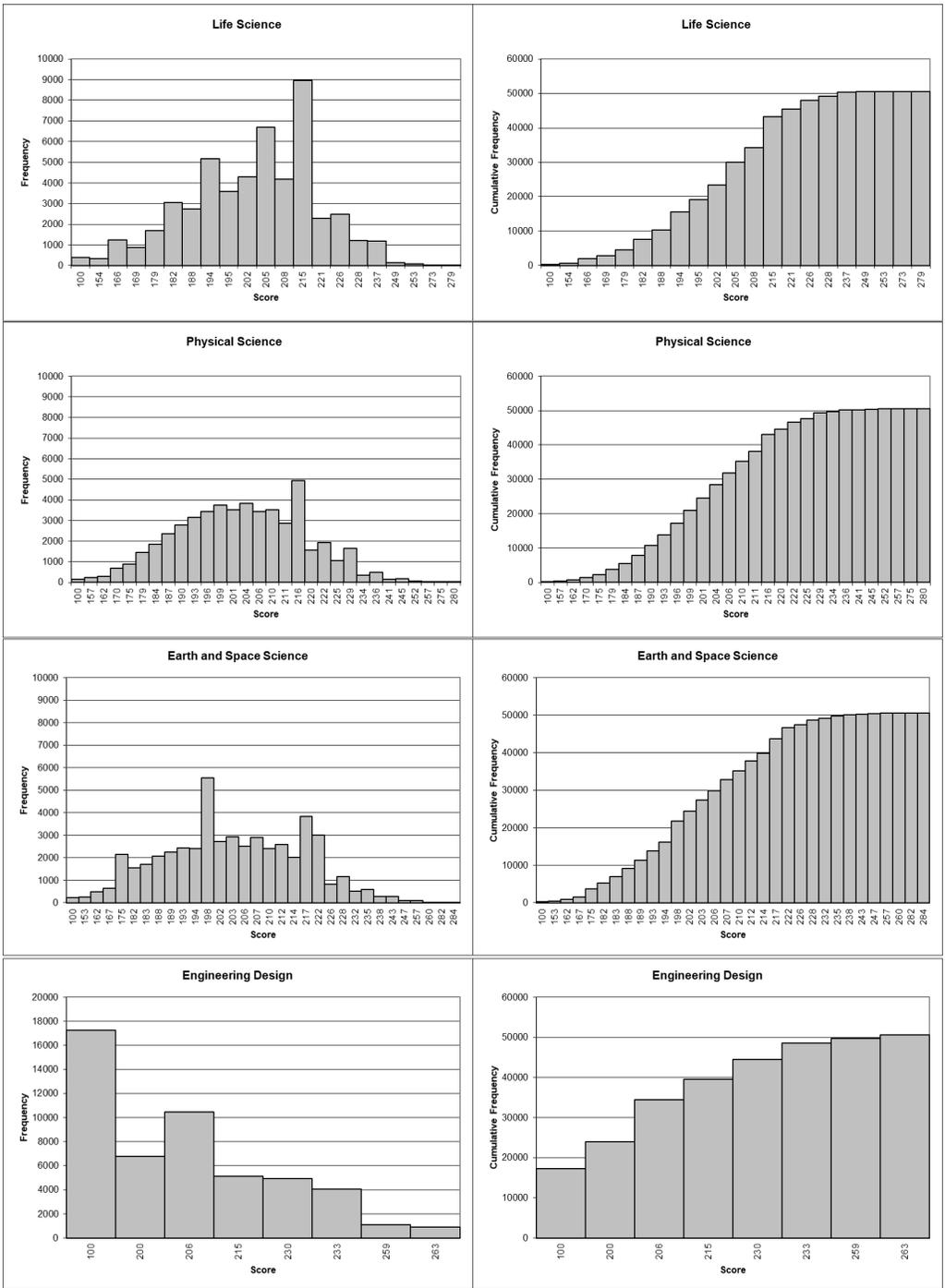
**Figure 10.** Mathematics Grade 6 Reporting Category Score Frequency and Cumulative Frequency Distributions



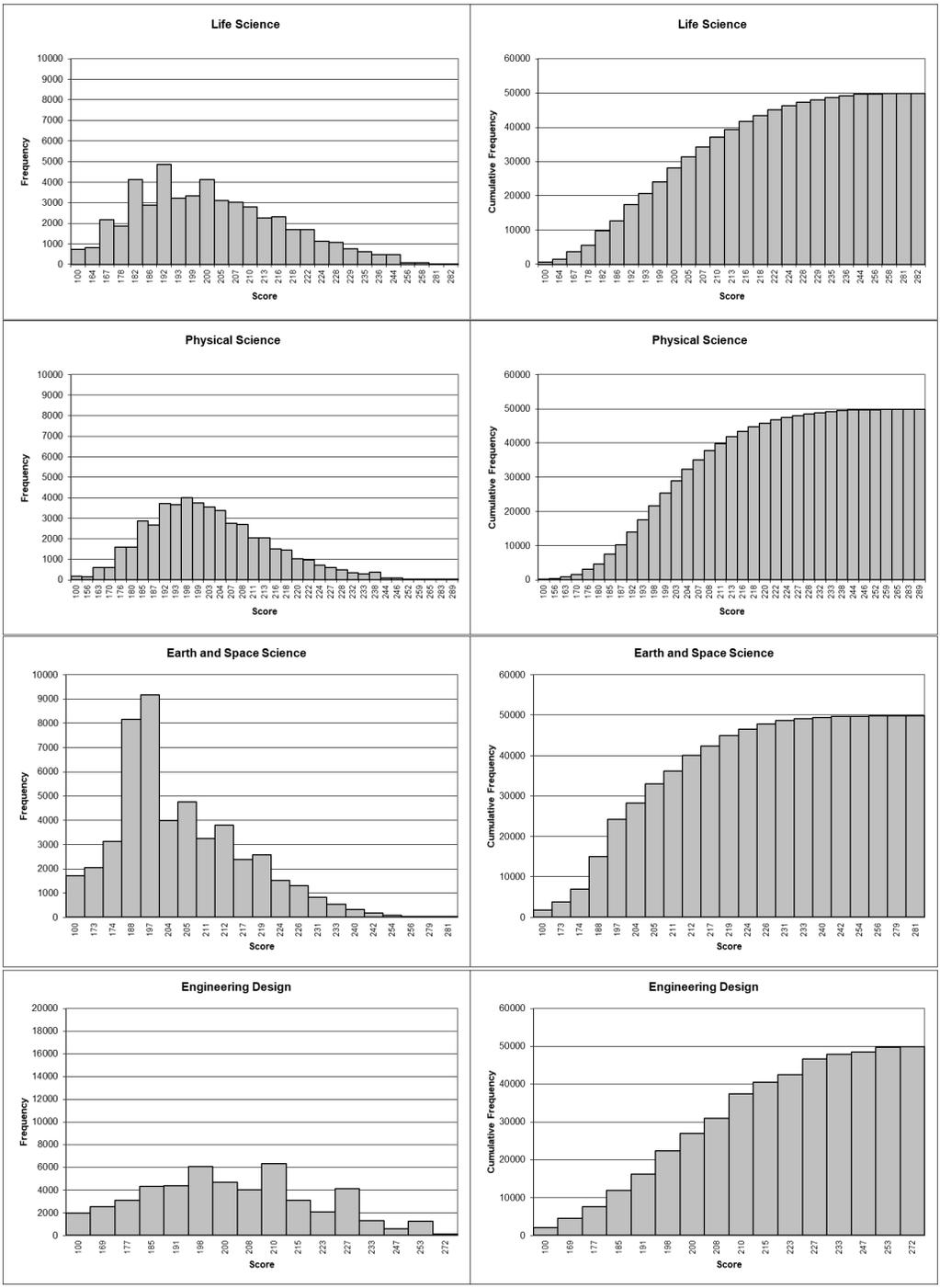
**Figure 11.** Mathematics Grade 7 Reporting Category Score Frequency and Cumulative Frequency Distributions



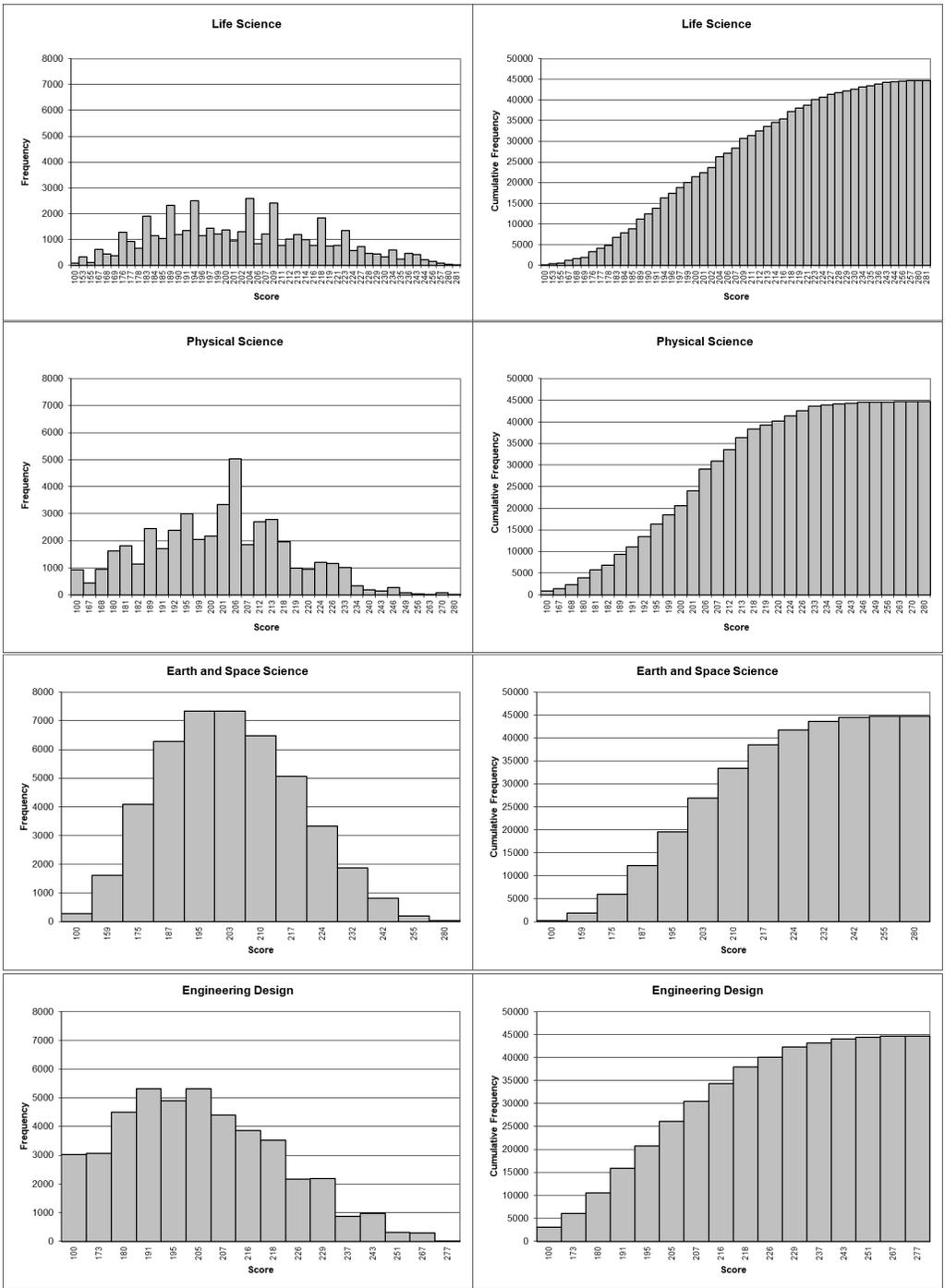
**Figure 12.** Mathematics Grade 8 Reporting Category Score Frequency and Cumulative Frequency Distributions



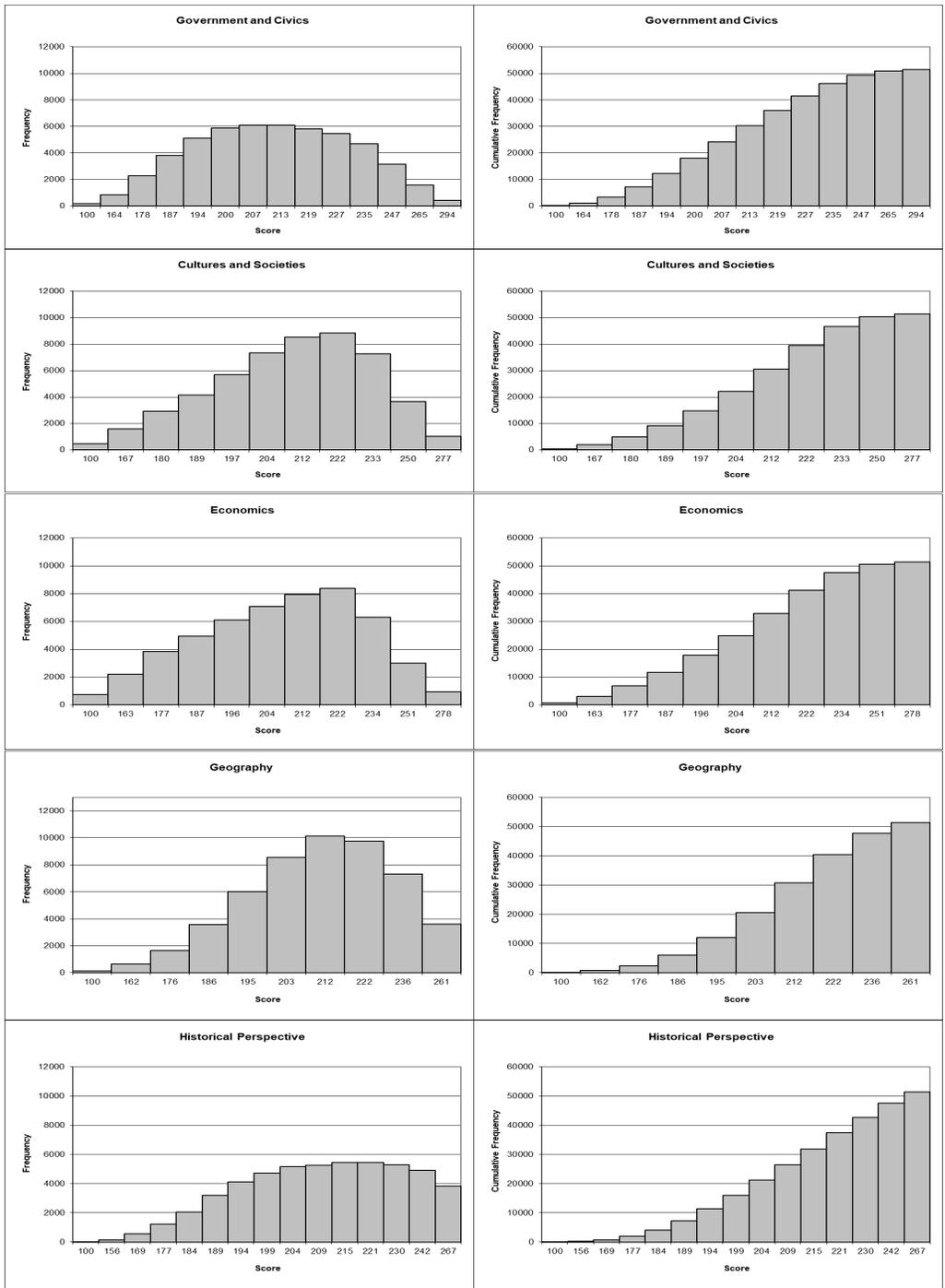
**Figure 13.** Science Grade 4 Reporting Category Score Frequency and Cumulative Frequency Distributions



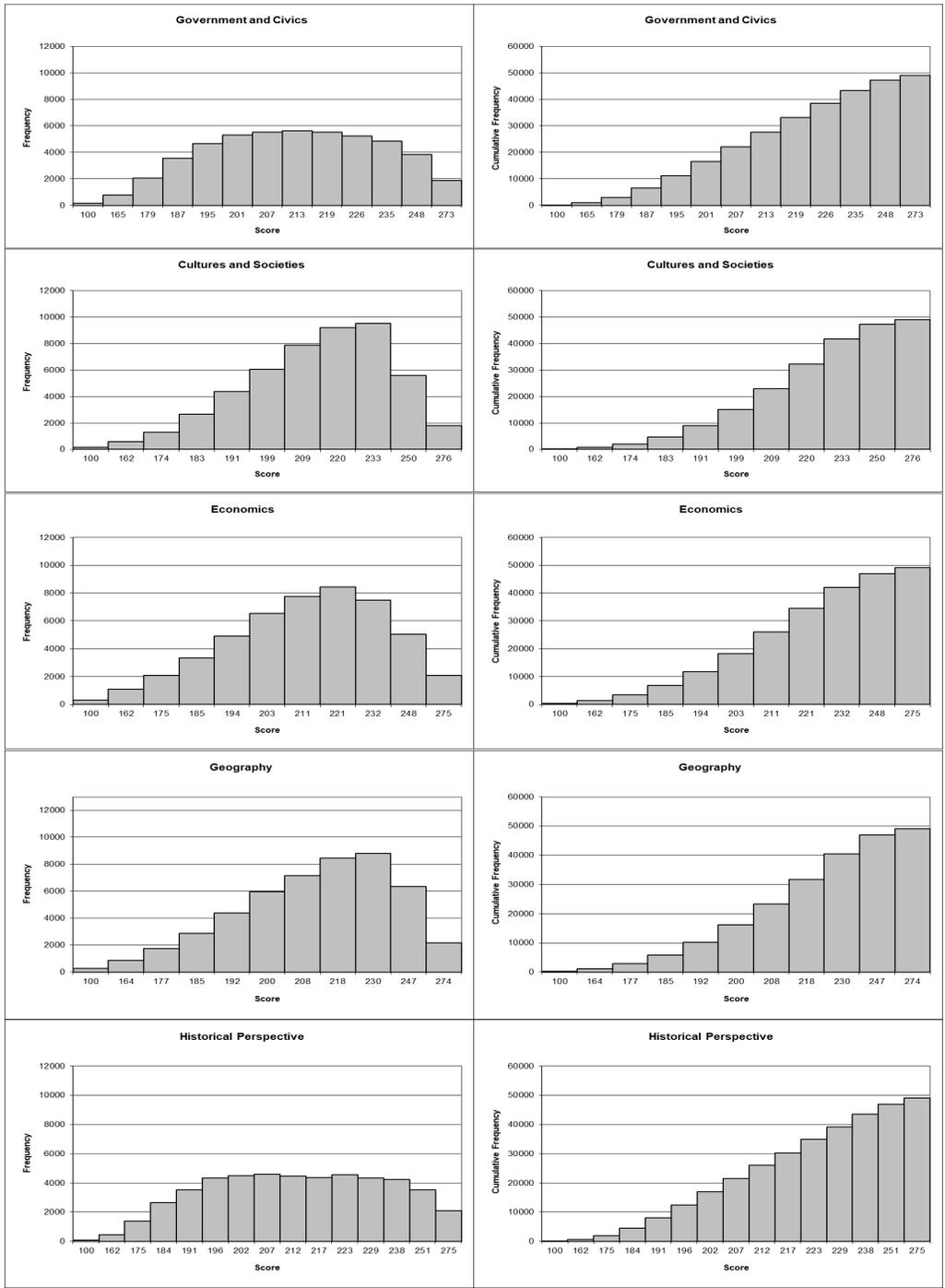
**Figure 14.** Science Grade 7 Reporting Category Score Frequency and Cumulative Frequency Distributions



**Figure 15.** Science Grade 11 Reporting Category Score Frequency and Cumulative Frequency Distributions



**Figure 16.** Social Studies Grade 5 Reporting Category Score Frequency and Cumulative Frequency Distributions



**Figure 17.** Social Studies Grade 8 Reporting Category Score Frequency and Cumulative Frequency Distributions

## Appendix K. Scale Score Descriptive Statistics<sup>67</sup>

### Grade 3 Reading

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 48,481 | 210.21 | 18.2 | 198 | 210    | 223 | 287 | 0.08  |
| Gender                | Female                           | 23,455 | 211.64 | 18.0 | 200 | 213    | 223 | 287 | 0.09  |
|                       | Male                             | 25,022 | 208.88 | 18.3 | 196 | 210    | 220 | 287 | 0.08  |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,745  | 205.04 | 16.9 | 194 | 206    | 217 | 287 | 0.15  |
|                       | Asian                            | 886    | 215.36 | 19.3 | 202 | 217    | 229 | 287 | 0.11  |
|                       | Native Hawaiian/Pacific Islander | 66     | 207.55 | 14.4 | 196 | 209    | 217 | 238 | -0.12 |
|                       | Black/African American           | 5,122  | 199.39 | 17.6 | 187 | 200    | 213 | 287 | 0.19  |
|                       | American Indian                  | 52     | 212.17 | 17.1 | 200 | 217    | 223 | 251 | -0.10 |
|                       | White                            | 36,282 | 212.27 | 17.8 | 200 | 213    | 223 | 287 | 0.09  |
|                       | Other                            | 2,323  | 208.35 | 18.0 | 196 | 208    | 220 | 287 | 0.03  |
|                       | Missing                          | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 48,236 | 210.26 | 18.2 | 198 | 210    | 223 | 287 | 0.08  |
|                       | Migrant                          | 245    | 201.07 | 15.6 | 190 | 200    | 210 | 238 | 0.07  |
| LEP                   | Non-LEP                          | 45,222 | 210.75 | 18.3 | 198 | 210    | 223 | 287 | 0.07  |
|                       | LEP                              | 3,259  | 202.61 | 15.9 | 192 | 202    | 213 | 263 | 0.02  |
| Economic Disadvantage | Free Lunch                       | 28,952 | 206.16 | 17.6 | 194 | 206    | 217 | 287 | 0.11  |
|                       | Reduced-Price Lunch              | 2,013  | 211.84 | 17.5 | 200 | 213    | 223 | 287 | 0.11  |
|                       | Regular Lunch                    | 17,516 | 216.73 | 17.5 | 206 | 217    | 229 | 287 | 0.05  |
| IEP                   | Non-IEP                          | 39,558 | 211.89 | 17.7 | 200 | 213    | 223 | 287 | 0.08  |
|                       | IEP                              | 8,923  | 202.79 | 18.7 | 189 | 202    | 215 | 287 | 0.31  |

### Grade 4 Reading

|           | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All       | Students Tested                  | 50,608 | 210.46 | 15.5 | 200 | 210    | 221 | 294 | 0.05  |
| Gender    | Female                           | 24,812 | 211.38 | 15.3 | 201 | 212    | 221 | 294 | 0.08  |
|           | Male                             | 25,792 | 209.58 | 15.5 | 200 | 210    | 221 | 294 | 0.03  |
|           | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity | Hispanic                         | 3,852  | 205.86 | 14.2 | 196 | 205    | 215 | 258 | 0.08  |
|           | Asian                            | 829    | 215.33 | 17.0 | 203 | 215    | 227 | 294 | -0.08 |
|           | Native Hawaiian/Pacific Islander | 68     | 205.82 | 14.3 | 196 | 205    | 215 | 232 | -0.14 |
|           | Black/African American           | 5,381  | 201.43 | 14.9 | 190 | 201    | 212 | 270 | 0.18  |
|           | American Indian                  | 56     | 210.43 | 14.8 | 201 | 212    | 222 | 242 | -0.02 |
|           | White                            | 38,025 | 212.23 | 15.0 | 201 | 212    | 223 | 294 | 0.05  |
|           | Other                            | 2,393  | 208.51 | 15.4 | 198 | 208    | 219 | 270 | 0.21  |
|           | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant   | Non-Migrant                      | 50,350 | 210.50 | 15.5 | 200 | 210    | 221 | 294 | 0.05  |

<sup>6</sup> Alternate K-PREP students are not included.

<sup>7</sup> Scale score statistics are not reported on n-counts less than 10.

|                       |                     |        |        |      |     |     |     |     |       |
|-----------------------|---------------------|--------|--------|------|-----|-----|-----|-----|-------|
|                       | Migrant             | 258    | 203.02 | 13.4 | 194 | 203 | 212 | 251 | 0.22  |
| LEP                   | Non-LEP             | 47,509 | 210.98 | 15.4 | 200 | 212 | 221 | 294 | 0.03  |
|                       | LEP                 | 3,099  | 202.40 | 13.7 | 194 | 201 | 212 | 294 | 0.21  |
| Economic Disadvantage | Free Lunch          | 30,135 | 206.76 | 14.7 | 196 | 207 | 217 | 294 | 0.08  |
|                       | Reduced-Price Lunch | 2,061  | 211.77 | 14.6 | 201 | 212 | 221 | 258 | -0.02 |
|                       | Regular Lunch       | 18,412 | 216.38 | 14.8 | 207 | 217 | 227 | 294 | -0.02 |
| IEP                   | Non-IEP             | 42,267 | 211.80 | 14.9 | 201 | 212 | 221 | 294 | 0.06  |
|                       | IEP                 | 8,341  | 203.67 | 16.6 | 192 | 203 | 215 | 294 | 0.36  |

### Grade 5 Reading

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 51,432 | 212.24 | 15.7 | 201 | 212    | 222 | 294 | -0.02 |
| Gender                | Female                           | 25,249 | 213.65 | 15.4 | 203 | 214    | 225 | 294 | 0.01  |
|                       | Male                             | 26,181 | 210.88 | 15.9 | 201 | 210    | 222 | 294 | -0.02 |
|                       | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 4,021  | 207.71 | 14.8 | 197 | 208    | 216 | 271 | 0.11  |
|                       | Asian                            | 863    | 217.09 | 17.8 | 206 | 218    | 230 | 271 | -0.17 |
|                       | Native Hawaiian/Pacific Islander | 81     | 210.26 | 17.5 | 198 | 210    | 221 | 242 | -0.13 |
|                       | Black/African American           | 5,468  | 203.40 | 15.3 | 193 | 203    | 214 | 259 | 0.11  |
|                       | American Indian                  | 64     | 210.20 | 14.7 | 197 | 212    | 220 | 242 | 0.01  |
|                       | White                            | 38,597 | 213.92 | 15.3 | 205 | 214    | 225 | 294 | -0.03 |
|                       | Other                            | 2,333  | 211.27 | 15.5 | 201 | 212    | 222 | 294 | 0.01  |
|                       | Missing                          | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 51,182 | 212.28 | 15.7 | 201 | 212    | 222 | 294 | -0.02 |
|                       | Migrant                          | 250    | 204.28 | 14.4 | 195 | 205    | 214 | 235 | -0.30 |
| LEP                   | Non-LEP                          | 48,806 | 212.74 | 15.6 | 203 | 212    | 222 | 294 | -0.02 |
|                       | LEP                              | 2,626  | 202.83 | 15.1 | 193 | 203    | 212 | 252 | 0.16  |
| Economic Disadvantage | Free Lunch                       | 30,337 | 208.46 | 15.0 | 199 | 208    | 218 | 271 | -0.01 |
|                       | Reduced-Price Lunch              | 2,042  | 213.10 | 14.6 | 203 | 214    | 222 | 271 | 0.00  |
|                       | Regular Lunch                    | 19,053 | 218.17 | 15.1 | 208 | 218    | 227 | 294 | -0.08 |
| IEP                   | Non-IEP                          | 43,480 | 213.89 | 15.0 | 205 | 214    | 225 | 294 | 0.02  |
|                       | IEP                              | 7,952  | 203.26 | 16.5 | 191 | 203    | 214 | 271 | 0.26  |

### Grade 6 Reading

|           | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All       | Students Tested                  | 51,510 | 212.68 | 15.4 | 201 | 213    | 224 | 273 | -0.10 |
| Gender    | Female                           | 25,324 | 214.05 | 15.1 | 203 | 214    | 226 | 273 | -0.11 |
|           | Male                             | 26,184 | 211.35 | 15.5 | 200 | 212    | 222 | 273 | -0.09 |
|           | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity | Hispanic                         | 3,810  | 208.72 | 14.8 | 198 | 209    | 219 | 273 | 0.06  |
|           | Asian                            | 866    | 219.16 | 16.4 | 209 | 220    | 231 | 273 | -0.36 |
|           | Native Hawaiian/Pacific Islander | 74     | 209.38 | 15.8 | 198 | 210    | 219 | 241 | 0.13  |
|           | Black/African American           | 5,517  | 203.73 | 14.9 | 192 | 203    | 214 | 254 | 0.16  |
|           | American Indian                  | 65     | 212.09 | 15.6 | 201 | 213    | 223 | 254 | 0.04  |

|                       | Subgroup            | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|---------------------|--------|--------|------|-----|--------|-----|-----|-------|
|                       | White               | 38,861 | 214.31 | 14.9 | 204 | 216    | 226 | 273 | -0.15 |
|                       | Other               | 2,312  | 210.88 | 15.0 | 200 | 210    | 222 | 273 | 0.03  |
|                       | Missing             | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant         | 51,290 | 212.71 | 15.3 | 201 | 213    | 224 | 273 | -0.10 |
|                       | Migrant             | 220    | 205.21 | 14.7 | 194 | 204    | 216 | 245 | 0.19  |
| LEP                   | Non-LEP             | 49,291 | 213.12 | 15.2 | 203 | 214    | 224 | 273 | -0.12 |
|                       | LEP                 | 2,219  | 202.87 | 14.9 | 192 | 201    | 213 | 261 | 0.43  |
| Economic Disadvantage | Free Lunch          | 29,900 | 208.87 | 14.8 | 198 | 209    | 220 | 273 | -0.01 |
|                       | Reduced-Price Lunch | 2,177  | 213.39 | 14.7 | 203 | 214    | 224 | 261 | -0.13 |
|                       | Regular Lunch       | 19,433 | 218.45 | 14.4 | 209 | 219    | 229 | 273 | -0.27 |
| IEP                   | Non-IEP             | 44,516 | 214.27 | 14.8 | 204 | 214    | 226 | 273 | -0.14 |
|                       | IEP                 | 6,994  | 202.54 | 14.9 | 192 | 201    | 213 | 273 | 0.40  |

### Grade 7 Reading

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 49,888 | 212.13 | 15.4 | 201 | 212    | 223 | 300 | -0.18 |
| Gender                | Female                           | 24,200 | 214.23 | 15.0 | 204 | 215    | 225 | 300 | -0.17 |
|                       | Male                             | 25,687 | 210.16 | 15.5 | 200 | 211    | 221 | 276 | -0.16 |
|                       | Missing                          | 1      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,641  | 208.11 | 14.9 | 198 | 209    | 219 | 256 | -0.17 |
|                       | Asian                            | 875    | 217.99 | 16.9 | 207 | 219    | 229 | 264 | -0.76 |
|                       | Native Hawaiian/Pacific Islander | 53     | 206.94 | 15.5 | 199 | 207    | 218 | 242 | -0.10 |
|                       | Black/African American           | 5,120  | 203.21 | 15.2 | 192 | 203    | 214 | 256 | 0.10  |
|                       | American Indian                  | 73     | 211.25 | 16.3 | 198 | 214    | 225 | 242 | -0.38 |
|                       | White                            | 38,080 | 213.67 | 14.9 | 204 | 214    | 225 | 300 | -0.18 |
|                       | Other                            | 2,043  | 210.72 | 15.0 | 201 | 212    | 221 | 264 | -0.16 |
|                       | Missing                          | 3      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 49,681 | 212.18 | 15.4 | 201 | 212    | 223 | 300 | -0.18 |
|                       | Migrant                          | 207    | 200.65 | 13.6 | 192 | 201    | 211 | 231 | -0.47 |
| LEP                   | Non-LEP                          | 47,770 | 212.57 | 15.2 | 203 | 214    | 223 | 300 | -0.17 |
|                       | LEP                              | 2,118  | 202.30 | 16.0 | 190 | 201    | 214 | 264 | 0.05  |
| Economic Disadvantage | Free Lunch                       | 28,142 | 207.96 | 14.8 | 198 | 209    | 219 | 276 | -0.08 |
|                       | Reduced-Price Lunch              | 2,087  | 212.76 | 14.4 | 203 | 212    | 223 | 264 | -0.09 |
|                       | Regular Lunch                    | 19,659 | 218.04 | 14.3 | 209 | 219    | 227 | 300 | -0.36 |
| IEP                   | Non-IEP                          | 43,832 | 213.86 | 14.6 | 204 | 214    | 225 | 300 | -0.18 |
|                       | IEP                              | 6,056  | 199.61 | 15.0 | 188 | 198    | 209 | 264 | 0.34  |

## Grade 8 Reading

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 49,213 | 214.04 | 15.8 | 204 | 215    | 225 | 300 | -0.19 |
| Gender                | Female                           | 24,010 | 216.82 | 15.3 | 207 | 218    | 227 | 300 | -0.23 |
|                       | Male                             | 25,203 | 211.38 | 15.8 | 201 | 212    | 223 | 300 | -0.14 |
|                       | Missing                          | --     | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,301  | 209.67 | 15.4 | 199 | 210    | 220 | 258 | -0.30 |
|                       | Asian                            | 884    | 220.23 | 17.0 | 210 | 221    | 233 | 277 | -0.45 |
|                       | Native Hawaiian/Pacific Islander | 68     | 211.46 | 17.0 | 198 | 210    | 223 | 258 | 0.17  |
|                       | Black/African American           | 5,203  | 204.83 | 16.0 | 193 | 204    | 216 | 300 | 0.08  |
|                       | American Indian                  | 57     | 213.71 | 15.4 | 203 | 216    | 226 | 241 | -0.39 |
|                       | White                            | 37,826 | 215.62 | 15.2 | 205 | 216    | 227 | 300 | -0.20 |
|                       | Other                            | 1,870  | 212.39 | 15.0 | 202 | 213    | 223 | 265 | -0.01 |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 49,031 | 214.08 | 15.7 | 204 | 215    | 225 | 300 | -0.18 |
|                       | Migrant                          | 182    | 202.13 | 18.2 | 191 | 203    | 215 | 241 | -1.84 |
| LEP                   | Non-LEP                          | 47,156 | 214.52 | 15.6 | 204 | 215    | 225 | 300 | -0.18 |
|                       | LEP                              | 2,057  | 202.88 | 16.0 | 191 | 202    | 215 | 258 | -0.06 |
| Economic Disadvantage | Free Lunch                       | 27,093 | 209.71 | 15.2 | 199 | 210    | 221 | 300 | -0.11 |
|                       | Reduced-Price Lunch              | 1,995  | 214.92 | 14.9 | 205 | 216    | 225 | 265 | -0.20 |
|                       | Regular Lunch                    | 20,125 | 219.76 | 14.7 | 210 | 221    | 229 | 300 | -0.33 |
| IEP                   | Non-IEP                          | 43,700 | 215.77 | 15.0 | 205 | 216    | 227 | 300 | -0.20 |
|                       | IEP                              | 5,513  | 200.30 | 14.6 | 189 | 199    | 210 | 258 | 0.27  |

## Grade 3 Mathematics

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 48,481 | 209.74 | 20.7 | 195 | 209    | 223 | 296 | 0.43  |
| Gender                | Female                           | 23,455 | 209.12 | 20.1 | 195 | 207    | 223 | 296 | 0.44  |
|                       | Male                             | 25,022 | 210.33 | 21.3 | 195 | 209    | 223 | 296 | 0.41  |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,745  | 204.13 | 20.2 | 190 | 203    | 216 | 296 | 0.17  |
|                       | Asian                            | 886    | 222.14 | 25.6 | 204 | 221    | 238 | 296 | 0.38  |
|                       | Native Hawaiian/Pacific Islander | 66     | 206.14 | 17.8 | 195 | 201    | 218 | 249 | 0.51  |
|                       | Black/African American           | 5,122  | 198.51 | 18.6 | 185 | 196    | 211 | 296 | 0.45  |
|                       | American Indian                  | 52     | 213.27 | 19.9 | 200 | 211    | 224 | 271 | 0.63  |
|                       | White                            | 36,282 | 211.74 | 20.3 | 198 | 211    | 225 | 296 | 0.45  |
|                       | Other                            | 2,323  | 207.72 | 19.6 | 193 | 206    | 221 | 296 | 0.45  |
|                       | Missing                          | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 48,236 | 209.79 | 20.7 | 195 | 209    | 223 | 296 | 0.43  |
|                       | Migrant                          | 245    | 200.32 | 19.1 | 189 | 199    | 213 | 249 | -0.41 |
| LEP                   | Non-LEP                          | 45,222 | 210.28 | 20.7 | 196 | 209    | 223 | 296 | 0.47  |
|                       | LEP                              | 3,259  | 202.33 | 20.6 | 189 | 201    | 214 | 296 | -0.01 |
| Economic Disadvantage | Free Lunch                       | 28,952 | 204.72 | 19.1 | 192 | 204    | 216 | 296 | 0.42  |
|                       | Reduced-Price Lunch              | 2,013  | 211.65 | 20.1 | 198 | 211    | 223 | 296 | 0.55  |

|     | Subgroup      | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew |
|-----|---------------|--------|--------|------|-----|--------|-----|-----|------|
|     | Regular Lunch | 17,516 | 217.82 | 20.9 | 204 | 216    | 231 | 296 | 0.35 |
| IEP | Non-IEP       | 39,558 | 211.79 | 20.3 | 198 | 211    | 225 | 296 | 0.44 |
|     | IEP           | 8,923  | 200.66 | 20.4 | 185 | 198    | 213 | 296 | 0.66 |

### Grade 4 Mathematics

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 50,608 | 209.76 | 18.9 | 197 | 209    | 222 | 295 | 0.50  |
| Gender                | Female                           | 24,812 | 209.42 | 18.2 | 197 | 207    | 221 | 295 | 0.58  |
|                       | Male                             | 25,792 | 210.08 | 19.5 | 195 | 209    | 222 | 295 | 0.43  |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,852  | 204.67 | 17.2 | 193 | 203    | 215 | 295 | 0.17  |
|                       | Asian                            | 829    | 222.89 | 24.5 | 206 | 224    | 238 | 295 | -0.04 |
|                       | Native Hawaiian/Pacific Islander | 68     | 204.99 | 19.2 | 193 | 202    | 216 | 253 | -0.40 |
|                       | Black/African American           | 5,381  | 199.12 | 16.3 | 189 | 197    | 209 | 295 | 0.50  |
|                       | American Indian                  | 56     | 211.09 | 22.7 | 197 | 205    | 223 | 295 | 1.26  |
|                       | White                            | 38,025 | 211.69 | 18.6 | 198 | 210    | 224 | 295 | 0.52  |
|                       | Other                            | 2,393  | 206.78 | 17.5 | 193 | 204    | 218 | 272 | 0.60  |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 50,350 | 209.80 | 18.9 | 197 | 209    | 222 | 295 | 0.51  |
|                       | Migrant                          | 258    | 200.90 | 18.7 | 192 | 200    | 212 | 253 | -0.62 |
| LEP                   | Non-LEP                          | 47,509 | 210.27 | 18.8 | 197 | 209    | 222 | 295 | 0.54  |
|                       | LEP                              | 3,099  | 201.96 | 17.8 | 190 | 200    | 212 | 272 | -0.07 |
| Economic Disadvantage | Free Lunch                       | 30,135 | 205.00 | 16.9 | 193 | 203    | 216 | 295 | 0.47  |
|                       | Reduced-Price Lunch              | 2,061  | 211.28 | 18.3 | 198 | 210    | 222 | 295 | 0.56  |
|                       | Regular Lunch                    | 18,412 | 217.38 | 19.4 | 204 | 216    | 229 | 295 | 0.38  |
| IEP                   | Non-IEP                          | 42,267 | 211.39 | 18.6 | 198 | 210    | 224 | 295 | 0.49  |
|                       | IEP                              | 8,341  | 201.48 | 18.2 | 189 | 198    | 212 | 295 | 0.81  |

### Grade 5 Mathematics

|           | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All       | Students Tested                  | 51,432 | 211.46 | 19.5 | 198 | 210    | 225 | 300 | 0.37  |
| Gender    | Female                           | 25,249 | 211.32 | 18.7 | 198 | 210    | 223 | 300 | 0.37  |
|           | Male                             | 26,181 | 211.61 | 20.3 | 196 | 210    | 225 | 300 | 0.37  |
|           | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity | Hispanic                         | 4,021  | 206.82 | 18.2 | 194 | 205    | 218 | 278 | -0.11 |
|           | Asian                            | 863    | 225.86 | 23.6 | 210 | 225    | 240 | 300 | 0.09  |
|           | Native Hawaiian/Pacific Islander | 81     | 209.90 | 22.1 | 193 | 208    | 225 | 266 | 0.27  |
|           | Black/African American           | 5,468  | 200.32 | 16.8 | 188 | 198    | 212 | 278 | 0.49  |
|           | American Indian                  | 64     | 206.47 | 17.9 | 196 | 205    | 218 | 254 | 0.29  |
|           | White                            | 38,597 | 213.35 | 19.3 | 199 | 212    | 227 | 300 | 0.37  |
|           | Other                            | 2,333  | 209.28 | 18.5 | 196 | 208    | 221 | 300 | 0.50  |
|           | Missing                          | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant   | Non-Migrant                      | 51,182 | 211.51 | 19.5 | 198 | 210    | 225 | 300 | 0.38  |

|                       | Subgroup            | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|---------------------|--------|--------|------|-----|--------|-----|-----|-------|
|                       | Migrant             | 250    | 201.91 | 20.3 | 189 | 201    | 215 | 259 | -0.93 |
| LEP                   | Non-LEP             | 48,806 | 211.92 | 19.4 | 198 | 212    | 225 | 300 | 0.40  |
|                       | LEP                 | 2,626  | 202.92 | 19.5 | 191 | 201    | 215 | 300 | 0.09  |
| Economic Disadvantage | Free Lunch          | 30,337 | 206.44 | 17.7 | 193 | 205    | 218 | 300 | 0.34  |
|                       | Reduced-Price Lunch | 2,042  | 212.55 | 18.5 | 199 | 212    | 225 | 300 | 0.47  |
|                       | Regular Lunch       | 19,053 | 219.35 | 19.8 | 205 | 218    | 233 | 300 | 0.26  |
| IEP                   | Non-IEP             | 43,480 | 213.41 | 19.2 | 199 | 212    | 225 | 300 | 0.35  |
|                       | IEP                 | 7,952  | 200.81 | 18.0 | 188 | 198    | 212 | 278 | 0.71  |

### Grade 6 Mathematics

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 51,510 | 209.93 | 18.1 | 197 | 207    | 222 | 300 | 0.56  |
| Gender                | Female                           | 25,324 | 210.84 | 17.8 | 197 | 209    | 222 | 300 | 0.55  |
|                       | Male                             | 26,184 | 209.06 | 18.3 | 195 | 207    | 220 | 300 | 0.57  |
|                       | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,810  | 204.86 | 16.5 | 194 | 203    | 214 | 279 | 0.45  |
|                       | Asian                            | 866    | 221.56 | 22.2 | 206 | 220    | 236 | 300 | 0.21  |
|                       | Native Hawaiian/Pacific Islander | 74     | 204.14 | 15.7 | 192 | 200    | 213 | 254 | 1.16  |
|                       | Black/African American           | 5,517  | 199.24 | 14.8 | 189 | 197    | 207 | 267 | 0.57  |
|                       | American Indian                  | 65     | 210.25 | 22.0 | 193 | 207    | 223 | 267 | 0.52  |
|                       | White                            | 38,861 | 211.89 | 17.9 | 199 | 210    | 223 | 300 | 0.54  |
|                       | Other                            | 2,312  | 206.82 | 17.0 | 194 | 204    | 217 | 300 | 0.77  |
|                       | Missing                          | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 51,290 | 209.98 | 18.1 | 197 | 207    | 222 | 300 | 0.57  |
|                       | Migrant                          | 220    | 200.01 | 18.5 | 191 | 200    | 211 | 259 | -0.89 |
| LEP                   | Non-LEP                          | 49,291 | 210.39 | 18.0 | 197 | 209    | 222 | 300 | 0.57  |
|                       | LEP                              | 2,219  | 199.85 | 17.4 | 189 | 197    | 209 | 300 | 0.61  |
| Economic Disadvantage | Free Lunch                       | 29,900 | 205.18 | 16.2 | 194 | 203    | 216 | 300 | 0.58  |
|                       | Reduced-Price Lunch              | 2,177  | 210.45 | 17.1 | 197 | 209    | 222 | 279 | 0.47  |
|                       | Regular Lunch                    | 19,433 | 217.19 | 18.5 | 204 | 216    | 230 | 300 | 0.42  |
| IEP                   | Non-IEP                          | 44,516 | 211.75 | 17.7 | 199 | 210    | 223 | 300 | 0.54  |
|                       | IEP                              | 6,994  | 198.40 | 15.9 | 187 | 195    | 206 | 279 | 1.10  |

### Grade 7 Mathematics

|           | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All       | Students Tested                  | 49,888 | 210.40 | 17.7 | 198 | 209    | 221 | 300 | 0.53  |
| Gender    | Female                           | 24,200 | 211.09 | 17.2 | 199 | 209    | 221 | 300 | 0.56  |
|           | Male                             | 25,687 | 209.75 | 18.2 | 196 | 208    | 221 | 300 | 0.52  |
|           | Missing                          | 1      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity | Hispanic                         | 3,641  | 205.46 | 16.0 | 194 | 203    | 214 | 300 | 0.30  |
|           | Asian                            | 875    | 223.76 | 23.1 | 208 | 223    | 240 | 300 | 0.27  |
|           | Native Hawaiian/Pacific Islander | 53     | 205.13 | 22.4 | 194 | 205    | 216 | 250 | -1.65 |
|           | Black/African American           | 5,120  | 199.93 | 14.8 | 189 | 198    | 209 | 300 | 0.75  |

|                       | Subgroup            | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|---------------------|--------|--------|------|-----|--------|-----|-----|-------|
|                       | American Indian     | 73     | 212.32 | 18.8 | 199 | 210    | 220 | 267 | 0.57  |
|                       | White               | 38,080 | 212.12 | 17.5 | 199 | 210    | 223 | 300 | 0.51  |
|                       | Other               | 2,043  | 207.61 | 16.6 | 194 | 206    | 219 | 279 | 0.56  |
|                       | Missing             | 3      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant         | 49,681 | 210.45 | 17.7 | 198 | 209    | 221 | 300 | 0.53  |
|                       | Migrant             | 207    | 198.81 | 13.6 | 189 | 199    | 206 | 246 | -0.20 |
| LEP                   | Non-LEP             | 47,770 | 210.79 | 17.6 | 198 | 209    | 221 | 300 | 0.54  |
|                       | LEP                 | 2,118  | 201.66 | 18.2 | 189 | 199    | 210 | 300 | 0.64  |
| Economic Disadvantage | Free Lunch          | 28,142 | 205.27 | 15.7 | 194 | 203    | 214 | 300 | 0.58  |
|                       | Reduced-Price Lunch | 2,087  | 210.93 | 16.7 | 199 | 209    | 221 | 300 | 0.65  |
|                       | Regular Lunch       | 19,659 | 217.68 | 18.0 | 205 | 217    | 230 | 300 | 0.35  |
| IEP                   | Non-IEP             | 43,832 | 212.09 | 17.5 | 199 | 210    | 223 | 300 | 0.51  |
|                       | IEP                 | 6,056  | 198.17 | 14.5 | 189 | 196    | 205 | 279 | 1.02  |

### Grade 8 Mathematics

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 49,213 | 209.03 | 17.9 | 196 | 207    | 220 | 298 | 0.53  |
| Gender                | Female                           | 24,010 | 210.15 | 17.4 | 198 | 209    | 221 | 298 | 0.48  |
|                       | Male                             | 25,203 | 207.96 | 18.4 | 195 | 206    | 220 | 298 | 0.59  |
|                       | Missing                          | --     | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,301  | 204.09 | 17.1 | 193 | 202    | 214 | 275 | 0.12  |
|                       | Asian                            | 884    | 222.77 | 23.4 | 207 | 221    | 238 | 298 | 0.12  |
|                       | Native Hawaiian/Pacific Islander | 68     | 205.12 | 17.6 | 194 | 203    | 217 | 244 | -0.58 |
|                       | Black/African American           | 5,203  | 198.61 | 15.1 | 188 | 196    | 207 | 275 | 0.72  |
|                       | American Indian                  | 57     | 209.61 | 17.5 | 198 | 211    | 222 | 256 | 0.37  |
|                       | White                            | 37,826 | 210.70 | 17.6 | 198 | 209    | 221 | 298 | 0.53  |
|                       | Other                            | 1,870  | 206.43 | 17.0 | 195 | 205    | 217 | 298 | 0.71  |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 49,031 | 209.06 | 17.9 | 196 | 207    | 220 | 298 | 0.54  |
|                       | Migrant                          | 182    | 199.20 | 18.1 | 191 | 200    | 211 | 241 | -1.45 |
| LEP                   | Non-LEP                          | 47,156 | 209.45 | 17.8 | 196 | 207    | 220 | 298 | 0.57  |
|                       | LEP                              | 2,057  | 199.27 | 18.4 | 188 | 198    | 209 | 298 | 0.15  |
| Economic Disadvantage | Free Lunch                       | 27,093 | 203.78 | 15.9 | 193 | 202    | 214 | 298 | 0.48  |
|                       | Reduced-Price Lunch              | 1,995  | 209.69 | 17.2 | 198 | 209    | 220 | 298 | 0.68  |
|                       | Regular Lunch                    | 20,125 | 216.02 | 18.2 | 203 | 214    | 228 | 298 | 0.44  |
| IEP                   | Non-IEP                          | 43,700 | 210.71 | 17.6 | 198 | 209    | 221 | 298 | 0.52  |
|                       | IEP                              | 5,513  | 195.66 | 14.4 | 186 | 193    | 203 | 275 | 0.98  |

### Grade 4 Science

|        | Subgroup        | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|--------|-----------------|--------|--------|------|-----|--------|-----|-----|-------|
| All    | Students Tested | 50,608 | 203.05 | 12.7 | 194 | 203    | 212 | 264 | -0.33 |
| Gender | Female          | 24,812 | 203.21 | 12.3 | 195 | 203    | 212 | 252 | -0.28 |
|        | Male            | 25,792 | 202.90 | 13.0 | 194 | 203    | 212 | 264 | -0.37 |

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,852  | 199.20 | 12.6 | 192 | 200    | 207 | 244 | -0.84 |
|                       | Asian                            | 829    | 207.19 | 15.8 | 198 | 208    | 218 | 247 | -1.63 |
|                       | Native Hawaiian/Pacific Islander | 68     | 199.85 | 13.2 | 192 | 202    | 207 | 226 | -0.78 |
|                       | Black/African American           | 5,381  | 194.81 | 12.4 | 187 | 194    | 203 | 241 | -0.42 |
|                       | American Indian                  | 56     | 201.95 | 12.4 | 197 | 204    | 210 | 228 | -0.59 |
|                       | White                            | 38,025 | 204.63 | 12.1 | 197 | 205    | 213 | 264 | -0.18 |
|                       | Other                            | 2,393  | 201.39 | 12.5 | 194 | 202    | 210 | 238 | -0.41 |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 50,350 | 203.09 | 12.6 | 195 | 203    | 212 | 264 | -0.31 |
|                       | Migrant                          | 258    | 195.82 | 15.8 | 189 | 197    | 205 | 224 | -2.29 |
| LEP                   | Non-LEP                          | 47,509 | 203.49 | 12.5 | 195 | 204    | 212 | 264 | -0.21 |
|                       | LEP                              | 3,099  | 196.43 | 13.3 | 189 | 197    | 205 | 244 | -1.63 |
| Economic Disadvantage | Free Lunch                       | 30,135 | 200.17 | 12.2 | 192 | 201    | 208 | 252 | -0.26 |
|                       | Reduced-Price Lunch              | 2,061  | 204.40 | 12.0 | 197 | 205    | 212 | 238 | -0.34 |
|                       | Regular Lunch                    | 18,412 | 207.62 | 12.1 | 200 | 208    | 215 | 264 | -0.58 |
| IEP                   | Non-IEP                          | 42,267 | 203.87 | 12.4 | 196 | 204    | 212 | 264 | -0.40 |
|                       | IEP                              | 8,341  | 198.89 | 13.4 | 189 | 199    | 208 | 252 | 0.05  |

### Grade 7 Science

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 49,888 | 201.24 | 12.7 | 192 | 200    | 210 | 260 | 0.01  |
| Gender                | Female                           | 24,200 | 201.61 | 12.3 | 194 | 200    | 210 | 255 | 0.10  |
|                       | Male                             | 25,687 | 200.89 | 13.1 | 192 | 200    | 210 | 260 | -0.05 |
|                       | Missing                          | 1      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,641  | 198.14 | 12.1 | 190 | 198    | 205 | 247 | -0.27 |
|                       | Asian                            | 875    | 208.37 | 15.1 | 198 | 210    | 219 | 255 | -0.58 |
|                       | Native Hawaiian/Pacific Islander | 53     | 195.38 | 13.4 | 190 | 196    | 200 | 225 | -0.80 |
|                       | Black/African American           | 5,120  | 194.28 | 11.5 | 188 | 194    | 202 | 248 | -0.23 |
|                       | American Indian                  | 73     | 202.73 | 13.4 | 194 | 202    | 212 | 240 | 0.31  |
|                       | White                            | 38,080 | 202.38 | 12.5 | 194 | 202    | 211 | 260 | 0.04  |
|                       | Other                            | 2,043  | 200.01 | 12.2 | 192 | 199    | 207 | 245 | 0.29  |
|                       | Missing                          | 3      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 49,681 | 201.27 | 12.7 | 192 | 200    | 210 | 260 | 0.01  |
|                       | Migrant                          | 207    | 193.94 | 9.74 | 188 | 194    | 200 | 216 | -0.80 |
| LEP                   | Non-LEP                          | 47,770 | 201.51 | 12.6 | 192 | 200    | 210 | 260 | 0.03  |
|                       | LEP                              | 2,118  | 195.08 | 13.3 | 188 | 194    | 202 | 242 | -0.15 |
| Economic Disadvantage | Free Lunch                       | 28,142 | 197.91 | 11.8 | 190 | 197    | 205 | 251 | -0.09 |
|                       | Reduced-Price Lunch              | 2,087  | 201.94 | 12.0 | 194 | 202    | 210 | 251 | -0.18 |
|                       | Regular Lunch                    | 19,659 | 205.93 | 12.6 | 197 | 205    | 215 | 260 | -0.01 |
| IEP                   | Non-IEP                          | 43,832 | 202.32 | 12.5 | 194 | 202    | 210 | 260 | 0.01  |
|                       | IEP                              | 6,056  | 193.41 | 11.4 | 185 | 192    | 200 | 245 | -0.06 |

## Grade 11 Science

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 44,827 | 202.13 | 13.9 | 192 | 202    | 212 | 256 | 0.10  |
| Gender                | Female                           | 22,069 | 203.42 | 13.4 | 194 | 203    | 213 | 256 | 0.08  |
|                       | Male                             | 22,756 | 200.87 | 14.3 | 190 | 200    | 211 | 255 | 0.15  |
|                       | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 2,750  | 198.15 | 13.2 | 189 | 197    | 207 | 248 | 0.15  |
|                       | Asian                            | 906    | 207.21 | 16.4 | 194 | 207    | 221 | 248 | -0.04 |
|                       | Native Hawaiian/Pacific Islander | 53     | 200.68 | 15.1 | 192 | 200    | 208 | 244 | 0.56  |
|                       | Black/African American           | 4,647  | 193.97 | 12.2 | 185 | 193    | 202 | 239 | 0.13  |
|                       | American Indian                  | 57     | 201.07 | 13.2 | 193 | 198    | 211 | 230 | 0.26  |
|                       | White                            | 35,140 | 203.46 | 13.7 | 194 | 203    | 213 | 256 | 0.06  |
|                       | Other                            | 1,266  | 200.22 | 13.5 | 190 | 200    | 209 | 248 | 0.26  |
|                       | Missing                          | 8      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 44,701 | 202.16 | 13.9 | 192 | 202    | 212 | 256 | 0.11  |
|                       | Migrant                          | 126    | 190.74 | 13.8 | 183 | 189    | 201 | 215 | -2.20 |
| LEP                   | Non-LEP                          | 43,366 | 202.57 | 13.8 | 192 | 202    | 212 | 256 | 0.10  |
|                       | LEP                              | 1,461  | 189.16 | 11.1 | 183 | 188    | 196 | 235 | -0.05 |
| Economic Disadvantage | Free Lunch                       | 21,910 | 198.28 | 12.9 | 189 | 198    | 207 | 251 | 0.18  |
|                       | Reduced-Price Lunch              | 1,937  | 202.62 | 13.0 | 193 | 202    | 212 | 247 | 0.04  |
|                       | Regular Lunch                    | 20,980 | 206.08 | 13.9 | 196 | 207    | 216 | 256 | -0.06 |
| IEP                   | Non-IEP                          | 41,036 | 203.20 | 13.7 | 193 | 203    | 212 | 256 | 0.07  |
|                       | IEP                              | 3,791  | 190.56 | 11.1 | 183 | 190    | 197 | 242 | 0.49  |

## Grade 5 Social Studies

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|------|
| All                   | Students Tested                  | 51,432 | 211.65 | 17.3 | 199 | 211    | 223 | 300 | 0.35 |
| Gender                | Female                           | 25,249 | 211.22 | 16.8 | 199 | 210    | 221 | 300 | 0.45 |
|                       | Male                             | 26,181 | 212.07 | 17.7 | 199 | 211    | 225 | 300 | 0.26 |
|                       | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --   |
| Ethnicity             | Hispanic                         | 4,021  | 206.48 | 15.7 | 195 | 206    | 216 | 283 | 0.27 |
|                       | Asian                            | 863    | 220.05 | 22.1 | 205 | 221    | 234 | 300 | 0.21 |
|                       | Native Hawaiian/Pacific Islander | 81     | 211.58 | 19.2 | 197 | 210    | 224 | 269 | 0.36 |
|                       | Black/African American           | 5,468  | 201.04 | 15.6 | 189 | 199    | 211 | 300 | 0.59 |
|                       | American Indian                  | 64     | 208.06 | 15.8 | 199 | 207    | 217 | 246 | 0.22 |
|                       | White                            | 38,597 | 213.64 | 16.9 | 202 | 213    | 225 | 300 | 0.34 |
|                       | Other                            | 2,333  | 209.51 | 16.3 | 198 | 209    | 219 | 269 | 0.33 |
|                       | Missing                          | 5      | --     | --   | --  | --     | --  | --  | --   |
| Migrant               | Non-Migrant                      | 51,182 | 211.69 | 17.3 | 199 | 211    | 223 | 300 | 0.35 |
|                       | Migrant                          | 250    | 203.45 | 14.8 | 192 | 203    | 213 | 250 | 0.24 |
| LEP                   | Non-LEP                          | 48,806 | 212.15 | 17.2 | 200 | 211    | 223 | 300 | 0.35 |
|                       | LEP                              | 2,626  | 202.31 | 16.5 | 191 | 200    | 211 | 300 | 0.62 |
| Economic Disadvantage | Free Lunch                       | 30,337 | 207.33 | 16.0 | 196 | 206    | 218 | 300 | 0.35 |
|                       | Reduced-Price Lunch              | 2,042  | 212.32 | 16.5 | 200 | 211    | 223 | 300 | 0.27 |
|                       | Regular Lunch                    | 19,053 | 218.47 | 17.1 | 207 | 218    | 229 | 300 | 0.31 |

|     | Subgroup | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew |
|-----|----------|--------|--------|------|-----|--------|-----|-----|------|
| IEP | Non-IEP  | 43,480 | 213.47 | 16.7 | 202 | 213    | 225 | 300 | 0.37 |
|     | IEP      | 7,952  | 201.72 | 16.8 | 189 | 199    | 213 | 283 | 0.68 |

### Grade 8 Social Studies

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 49,213 | 214.28 | 18.7 | 201 | 214    | 228 | 300 | 0.25  |
| Gender                | Female                           | 24,010 | 214.72 | 18.3 | 201 | 214    | 228 | 300 | 0.34  |
|                       | Male                             | 25,203 | 213.86 | 19.1 | 200 | 214    | 228 | 300 | 0.19  |
|                       | Missing                          | --     | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,301  | 208.82 | 17.4 | 197 | 208    | 220 | 300 | 0.38  |
|                       | Asian                            | 884    | 224.63 | 22.2 | 210 | 226    | 239 | 300 | -0.18 |
|                       | Native Hawaiian/Pacific Islander | 68     | 209.73 | 19.5 | 197 | 205    | 224 | 266 | 0.48  |
|                       | Black/African American           | 5,203  | 203.04 | 17.2 | 191 | 201    | 214 | 300 | 0.42  |
|                       | American Indian                  | 57     | 213.96 | 19.4 | 196 | 217    | 231 | 249 | -0.18 |
|                       | White                            | 37,826 | 216.19 | 18.3 | 202 | 216    | 228 | 300 | 0.24  |
|                       | Other                            | 1,870  | 211.55 | 17.7 | 198 | 210    | 224 | 278 | 0.32  |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 49,031 | 214.32 | 18.7 | 201 | 214    | 228 | 300 | 0.25  |
|                       | Migrant                          | 182    | 202.53 | 15.9 | 191 | 201    | 214 | 249 | 0.30  |
| LEP                   | Non-LEP                          | 47,156 | 214.80 | 18.6 | 201 | 214    | 228 | 300 | 0.26  |
|                       | LEP                              | 2,057  | 202.09 | 17.9 | 189 | 200    | 214 | 278 | 0.41  |
| Economic Disadvantage | Free Lunch                       | 27,093 | 208.76 | 17.3 | 195 | 208    | 220 | 300 | 0.30  |
|                       | Reduced-Price Lunch              | 1,995  | 215.59 | 17.6 | 202 | 216    | 228 | 278 | 0.18  |
|                       | Regular Lunch                    | 20,125 | 221.56 | 18.2 | 210 | 222    | 234 | 300 | 0.17  |
| IEP                   | Non-IEP                          | 43,700 | 216.19 | 18.2 | 202 | 216    | 228 | 300 | 0.26  |
|                       | IEP                              | 5,513  | 199.10 | 16.1 | 188 | 197    | 208 | 278 | 0.69  |

### Grade 5 On-Demand Writing<sup>8</sup>

|           | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All       | Students Tested                  | 51,432 | 223.38 | 37.6 | 212 | 215    | 242 | 300 | -0.24 |
| Gender    | Female                           | 25,249 | 231.18 | 36.1 | 212 | 238    | 264 | 300 | -0.34 |
|           | Male                             | 26,181 | 215.85 | 37.6 | 185 | 215    | 242 | 300 | -0.14 |
|           | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity | Hispanic                         | 4,021  | 216.93 | 35.7 | 185 | 215    | 242 | 300 | -0.16 |
|           | Asian                            | 863    | 237.05 | 36.5 | 215 | 242    | 267 | 300 | -0.54 |
|           | Native Hawaiian/Pacific Islander | 81     | 221.76 | 41.1 | 199 | 215    | 253 | 300 | -0.24 |
|           | Black/African American           | 5,468  | 204.29 | 37.2 | 185 | 212    | 238 | 300 | 0.06  |
|           | American Indian                  | 64     | 216.67 | 38.7 | 185 | 215    | 242 | 300 | -0.24 |
|           | White                            | 38,597 | 226.70 | 37.0 | 212 | 238    | 264 | 300 | -0.29 |
|           | Other                            | 2,333  | 219.52 | 37.3 | 185 | 215    | 242 | 300 | -0.18 |

<sup>8</sup> On Demand Writing is reported on a scale score metric of 100-300 with 'Proficient' at 235.

|                       | Subgroup            | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|---------------------|--------|--------|------|-----|--------|-----|-----|-------|
|                       | Missing             | 5      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant         | 51,182 | 223.45 | 37.6 | 212 | 215    | 242 | 300 | -0.24 |
|                       | Migrant             | 250    | 208.03 | 40.8 | 185 | 212    | 242 | 300 | -0.10 |
| LEP                   | Non-LEP             | 48,806 | 224.20 | 37.5 | 212 | 215    | 242 | 300 | -0.26 |
|                       | LEP                 | 2,626  | 207.90 | 36.6 | 185 | 212    | 238 | 300 | 0.03  |
| Economic Disadvantage | Free Lunch          | 30,337 | 215.38 | 37.2 | 185 | 215    | 242 | 300 | -0.14 |
|                       | Reduced-Price Lunch | 2,042  | 224.68 | 35.9 | 212 | 215    | 242 | 300 | -0.25 |
|                       | Regular Lunch       | 19,053 | 235.96 | 35.0 | 215 | 242    | 267 | 300 | -0.40 |
| IEP                   | Non-IEP             | 43,480 | 228.14 | 35.4 | 212 | 238    | 264 | 300 | -0.25 |
|                       | IEP                 | 7,952  | 197.34 | 39.1 | 156 | 185    | 215 | 300 | 0.29  |

### Grade 8 On-Demand Writing

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
| All                   | Students Tested                  | 49,213 | 219.85 | 33.8 | 206 | 226    | 247 | 287 | -0.52 |
| Gender                | Female                           | 24,010 | 229.47 | 30.4 | 206 | 228    | 250 | 287 | -0.60 |
|                       | Male                             | 25,203 | 210.68 | 34.4 | 187 | 208    | 228 | 287 | -0.40 |
|                       | Missing                          | --     | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 3,301  | 213.54 | 33.0 | 206 | 208    | 228 | 287 | -0.44 |
|                       | Asian                            | 884    | 233.82 | 33.5 | 208 | 247    | 250 | 287 | -0.84 |
|                       | Native Hawaiian/Pacific Islander | 68     | 211.75 | 38.2 | 187 | 226    | 228 | 287 | -0.39 |
|                       | Black/African American           | 5,203  | 201.46 | 35.0 | 185 | 206    | 226 | 287 | -0.23 |
|                       | American Indian                  | 57     | 219.52 | 37.9 | 197 | 226    | 250 | 287 | -0.29 |
|                       | White                            | 37,826 | 222.75 | 32.8 | 206 | 226    | 247 | 287 | -0.57 |
|                       | Other                            | 1,870  | 216.84 | 33.0 | 206 | 226    | 247 | 287 | -0.46 |
|                       | Missing                          | 4      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 49,031 | 219.91 | 33.8 | 206 | 226    | 247 | 287 | -0.52 |
|                       | Migrant                          | 182    | 203.75 | 36.9 | 185 | 208    | 228 | 271 | -0.60 |
| LEP                   | Non-LEP                          | 47,156 | 220.63 | 33.5 | 206 | 226    | 247 | 287 | -0.53 |
|                       | LEP                              | 2,057  | 201.67 | 36.0 | 185 | 206    | 226 | 287 | -0.28 |
| Economic Disadvantage | Free Lunch                       | 27,093 | 212.21 | 34.0 | 187 | 208    | 228 | 287 | -0.44 |
|                       | Reduced-Price Lunch              | 1,995  | 220.52 | 31.8 | 206 | 226    | 247 | 287 | -0.52 |
|                       | Regular Lunch                    | 20,125 | 230.03 | 31.0 | 208 | 228    | 250 | 287 | -0.64 |
| IEP                   | Non-IEP                          | 43,700 | 224.01 | 31.4 | 206 | 226    | 247 | 287 | -0.54 |
|                       | IEP                              | 5,513  | 186.70 | 33.8 | 151 | 185    | 208 | 287 | 0.09  |

### Grade 11 On-Demand Writing

|        | Subgroup        | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|--------|-----------------|--------|--------|------|-----|--------|-----|-----|-------|
| All    | Students Tested | 44,827 | 238.14 | 37.4 | 213 | 240    | 276 | 296 | -0.62 |
| Gender | Female          | 22,069 | 246.15 | 33.9 | 220 | 256    | 276 | 296 | -0.64 |
|        | Male            | 22,756 | 230.35 | 38.9 | 200 | 234    | 260 | 296 | -0.53 |

|                       | Subgroup                         | N      | Mean   | SD   | P25 | Median | P75 | Max | Skew  |
|-----------------------|----------------------------------|--------|--------|------|-----|--------|-----|-----|-------|
|                       | Missing                          | 2      | --     | --   | --  | --     | --  | --  | --    |
| Ethnicity             | Hispanic                         | 2,750  | 224.68 | 37.8 | 200 | 220    | 256 | 296 | -0.33 |
|                       | Asian                            | 906    | 244.42 | 40.5 | 213 | 256    | 276 | 296 | -0.63 |
|                       | Native Hawaiian/Pacific Islander | 53     | 232.04 | 34.9 | 213 | 234    | 260 | 294 | -0.29 |
|                       | Black/African American           | 4,647  | 217.68 | 36.7 | 192 | 213    | 240 | 296 | -0.25 |
|                       | American Indian                  | 57     | 231.45 | 38.7 | 213 | 234    | 258 | 294 | -0.32 |
|                       | White                            | 35,140 | 241.90 | 36.2 | 220 | 240    | 276 | 296 | -0.73 |
|                       | Other                            | 1,266  | 233.57 | 37.1 | 213 | 234    | 260 | 296 | -0.56 |
|                       | Missing                          | 8      | --     | --   | --  | --     | --  | --  | --    |
| Migrant               | Non-Migrant                      | 44,701 | 238.24 | 37.3 | 213 | 240    | 276 | 296 | -0.62 |
|                       | Migrant                          | 126    | 201.50 | 39.7 | 169 | 200    | 234 | 296 | -0.27 |
| LEP                   | Non-LEP                          | 43,366 | 239.46 | 36.8 | 213 | 240    | 276 | 296 | -0.65 |
|                       | LEP                              | 1,461  | 198.50 | 33.5 | 177 | 192    | 220 | 296 | 0.07  |
| Economic Disadvantage | Free Lunch                       | 21,910 | 228.87 | 37.3 | 200 | 234    | 256 | 296 | -0.44 |
|                       | Reduced-Price Lunch              | 1,937  | 239.19 | 35.6 | 213 | 240    | 260 | 296 | -0.61 |
|                       | Regular Lunch                    | 20,980 | 247.67 | 35.2 | 234 | 256    | 276 | 296 | -0.89 |
| IEP                   | Non-IEP                          | 41,036 | 241.57 | 35.9 | 220 | 240    | 276 | 296 | -0.72 |
|                       | IEP                              | 3,791  | 200.68 | 32.3 | 177 | 200    | 220 | 296 | 0.09  |

## Appendix L. Performance Level Rates<sup>9</sup>

### Grade 3 Reading

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 48,898 | 10.9%      | 12.4%       | 10.8%          | 13%             | 31.2%      | 21.6%         |
| Gender                | Female                           | 23,585 | 9.2%       | 11.7%       | 10.4%          | 13%             | 32%        | 23.7%         |
|                       | Male                             | 25,309 | 12.5%      | 13.2%       | 11.1%          | 13.1%           | 30.5%      | 19.6%         |
| Ethnicity             | Hispanic                         | 3,713  | 15.1%      | 17.4%       | 12.6%          | 15.3%           | 27%        | 12.6%         |
|                       | Asian                            | 879    | 6.8%       | 10.9%       | 8.3%           | 10.8%           | 30.9%      | 32.2%         |
|                       | Native Hawaiian/Pacific Islander | 66     | 10.6%      | 16.7%       | 7.6%           | 15.2%           | 40.9%      | 9.1%          |
|                       | Black/African American           | 5,114  | 27%        | 18.3%       | 12.7%          | 12.3%           | 21.7%      | 8%            |
|                       | American Indian                  | 52     | 5.8%       | 13.5%       | 13.5%          | 9.6%            | 38.5%      | 19.2%         |
|                       | White                            | 36,278 | 8.3%       | 11.1%       | 10.1%          | 12.9%           | 33%        | 24.6%         |
|                       | Other                            | 2,321  | 12.7%      | 14%         | 11.7%          | 12.7%           | 30.3%      | 18.7%         |
|                       | Missing                          | 475    | 6.3%       | 9.1%        | 23.2%          | 20.2%           | 34.5%      | 6.7%          |
| Migrant               | Non-Migrant                      | 48,660 | 10.9%      | 12.4%       | 10.8%          | 13%             | 31.3%      | 21.7%         |
|                       | Migrant                          | 238    | 22.3%      | 18.9%       | 11.8%          | 15.5%           | 24.4%      | 7.1%          |
| LEP                   | Non-LEP                          | 45,686 | 10.5%      | 12%         | 10.5%          | 12.8%           | 31.7%      | 22.5%         |
|                       | LEP                              | 3,212  | 17.4%      | 19.2%       | 14.3%          | 15.6%           | 24.6%      | 8.8%          |
| Economic Disadvantage | Free Lunch                       | 28,924 | 15%        | 15.3%       | 12.2%          | 13.8%           | 28.8%      | 14.9%         |
|                       | Reduced-Price Lunch              | 2,010  | 8.3%       | 11.1%       | 10.7%          | 14.2%           | 32.4%      | 23.3%         |
|                       | Regular Lunch                    | 17,964 | 4.8%       | 7.9%        | 8.4%           | 11.6%           | 35.1%      | 32.2%         |
| IEP                   | Non-IEP                          | 39,978 | 8.5%       | 11.2%       | 10.4%          | 13.2%           | 33.1%      | 23.5%         |
|                       | IEP                              | 8,920  | 22%        | 17.9%       | 12.2%          | 12%             | 22.8%      | 13%           |

### Grade 4 Reading

|           | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All       | Students Tested                  | 51,115 | 8.1%       | 11%         | 11.1%          | 16.8%           | 37.6%      | 15.4%         |
| Gender    | Female                           | 24,985 | 6.9%       | 10.3%       | 10.9%          | 16.6%           | 38.8%      | 16.5%         |
|           | Male                             | 26,126 | 9.2%       | 11.7%       | 11.2%          | 16.9%           | 36.6%      | 14.4%         |
| Ethnicity | Hispanic                         | 3,826  | 11.5%      | 14.8%       | 14.7%          | 18.9%           | 32%        | 8.1%          |
|           | Asian                            | 821    | 6%         | 8%          | 9.6%           | 11.3%           | 38%        | 27%           |
|           | Native Hawaiian/Pacific Islander | 67     | 11.9%      | 14.9%       | 13.4%          | 17.9%           | 31.3%      | 10.4%         |
|           | Black/African American           | 5,371  | 20.4%      | 18.6%       | 15.1%          | 16.5%           | 24.1%      | 5.4%          |
|           | American Indian                  | 56     | 5.4%       | 14.3%       | 10.7%          | 16.1%           | 33.9%      | 19.6%         |
|           | White                            | 38,020 | 6%         | 9.6%        | 9.9%           | 16.5%           | 40.4%      | 17.6%         |
|           | Other                            | 2,393  | 9.9%       | 12.7%       | 12.1%          | 19%             | 33.4%      | 12.9%         |
|           | Missing                          | 561    | 3.7%       | 7.5%        | 20.7%          | 24.1%           | 34.8%      | 9.3%          |

<sup>9</sup> Alternate K-PREP students are included.

|                       | Test Group          | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|---------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| Migrant               | Non-Migrant         | 50,865 | 8%         | 11%         | 11%            | 16.7%           | 37.7%      | 15.5%         |
|                       | Migrant             | 250    | 16%        | 14.4%       | 14.8%          | 24%             | 26.8%      | 4%            |
| LEP                   | Non-LEP             | 48,060 | 7.6%       | 10.5%       | 10.7%          | 16.6%           | 38.4%      | 16.1%         |
|                       | LEP                 | 3,055  | 15.8%      | 18.4%       | 16.6%          | 18.7%           | 26.1%      | 4.3%          |
| Economic Disadvantage | Free Lunch          | 30,109 | 11.2%      | 14.2%       | 13.1%          | 18.4%           | 33.6%      | 9.5%          |
|                       | Reduced-Price Lunch | 2,060  | 6.1%       | 9.4%        | 10.7%          | 16%             | 42%        | 15.9%         |
|                       | Regular Lunch       | 18,946 | 3.3%       | 6.1%        | 7.9%           | 14.3%           | 43.6%      | 24.8%         |
| IEP                   | Non-IEP             | 42,775 | 5.9%       | 9.8%        | 10.7%          | 17.1%           | 40%        | 16.5%         |
|                       | IEP                 | 8,340  | 19.3%      | 17.5%       | 12.8%          | 15.1%           | 25.6%      | 9.7%          |

### Grade 5 Reading

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 51,933 | 10.5%      | 7.9%        | 10.7%          | 13%             | 38.8%      | 19.2%         |
| Gender                | Female                           | 25,407 | 8.4%       | 6.9%        | 10%            | 13.2%           | 40.4%      | 21%           |
|                       | Male                             | 26,524 | 12.5%      | 8.8%        | 11.3%          | 12.8%           | 37.2%      | 17.5%         |
| Ethnicity             | Hispanic                         | 3,995  | 14.5%      | 10.8%       | 14.3%          | 14.8%           | 34.4%      | 11.1%         |
|                       | Asian                            | 856    | 8.1%       | 6%          | 7.9%           | 10.6%           | 35%        | 32.4%         |
|                       | Native Hawaiian/Pacific Islander | 80     | 15%        | 10%         | 13.8%          | 6.3%            | 33.8%      | 21.3%         |
|                       | Black/African American           | 5,465  | 24.7%      | 12.2%       | 14.6%          | 14.1%           | 26.7%      | 7.7%          |
|                       | American Indian                  | 64     | 14.1%      | 12.5%       | 9.4%           | 12.5%           | 34.4%      | 17.2%         |
|                       | White                            | 38,586 | 8.1%       | 6.9%        | 9.6%           | 12.6%           | 41%        | 21.7%         |
|                       | Other                            | 2,333  | 11.1%      | 8.4%        | 10.5%          | 13.8%           | 39.4%      | 16.6%         |
|                       | Missing                          | 554    | 5.8%       | 10.3%       | 22.9%          | 19.9%           | 35.9%      | 5.2%          |
| Migrant               | Non-Migrant                      | 51,689 | 10.4%      | 7.9%        | 10.6%          | 13%             | 38.8%      | 19.3%         |
|                       | Migrant                          | 244    | 20.1%      | 10.7%       | 14.8%          | 16%             | 31.6%      | 7%            |
| LEP                   | Non-LEP                          | 49,349 | 9.8%       | 7.5%        | 10.4%          | 13%             | 39.5%      | 19.8%         |
|                       | LEP                              | 2,584  | 23.3%      | 15.4%       | 15.6%          | 14.4%           | 24.3%      | 7%            |
| Economic Disadvantage | Free Lunch                       | 30,309 | 14.4%      | 9.9%        | 12.8%          | 14.5%           | 36.2%      | 12.2%         |
|                       | Reduced-Price Lunch              | 2,040  | 8.6%       | 7.3%        | 9.5%           | 13.3%           | 43%        | 18.3%         |
|                       | Regular Lunch                    | 19,584 | 4.6%       | 4.8%        | 7.5%           | 10.7%           | 42.3%      | 30.1%         |
| IEP                   | Non-IEP                          | 43,982 | 7.4%       | 7%          | 10.2%          | 13.2%           | 41.3%      | 20.9%         |
|                       | IEP                              | 7,951  | 27.4%      | 12.5%       | 13.2%          | 12.1%           | 24.9%      | 9.8%          |

### Grade 6 Reading

|           | Test Group      | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------|-----------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All       | Students Tested | 52,078 | 9.1%       | 11.5%       | 8.3%           | 12%             | 39.3%      | 19.8%         |
| Gender    | Female          | 25,512 | 7.2%       | 10.6%       | 7.8%           | 12%             | 40.4%      | 22.2%         |
|           | Male            | 26,564 | 10.9%      | 12.5%       | 8.8%           | 12.1%           | 38.2%      | 17.5%         |
| Ethnicity | Hispanic        | 3,795  | 12.8%      | 15.4%       | 10.7%          | 13%             | 35.5%      | 12.8%         |

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
|                       | Asian                            | 859    | 5.4%       | 7.6%        | 5%             | 8.6%            | 36.4%      | 37%           |
|                       | Native Hawaiian/Pacific Islander | 74     | 17.6%      | 8.1%        | 5.4%           | 17.6%           | 37.8%      | 13.5%         |
|                       | Black/African American           | 5,512  | 21.8%      | 20.2%       | 9.2%           | 13.7%           | 28%        | 7.1%          |
|                       | American Indian                  | 64     | 10.9%      | 12.5%       | 9.4%           | 1.6%            | 48.4%      | 17.2%         |
|                       | White                            | 38,843 | 6.9%       | 10%         | 7.7%           | 11.6%           | 41.5%      | 22.3%         |
|                       | Other                            | 2,311  | 10.4%      | 12.5%       | 9.9%           | 13.8%           | 36.9%      | 16.6%         |
|                       | Missing                          | 620    | 10.8%      | 11.6%       | 19%            | 17.6%           | 33.9%      | 7.1%          |
| Migrant               | Non-Migrant                      | 51,861 | 9%         | 11.5%       | 8.3%           | 12%             | 39.3%      | 19.8%         |
|                       | Migrant                          | 217    | 17.1%      | 21.7%       | 10.6%          | 13.4%           | 29.5%      | 7.8%          |
| LEP                   | Non-LEP                          | 49,880 | 8.4%       | 11.1%       | 8.1%           | 12.1%           | 40%        | 20.3%         |
|                       | LEP                              | 2,198  | 23.9%      | 21.4%       | 11.6%          | 11.8%           | 23.5%      | 7.9%          |
| Economic Disadvantage | Free Lunch                       | 29,868 | 12.5%      | 14.9%       | 9.9%           | 13.5%           | 36.7%      | 12.6%         |
|                       | Reduced-Price Lunch              | 2,176  | 7.1%       | 10.6%       | 9.2%           | 11.3%           | 41.8%      | 20.1%         |
|                       | Regular Lunch                    | 20,034 | 4.1%       | 6.7%        | 5.8%           | 10%             | 42.9%      | 30.5%         |
| IEP                   | Non-IEP                          | 45,089 | 6.7%       | 10.1%       | 7.9%           | 12%             | 41.5%      | 21.8%         |
|                       | IEP                              | 6,989  | 24.7%      | 20.8%       | 10.4%          | 12.5%           | 24.8%      | 6.7%          |

### Grade 7 Reading

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 50,435 | 9.7%       | 10.4%       | 8.3%           | 14%             | 38.6%      | 19%           |
| Gender                | Female                           | 24,393 | 7.2%       | 8.8%        | 7.7%           | 13.6%           | 40.2%      | 22.5%         |
|                       | Male                             | 26,042 | 12.1%      | 11.8%       | 8.9%           | 14.5%           | 37%        | 15.7%         |
| Ethnicity             | Hispanic                         | 3,621  | 13.2%      | 14.1%       | 10%            | 16.1%           | 35%        | 11.5%         |
|                       | Asian                            | 870    | 7.6%       | 5.9%        | 4.9%           | 10%             | 36.2%      | 35.4%         |
|                       | Native Hawaiian/Pacific Islander | 52     | 17.3%      | 7.7%        | 11.5%          | 21.2%           | 30.8%      | 11.5%         |
|                       | Black/African American           | 5,103  | 23.8%      | 17.2%       | 9.9%           | 14.7%           | 27.2%      | 7.2%          |
|                       | American Indian                  | 73     | 12.3%      | 13.7%       | 6.8%           | 9.6%            | 34.2%      | 23.3%         |
|                       | White                            | 38,047 | 7.5%       | 9.1%        | 7.7%           | 13.6%           | 40.8%      | 21.3%         |
|                       | Other                            | 2,040  | 10.3%      | 11.6%       | 8.5%           | 15.9%           | 37.7%      | 15.8%         |
| Migrant               | Non-Migrant                      | 50,230 | 9.7%       | 10.3%       | 8.3%           | 14%             | 38.6%      | 19.1%         |
|                       | Migrant                          | 205    | 22.9%      | 21%         | 11.2%          | 16.6%           | 26.3%      | 2%            |
| LEP                   | Non-LEP                          | 48,340 | 9%         | 10%         | 8.3%           | 14%             | 39.2%      | 19.5%         |
|                       | LEP                              | 2,095  | 25.3%      | 19.4%       | 10%            | 13.4%           | 24%        | 7.9%          |
| Economic Disadvantage | Free Lunch                       | 28,086 | 13.9%      | 13.6%       | 10.1%          | 15.9%           | 35.1%      | 11.3%         |
|                       | Reduced-Price Lunch              | 2,083  | 7.2%       | 10.1%       | 8.2%           | 15.7%           | 39.6%      | 19.2%         |
|                       | Regular Lunch                    | 20,266 | 4.2%       | 5.8%        | 6%             | 11.2%           | 43.2%      | 29.6%         |
| IEP                   | Non-IEP                          | 44,396 | 6.8%       | 9%          | 7.9%           | 14.2%           | 41.2%      | 20.8%         |
|                       | IEP                              | 6,039  | 31.1%      | 20.1%       | 11.5%          | 12.8%           | 19.2%      | 5.3%          |

### Grade 8 Reading

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 49,690 | 7.4%       | 9.6%        | 10.4%          | 9.7%            | 35.7%      | 27.1%         |
| Gender                | Female                           | 24,152 | 4.7%       | 7.3%        | 9.1%           | 9.1%            | 37%        | 32.8%         |
|                       | Male                             | 25,538 | 10%        | 11.9%       | 11.6%          | 10.3%           | 34.4%      | 21.8%         |
| Ethnicity             | Hispanic                         | 3,271  | 10.4%      | 12.9%       | 13.1%          | 11.4%           | 34.8%      | 17.4%         |
|                       | Asian                            | 878    | 5%         | 7.4%        | 5.5%           | 4.8%            | 32.5%      | 44.9%         |
|                       | Native Hawaiian/Pacific Islander | 67     | 10.4%      | 16.4%       | 10.4%          | 9%              | 29.9%      | 23.9%         |
|                       | Black/African American           | 5,179  | 18.9%      | 17.2%       | 14.9%          | 10.1%           | 26.5%      | 12.3%         |
|                       | American Indian                  | 56     | 12.5%      | 5.4%        | 8.9%           | 10.7%           | 33.9%      | 28.6%         |
|                       | White                            | 37,791 | 5.7%       | 8.2%        | 9.3%           | 9.3%            | 37.3%      | 30.2%         |
|                       | Other                            | 1,869  | 6.8%       | 11.7%       | 12%            | 10.8%           | 37%        | 21.7%         |
|                       | Missing                          | 579    | 5.2%       | 15.7%       | 26.6%          | 27.3%           | 20%        | 5.2%          |
| Migrant               | Non-Migrant                      | 49,512 | 7.4%       | 9.6%        | 10.4%          | 9.7%            | 35.7%      | 27.2%         |
|                       | Migrant                          | 178    | 21.9%      | 19.7%       | 12.4%          | 9.6%            | 28.7%      | 7.9%          |
| LEP                   | Non-LEP                          | 47,666 | 6.8%       | 9.2%        | 10.2%          | 9.7%            | 36.2%      | 27.9%         |
|                       | LEP                              | 2,024  | 21.9%      | 19.5%       | 14.9%          | 9.9%            | 23.9%      | 9.9%          |
| Economic Disadvantage | Free Lunch                       | 27,020 | 10.8%      | 13.1%       | 12.7%          | 11%             | 34.7%      | 17.7%         |
|                       | Reduced-Price Lunch              | 1,995  | 5.9%       | 7.9%        | 10%            | 10.3%           | 38.6%      | 27.4%         |
|                       | Regular Lunch                    | 20,675 | 3.2%       | 5.4%        | 7.4%           | 8%              | 36.6%      | 39.4%         |
| IEP                   | Non-IEP                          | 44,194 | 5.1%       | 7.9%        | 9.8%           | 9.8%            | 37.6%      | 29.7%         |
|                       | IEP                              | 5,496  | 25.8%      | 23.3%       | 14.9%          | 9.3%            | 19.9%      | 6.7%          |

### Grade 3 Mathematics

|           | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All       | Students Tested                  | 48,944 | 8.5%       | 10.3%       | 18%            | 15.8%           | 34.5%      | 12.9%         |
| Gender    | Female                           | 23,602 | 8.2%       | 10.7%       | 18.5%          | 16.6%           | 34.3%      | 11.7%         |
|           | Male                             | 25,338 | 8.7%       | 10%         | 17.6%          | 15.1%           | 34.7%      | 14%           |
| Ethnicity | Hispanic                         | 3,745  | 12%        | 14%         | 21.5%          | 15.9%           | 29.2%      | 7.5%          |
|           | Asian                            | 885    | 3.6%       | 6.2%        | 10.7%          | 12.8%           | 35.9%      | 30.7%         |
|           | Native Hawaiian/Pacific Islander | 66     | 7.6%       | 12.1%       | 31.8%          | 9.1%            | 31.8%      | 7.6%          |
|           | Black/African American           | 5,121  | 19.7%      | 18.1%       | 22.3%          | 14.6%           | 20.8%      | 4.5%          |
|           | American Indian                  | 52     | 5.8%       | 1.9%        | 21.2%          | 15.4%           | 34.6%      | 21.2%         |
|           | White                            | 36,278 | 6.5%       | 8.8%        | 17.2%          | 15.8%           | 37.2%      | 14.5%         |
|           | Other                            | 2,322  | 9.3%       | 11.3%       | 19.5%          | 17.2%           | 32.8%      | 9.9%          |
|           | Missing                          | 475    | 10.1%      | 17.5%       | 14.1%          | 26.7%           | 27.4%      | 4.2%          |
| Migrant   | Non-Migrant                      | 48,699 | 8.4%       | 10.3%       | 18%            | 15.8%           | 34.6%      | 12.9%         |
|           | Migrant                          | 245    | 15.1%      | 13.1%       | 26.5%          | 15.5%           | 24.9%      | 4.9%          |
| LEP       | Non-LEP                          | 45,686 | 8%         | 10%         | 17.8%          | 15.8%           | 35.1%      | 13.3%         |
|           | LEP                              | 3,258  | 14.4%      | 14.4%       | 21.6%          | 16.6%           | 26.1%      | 7%            |

|                       | Test Group          | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|---------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| Economic Disadvantage | Free Lunch          | 28,947 | 11.7%      | 13.2%       | 21.3%          | 16.7%           | 29.4%      | 7.7%          |
|                       | Reduced-Price Lunch | 2,013  | 5.5%       | 8.9%        | 17.5%          | 16.7%           | 37.6%      | 13.8%         |
|                       | Regular Lunch       | 17,984 | 3.5%       | 5.8%        | 12.8%          | 14.4%           | 42.4%      | 21.1%         |
| IEP                   | Non-IEP             | 40,023 | 6%         | 8.9%        | 17.6%          | 16.3%           | 37.1%      | 14.2%         |
|                       | IEP                 | 8,921  | 19.5%      | 16.6%       | 19.9%          | 13.9%           | 23.1%      | 7%            |

### Grade 4 Mathematics

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 51,157 | 10.6%      | 10.9%       | 15.7%          | 15.9%           | 30.7%      | 16.1%         |
| Gender                | Female                           | 24,999 | 9.7%       | 11.3%       | 16.4%          | 16.9%           | 30.8%      | 14.9%         |
|                       | Male                             | 26,154 | 11.5%      | 10.6%       | 15.1%          | 15%             | 30.5%      | 17.3%         |
| Ethnicity             | Hispanic                         | 3,852  | 13.9%      | 14.3%       | 19.1%          | 16.9%           | 26.8%      | 8.9%          |
|                       | Asian                            | 828    | 5.7%       | 6.2%        | 8.5%           | 9.4%            | 28.6%      | 41.7%         |
|                       | Native Hawaiian/Pacific Islander | 68     | 13.2%      | 13.2%       | 23.5%          | 14.7%           | 22.1%      | 13.2%         |
|                       | Black/African American           | 5,378  | 24.9%      | 17.3%       | 19.1%          | 15%             | 18.9%      | 4.8%          |
|                       | American Indian                  | 56     | 10.7%      | 10.7%       | 25%            | 10.7%           | 23.2%      | 19.6%         |
|                       | White                            | 38,021 | 8.3%       | 9.6%        | 14.8%          | 15.9%           | 33.1%      | 18.3%         |
|                       | Other                            | 2,393  | 12.3%      | 14.4%       | 17%            | 16.3%           | 27.6%      | 12.3%         |
|                       | Missing                          | 561    | 7.3%       | 11.2%       | 25%            | 28%             | 25%        | 3.6%          |
| Migrant               | Non-Migrant                      | 50,899 | 10.6%      | 10.9%       | 15.7%          | 15.9%           | 30.7%      | 16.2%         |
|                       | Migrant                          | 258    | 19%        | 14.7%       | 20.2%          | 14.7%           | 25.6%      | 5.8%          |
| LEP                   | Non-LEP                          | 48,058 | 10.2%      | 10.6%       | 15.4%          | 15.9%           | 31.2%      | 16.7%         |
|                       | LEP                              | 3,099  | 17.5%      | 15.9%       | 20.5%          | 16.6%           | 22.1%      | 7.4%          |
| Economic Disadvantage | Free Lunch                       | 30,130 | 14.4%      | 13.8%       | 18.5%          | 17.1%           | 26.6%      | 9.5%          |
|                       | Reduced-Price Lunch              | 2,061  | 8.2%       | 10%         | 14.8%          | 16.3%           | 34.2%      | 16.6%         |
|                       | Regular Lunch                    | 18,966 | 4.9%       | 6.4%        | 11.5%          | 13.9%           | 36.7%      | 26.6%         |
| IEP                   | Non-IEP                          | 42,818 | 8.1%       | 9.7%        | 15.3%          | 16.6%           | 32.7%      | 17.5%         |
|                       | IEP                              | 8,339  | 23.6%      | 17.1%       | 17.7%          | 12.4%           | 20.1%      | 9.2%          |

### Grade 5 Mathematics

|           | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All       | Students Tested                  | 51,975 | 7.4%       | 9.2%        | 13.7%          | 18%             | 31.8%      | 20%           |
| Gender    | Female                           | 25,427 | 6.4%       | 8.7%        | 14%            | 19.4%           | 33%        | 18.6%         |
|           | Male                             | 26,546 | 8.3%       | 9.7%        | 13.4%          | 16.6%           | 30.6%      | 21.3%         |
| Ethnicity | Hispanic                         | 4,021  | 8.7%       | 11.6%       | 16.4%          | 20.3%           | 30.8%      | 12.2%         |
|           | Asian                            | 862    | 3.2%       | 3%          | 7.3%           | 10.7%           | 29.2%      | 46.5%         |
|           | Native Hawaiian/Pacific Islander | 81     | 11.1%      | 12.3%       | 13.6%          | 13.6%           | 29.6%      | 19.8%         |

|                       | Test Group             | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
|                       | Black/African American | 5,468  | 17.7%      | 16.8%       | 18.9%          | 19.1%           | 21.3%      | 6.2%          |
|                       | American Indian        | 64     | 12.5%      | 4.7%        | 20.3%          | 21.9%           | 29.7%      | 10.9%         |
|                       | White                  | 38,592 | 5.8%       | 7.9%        | 12.6%          | 17.6%           | 33.5%      | 22.6%         |
|                       | Other                  | 2,333  | 8.1%       | 10.7%       | 14.1%          | 19.5%           | 31.5%      | 15.9%         |
|                       | Missing                | 554    | 7%         | 17.1%       | 20.4%          | 25.5%           | 25.1%      | 4.9%          |
| Migrant               | Non-Migrant            | 51,725 | 7.3%       | 9.2%        | 13.7%          | 18%             | 31.8%      | 20%           |
|                       | Migrant                | 250    | 14.8%      | 15.2%       | 16%            | 22%             | 22.8%      | 9.2%          |
| LEP                   | Non-LEP                | 49,350 | 7%         | 8.9%        | 13.4%          | 17.9%           | 32.2%      | 20.5%         |
|                       | LEP                    | 2,625  | 13.4%      | 15.2%       | 18.6%          | 20.1%           | 22.8%      | 9.9%          |
| Economic Disadvantage | Free Lunch             | 30,334 | 10.2%      | 12.1%       | 16.6%          | 19.7%           | 29.2%      | 12.2%         |
|                       | Reduced-Price Lunch    | 2,042  | 5%         | 7.9%        | 13.7%          | 18.3%           | 35.1%      | 20%           |
|                       | Regular Lunch          | 19,599 | 3.3%       | 4.9%        | 9.1%           | 15.4%           | 35.4%      | 31.9%         |
| IEP                   | Non-IEP                | 44,023 | 5.3%       | 7.6%        | 12.9%          | 18.3%           | 34%        | 21.9%         |
|                       | IEP                    | 7,952  | 18.8%      | 18.2%       | 18.1%          | 16.2%           | 19.5%      | 9.2%          |

### Grade 6 Mathematics

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 52,092 | 4.7%       | 7.2%        | 22.9%          | 18.4%           | 33.7%      | 13.1%         |
| Gender                | Female                           | 25,516 | 3.8%       | 6.4%        | 22%            | 19%             | 35.3%      | 13.6%         |
|                       | Male                             | 26,574 | 5.6%       | 7.9%        | 23.8%          | 17.9%           | 32.1%      | 12.7%         |
| Ethnicity             | Hispanic                         | 3,807  | 7%         | 8.6%        | 29.1%          | 20.3%           | 28.1%      | 7%            |
|                       | Asian                            | 866    | 3%         | 3.1%        | 10.7%          | 13.3%           | 36.7%      | 33.1%         |
|                       | Native Hawaiian/Pacific Islander | 74     | 1.4%       | 12.2%       | 37.8%          | 18.9%           | 21.6%      | 8.1%          |
|                       | Black/African American           | 5,508  | 12.1%      | 15.6%       | 32.9%          | 16.9%           | 19.3%      | 3.3%          |
|                       | American Indian                  | 64     | 9.4%       | 7.8%        | 17.2%          | 23.4%           | 26.6%      | 15.6%         |
|                       | White                            | 38,843 | 3.4%       | 5.8%        | 20.7%          | 18.5%           | 36.6%      | 15.1%         |
|                       | Other                            | 2,310  | 5.5%       | 8.4%        | 28.1%          | 19.4%           | 29.6%      | 8.9%          |
|                       | Missing                          | 620    | 7.7%       | 13.5%       | 28.5%          | 20.2%           | 25.8%      | 4.2%          |
| Migrant               | Non-Migrant                      | 51,872 | 4.6%       | 7.2%        | 22.8%          | 18.5%           | 33.7%      | 13.2%         |
|                       | Migrant                          | 220    | 14.5%      | 7.7%        | 32.7%          | 14.5%           | 26.8%      | 3.6%          |
| LEP                   | Non-LEP                          | 49,875 | 4.3%       | 6.9%        | 22.5%          | 18.6%           | 34.4%      | 13.5%         |
|                       | LEP                              | 2,217  | 13.4%      | 14.5%       | 32.5%          | 15.8%           | 18.2%      | 5.6%          |
| Economic Disadvantage | Free Lunch                       | 29,870 | 6.6%       | 9.5%        | 28.3%          | 19.6%           | 28.7%      | 7.3%          |
|                       | Reduced-Price Lunch              | 2,176  | 3.4%       | 6.4%        | 22.5%          | 17.8%           | 37.8%      | 12.1%         |
|                       | Regular Lunch                    | 20,046 | 2%         | 3.8%        | 14.8%          | 16.8%           | 40.7%      | 22%           |
| IEP                   | Non-IEP                          | 45,106 | 3.1%       | 5.6%        | 21.2%          | 19.2%           | 36.5%      | 14.4%         |
|                       | IEP                              | 6,986  | 14.8%      | 17.5%       | 33.5%          | 13.7%           | 15.5%      | 4.9%          |

## Grade 7 Mathematics

|                       | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All                   | Students Tested                  | 50,450 | 6.1%       | 7.9%        | 16.3%          | 22.4%           | 33.9%      | 13.4%         |
| Gender                | Female                           | 24,395 | 4.8%       | 7.1%        | 15.8%          | 23.4%           | 35.5%      | 13.3%         |
|                       | Male                             | 26,055 | 7.3%       | 8.7%        | 16.9%          | 21.4%           | 32.3%      | 13.4%         |
| Ethnicity             | Hispanic                         | 3,637  | 8.2%       | 10.4%       | 20.3%          | 25.6%           | 28.1%      | 7.3%          |
|                       | Asian                            | 874    | 3.3%       | 4.7%        | 6.5%           | 14.4%           | 33.8%      | 37.3%         |
|                       | Native Hawaiian/Pacific Islander | 53     | 11.3%      | 7.5%        | 18.9%          | 22.6%           | 28.3%      | 11.3%         |
|                       | Black/African American           | 5,103  | 15.4%      | 15.9%       | 24.9%          | 21.1%           | 18.9%      | 3.8%          |
|                       | American Indian                  | 73     | 6.8%       | 1.4%        | 17.8%          | 20.5%           | 35.6%      | 17.8%         |
|                       | White                            | 38,040 | 4.6%       | 6.6%        | 14.8%          | 22.2%           | 36.8%      | 15.1%         |
|                       | Other                            | 2,041  | 7.9%       | 9.7%        | 17.1%          | 24.6%           | 30.8%      | 9.8%          |
|                       | Missing                          | 629    | 8.7%       | 12.2%       | 26.2%          | 24.8%           | 23.8%      | 4.1%          |
| Migrant               | Non-Migrant                      | 50,243 | 6.1%       | 7.9%        | 16.3%          | 22.3%           | 34%        | 13.4%         |
|                       | Migrant                          | 207    | 14%        | 15.5%       | 22.2%          | 31.9%           | 15%        | 1.4%          |
| LEP                   | Non-LEP                          | 48,333 | 5.7%       | 7.6%        | 16%            | 22.5%           | 34.5%      | 13.7%         |
|                       | LEP                              | 2,117  | 15.1%      | 15.2%       | 23.7%          | 20%             | 18.7%      | 7.4%          |
| Economic Disadvantage | Free Lunch                       | 28,095 | 8.6%       | 10.8%       | 20.7%          | 24.9%           | 28.2%      | 6.8%          |
|                       | Reduced-Price Lunch              | 2,083  | 4.4%       | 7.2%        | 15%            | 24.7%           | 36.4%      | 12.1%         |
|                       | Regular Lunch                    | 20,272 | 2.8%       | 4%          | 10.5%          | 18.6%           | 41.4%      | 22.7%         |
| IEP                   | Non-IEP                          | 44,412 | 4.5%       | 6.5%        | 15%            | 22.9%           | 36.5%      | 14.7%         |
|                       | IEP                              | 6,038  | 18%        | 18.8%       | 26.2%          | 18.7%           | 14.8%      | 3.6%          |

## Grade 8 Mathematics

|           | Test Group                       | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|-----------|----------------------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| All       | Students Tested                  | 49,707 | 11.8%      | 5.7%        | 18.5%          | 18.5%           | 33.8%      | 11.7%         |
| Gender    | Female                           | 24,158 | 9.5%       | 4.9%        | 17.8%          | 19.3%           | 36.7%      | 11.8%         |
|           | Male                             | 25,549 | 14%        | 6.4%        | 19.2%          | 17.8%           | 31%        | 11.6%         |
| Ethnicity | Hispanic                         | 3,293  | 16.5%      | 7.2%        | 23.2%          | 19.3%           | 27%        | 6.9%          |
|           | Asian                            | 884    | 6.1%       | 2.1%        | 10%            | 10.3%           | 35.2%      | 36.3%         |
|           | Native Hawaiian/Pacific Islander | 68     | 13.2%      | 7.4%        | 25%            | 14.7%           | 35.3%      | 4.4%          |
|           | Black/African American           | 5,175  | 27.7%      | 10.7%       | 23.3%          | 16.9%           | 18.4%      | 3.1%          |
|           | American Indian                  | 56     | 10.7%      | 7.1%        | 17.9%          | 12.5%           | 42.9%      | 8.9%          |
|           | White                            | 37,783 | 9.3%       | 4.8%        | 17.5%          | 18.8%           | 36.5%      | 13.1%         |
|           | Other                            | 1,869  | 13.9%      | 6.6%        | 20.8%          | 18.6%           | 32%        | 8.1%          |
|           | Missing                          | 579    | 6.6%       | 14.3%       | 23.7%          | 23%             | 30.2%      | 2.2%          |
| Migrant   | Non-Migrant                      | 49,525 | 11.8%      | 5.7%        | 18.5%          | 18.5%           | 33.8%      | 11.7%         |
|           | Migrant                          | 182    | 20.9%      | 6%          | 28%            | 16.5%           | 26.9%      | 1.6%          |
| LEP       | Non-LEP                          | 47,655 | 11.1%      | 5.5%        | 18.3%          | 18.6%           | 34.4%      | 11.9%         |
|           | LEP                              | 2,052  | 26.9%      | 9.3%        | 23.8%          | 16.3%           | 17.6%      | 5.9%          |
| Economic  | Free Lunch                       | 27,028 | 16.9%      | 7.5%        | 22.8%          | 19.7%           | 27.3%      | 5.7%          |

|              | Test Group          | N      | Novice-Low | Novice-High | Apprentice-Low | Apprentice-High | Proficient | Distinguished |
|--------------|---------------------|--------|------------|-------------|----------------|-----------------|------------|---------------|
| Disadvantage | Reduced-Price Lunch | 1,995  | 9.4%       | 5.1%        | 19%            | 19%             | 36%        | 11.5%         |
|              | Regular Lunch       | 20,684 | 5.3%       | 3.3%        | 12.9%          | 17%             | 41.9%      | 19.5%         |
| IEP          | Non-IEP             | 44,211 | 8.9%       | 5%          | 17.7%          | 19.3%           | 36.4%      | 12.8%         |
|              | IEP                 | 5,496  | 35%        | 11.5%       | 25.5%          | 12.8%           | 12.4%      | 2.8%          |

### Grade 4 Science

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
| All                   | Students Tested                  | 51,145 | 14.9%  | 53.4%      | 28.4%      | 3.3%          |
| Gender                | Female                           | 24,995 | 13.9%  | 54.5%      | 28.6%      | 3%            |
|                       | Male                             | 26,146 | 15.8%  | 52.3%      | 28.3%      | 3.6%          |
| Ethnicity             | Hispanic                         | 3,851  | 20.8%  | 59.4%      | 18.5%      | 1.3%          |
|                       | Asian                            | 827    | 9.7%   | 43.4%      | 37%        | 9.9%          |
|                       | Native Hawaiian/Pacific Islander | 68     | 16.2%  | 63.2%      | 19.1%      | 1.5%          |
|                       | Black/African American           | 5,376  | 35.2%  | 52.9%      | 11.3%      | 0.5%          |
|                       | American Indian                  | 56     | 19.6%  | 48.2%      | 30.4%      | 1.8%          |
|                       | White                            | 38,013 | 11.3%  | 52.9%      | 32%        | 3.8%          |
|                       | Other                            | 2,393  | 17.6%  | 56.4%      | 23.4%      | 2.7%          |
|                       | Missing                          | 561    | 16.9%  | 51.2%      | 26.2%      | 5.7%          |
| Migrant               | Non-Migrant                      | 50,887 | 14.8%  | 53.4%      | 28.5%      | 3.3%          |
|                       | Migrant                          | 258    | 28.7%  | 58.1%      | 13.2%      | 0%            |
| LEP                   | Non-LEP                          | 48,048 | 14.2%  | 52.9%      | 29.5%      | 3.5%          |
|                       | LEP                              | 3,097  | 25.9%  | 60.9%      | 12.6%      | 0.6%          |
| Economic Disadvantage | Free Lunch                       | 30,117 | 20%    | 57.4%      | 20.9%      | 1.7%          |
|                       | Reduced-Price Lunch              | 2,061  | 11.6%  | 52.5%      | 32.6%      | 3.3%          |
|                       | Regular Lunch                    | 18,967 | 7.1%   | 47.1%      | 39.9%      | 5.9%          |
| IEP                   | Non-IEP                          | 42,813 | 12.7%  | 53.6%      | 30.2%      | 3.4%          |
|                       | IEP                              | 8,332  | 25.9%  | 52.3%      | 19.1%      | 2.7%          |

### Grade 7 Science

|           | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------|----------------------------------|--------|--------|------------|------------|---------------|
| All       | Students Tested                  | 50,436 | 20.4%  | 53.5%      | 24.2%      | 1.9%          |
| Gender    | Female                           | 24,388 | 18.7%  | 55.1%      | 24.4%      | 1.8%          |
|           | Male                             | 26,047 | 21.9%  | 52.1%      | 24%        | 2%            |
| Ethnicity | Hispanic                         | 3,635  | 26.2%  | 56.3%      | 16.9%      | 0.7%          |
|           | Asian                            | 872    | 12.5%  | 36.9%      | 42.2%      | 8.4%          |
|           | Native Hawaiian/Pacific Islander | 53     | 32.1%  | 54.7%      | 13.2%      | 0%            |
|           | Black/African American           | 5,097  | 38.4%  | 52%        | 9.4%       | 0.3%          |
|           | American Indian                  | 73     | 17.8%  | 52.1%      | 27.4%      | 2.7%          |
|           | White                            | 38,035 | 17.5%  | 53.7%      | 26.7%      | 2.1%          |
|           | Other                            | 2,041  | 22%    | 56.4%      | 20%        | 1.5%          |

|                       | Test Group          | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|---------------------|--------|--------|------------|------------|---------------|
|                       | Missing             | 630    | 15.2%  | 56.7%      | 24.9%      | 3.2%          |
| Migrant               | Non-Migrant         | 50,229 | 20.3%  | 53.5%      | 24.3%      | 1.9%          |
|                       | Migrant             | 207    | 35.7%  | 58.9%      | 5.3%       | 0%            |
| LEP                   | Non-LEP             | 48,322 | 19.6%  | 53.8%      | 24.7%      | 2%            |
|                       | LEP                 | 2,114  | 38.6%  | 48%        | 12.3%      | 1.2%          |
| Economic Disadvantage | Free Lunch          | 28,081 | 27.3%  | 56.1%      | 15.9%      | 0.7%          |
|                       | Reduced-Price Lunch | 2,085  | 15.9%  | 57.8%      | 25%        | 1.3%          |
|                       | Regular Lunch       | 20,270 | 11.2%  | 49.6%      | 35.5%      | 3.7%          |
| IEP                   | Non-IEP             | 44,401 | 17.3%  | 54.3%      | 26.3%      | 2.1%          |
|                       | IEP                 | 6,035  | 43.1%  | 48%        | 8.6%       | 0.3%          |

### Grade 11 Science

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
| All                   | Students Tested                  | 45,278 | 19.2%  | 50.3%      | 28.4%      | 2.2%          |
| Gender                | Female                           | 22,214 | 15.4%  | 51.6%      | 30.8%      | 2.2%          |
|                       | Male                             | 23,062 | 22.8%  | 49%        | 26%        | 2.1%          |
| Ethnicity             | Hispanic                         | 2,742  | 27.1%  | 53.1%      | 19%        | 0.8%          |
|                       | Asian                            | 906    | 16.3%  | 38.1%      | 37.9%      | 7.7%          |
|                       | Native Hawaiian/Pacific Islander | 53     | 20.8%  | 54.7%      | 18.9%      | 5.7%          |
|                       | Black/African American           | 4,621  | 38.1%  | 50.8%      | 10.9%      | 0.3%          |
|                       | American Indian                  | 57     | 19.3%  | 49.1%      | 31.6%      | 0%            |
|                       | White                            | 35,069 | 16%    | 50.2%      | 31.4%      | 2.4%          |
|                       | Other                            | 1,261  | 21.6%  | 53.7%      | 22.5%      | 2.1%          |
|                       | Missing                          | 569    | 20.9%  | 50.4%      | 26.2%      | 2.5%          |
| Migrant               | Non-Migrant                      | 45,153 | 19.1%  | 50.3%      | 28.4%      | 2.2%          |
|                       | Migrant                          | 125    | 50.4%  | 44%        | 5.6%       | 0%            |
| LEP                   | Non-LEP                          | 43,819 | 18%    | 50.6%      | 29.2%      | 2.2%          |
|                       | LEP                              | 1,459  | 55.1%  | 40.4%      | 4.4%       | 0.1%          |
| Economic Disadvantage | Free Lunch                       | 21,813 | 26.1%  | 54%        | 19.1%      | 0.8%          |
|                       | Reduced-Price Lunch              | 1,936  | 16%    | 52.9%      | 29.8%      | 1.4%          |
|                       | Regular Lunch                    | 21,529 | 12.4%  | 46.3%      | 37.6%      | 3.6%          |
| IEP                   | Non-IEP                          | 41,503 | 16.5%  | 50.7%      | 30.4%      | 2.3%          |
|                       | IEP                              | 3,775  | 48.3%  | 45.9%      | 5.6%       | 0.2%          |

### Grade 5 Social Studies

|           | Test Group      | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------|-----------------|--------|--------|------------|------------|---------------|
| All       | Students Tested | 51,930 | 14.1%  | 32.9%      | 41.1%      | 11.9%         |
| Gender    | Female          | 25,406 | 13.5%  | 35%        | 40.5%      | 11%           |
|           | Male            | 26,522 | 14.6%  | 30.8%      | 41.8%      | 12.8%         |
| Ethnicity | Hispanic        | 3,997  | 20.4%  | 39.2%      | 34.2%      | 6.2%          |
|           | Asian           | 856    | 10.2%  | 22.8%      | 39.8%      | 27.2%         |

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
|                       | Native Hawaiian/Pacific Islander | 80     | 16.3%  | 32.5%      | 33.8%      | 17.5%         |
|                       | Black/African American           | 5,464  | 33.4%  | 39.2%      | 24.1%      | 3.4%          |
|                       | American Indian                  | 64     | 21.9%  | 34.4%      | 37.5%      | 6.3%          |
|                       | White                            | 38,583 | 10.7%  | 31.2%      | 44.5%      | 13.7%         |
|                       | Other                            | 2,332  | 15.9%  | 34.7%      | 41%        | 8.4%          |
|                       | Missing                          | 554    | 12.1%  | 50.7%      | 29.4%      | 7.8%          |
| Migrant               | Non-Migrant                      | 51,686 | 14%    | 32.8%      | 41.2%      | 12%           |
|                       | Migrant                          | 244    | 26.2%  | 38.5%      | 31.6%      | 3.7%          |
| LEP                   | Non-LEP                          | 49,345 | 13.2%  | 32.4%      | 42%        | 12.3%         |
|                       | LEP                              | 2,585  | 30.5%  | 40.8%      | 23.8%      | 4.9%          |
| Economic Disadvantage | Free Lunch                       | 30,307 | 19.3%  | 37.9%      | 35.9%      | 7%            |
|                       | Reduced-Price Lunch              | 2,041  | 11.5%  | 33.6%      | 44.1%      | 10.9%         |
|                       | Regular Lunch                    | 19,582 | 6.3%   | 25%        | 49%        | 19.8%         |
| IEP                   | Non-IEP                          | 43,980 | 10.4%  | 32.3%      | 44.2%      | 13.1%         |
|                       | IEP                              | 7,950  | 34.4%  | 36%        | 24.4%      | 5.2%          |

### Grade 8 Social Studies

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
| All                   | Students Tested                  | 49,667 | 9.9%   | 31.2%      | 42.5%      | 16.4%         |
| Gender                | Female                           | 24,137 | 8.1%   | 32%        | 43.8%      | 16.2%         |
|                       | Male                             | 25,530 | 11.6%  | 30.4%      | 41.4%      | 16.6%         |
| Ethnicity             | Hispanic                         | 3,267  | 14.1%  | 38.8%      | 38%        | 9.1%          |
|                       | Asian                            | 879    | 7.1%   | 16.3%      | 40.3%      | 36.4%         |
|                       | Native Hawaiian/Pacific Islander | 67     | 11.9%  | 49.3%      | 22.4%      | 16.4%         |
|                       | Black/African American           | 5,172  | 24.7%  | 41.4%      | 28.6%      | 5.4%          |
|                       | American Indian                  | 56     | 10.7%  | 26.8%      | 44.6%      | 17.9%         |
|                       | White                            | 37,779 | 7.3%   | 28.9%      | 45.3%      | 18.4%         |
|                       | Other                            | 1,868  | 10.4%  | 36.2%      | 40.5%      | 13%           |
|                       | Missing                          | 579    | 22.5%  | 49.7%      | 22.6%      | 5.2%          |
| Migrant               | Non-Migrant                      | 49,494 | 9.8%   | 31.1%      | 42.6%      | 16.5%         |
|                       | Migrant                          | 173    | 24.3%  | 42.8%      | 29.5%      | 3.5%          |
| LEP                   | Non-LEP                          | 47,646 | 9.1%   | 30.8%      | 43.2%      | 16.9%         |
|                       | LEP                              | 2,021  | 27.5%  | 39.9%      | 27.1%      | 5.6%          |
| Economic Disadvantage | Free Lunch                       | 27,003 | 14.2%  | 38.6%      | 37.8%      | 9.3%          |
|                       | Reduced-Price Lunch              | 1,994  | 7.1%   | 29.5%      | 46%        | 17.4%         |
|                       | Regular Lunch                    | 20,670 | 4.5%   | 21.5%      | 48.4%      | 25.6%         |
| IEP                   | Non-IEP                          | 44,175 | 7%     | 29.8%      | 45.2%      | 18%           |
|                       | IEP                              | 5,492  | 33.2%  | 42.2%      | 21.1%      | 3.6%          |

### Grade 5 On-Demand Writing

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
| All                   | Students Tested                  | 51,912 | 24.4%  | 28.8%      | 41%        | 5.7%          |
| Gender                | Female                           | 25,402 | 18.1%  | 26.5%      | 47.5%      | 7.9%          |
|                       | Male                             | 26,508 | 30.6%  | 31.1%      | 34.7%      | 3.6%          |
| Ethnicity             | Hispanic                         | 3,994  | 29%    | 32.3%      | 35.5%      | 3.1%          |
|                       | Asian                            | 855    | 14.5%  | 22.7%      | 51.8%      | 11%           |
|                       | Native Hawaiian/Pacific Islander | 80     | 25%    | 28.8%      | 40%        | 6.3%          |
|                       | Black/African American           | 5,460  | 43.7%  | 29.6%      | 24.9%      | 1.8%          |
|                       | American Indian                  | 64     | 29.7%  | 26.6%      | 37.5%      | 6.3%          |
|                       | White                            | 38,573 | 21.4%  | 28.1%      | 44%        | 6.5%          |
|                       | Other                            | 2,332  | 27.3%  | 31.1%      | 37%        | 4.6%          |
|                       | Missing                          | 554    | 17%    | 44.8%      | 31.9%      | 6.3%          |
| Migrant               | Non-Migrant                      | 51,668 | 24.4%  | 28.9%      | 41%        | 5.7%          |
|                       | Migrant                          | 244    | 40.2%  | 25.4%      | 31.6%      | 2.9%          |
| LEP                   | Non-LEP                          | 49,331 | 23.7%  | 28.7%      | 41.7%      | 5.9%          |
|                       | LEP                              | 2,581  | 39.3%  | 31.8%      | 26.5%      | 2.4%          |
| Economic Disadvantage | Free Lunch                       | 30,290 | 31.4%  | 30.9%      | 34.5%      | 3.3%          |
|                       | Reduced-Price Lunch              | 2,040  | 21.9%  | 30.9%      | 41.9%      | 5.3%          |
|                       | Regular Lunch                    | 19,582 | 14%    | 25.5%      | 51%        | 9.5%          |
| IEP                   | Non-IEP                          | 43,966 | 19.3%  | 29.5%      | 44.8%      | 6.4%          |
|                       | IEP                              | 7,946  | 52.8%  | 25.2%      | 19.7%      | 2.2%          |

### Grade 8 On-Demand Writing

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
| All                   | Students Tested                  | 49,604 | 20%    | 47.9%      | 21.7%      | 10.4%         |
| Gender                | Female                           | 24,116 | 11.3%  | 46%        | 27.6%      | 15.1%         |
|                       | Male                             | 25,488 | 28.3%  | 49.7%      | 16%        | 5.9%          |
| Ethnicity             | Hispanic                         | 3,264  | 24.3%  | 52%        | 17.3%      | 6.4%          |
|                       | Asian                            | 878    | 11.5%  | 37.1%      | 28.6%      | 22.8%         |
|                       | Native Hawaiian/Pacific Islander | 67     | 26.9%  | 50.7%      | 13.4%      | 9%            |
|                       | Black/African American           | 5,152  | 39.6%  | 45.7%      | 10.9%      | 3.9%          |
|                       | American Indian                  | 56     | 25%    | 37.5%      | 23.2%      | 14.3%         |
|                       | White                            | 37,747 | 17.1%  | 48%        | 23.3%      | 11.6%         |
|                       | Other                            | 1,861  | 21.8%  | 50.1%      | 20.5%      | 7.6%          |
|                       | Missing                          | 579    | 19.9%  | 48.4%      | 25.6%      | 6.2%          |
| Migrant               | Non-Migrant                      | 49,432 | 20%    | 47.9%      | 21.7%      | 10.4%         |
|                       | Migrant                          | 172    | 35.5%  | 49.4%      | 10.5%      | 4.7%          |
| LEP                   | Non-LEP                          | 47,590 | 19.3%  | 48%        | 22.1%      | 10.7%         |
|                       | LEP                              | 2,014  | 38.3%  | 46.6%      | 10.5%      | 4.6%          |
| Economic Disadvantage | Free Lunch                       | 26,951 | 26.6%  | 50.1%      | 16.9%      | 6.4%          |
|                       | Reduced-Price Lunch              | 1,993  | 18.2%  | 51.2%      | 21.4%      | 9.3%          |

|     | Test Group    | N      | Novice | Apprentice | Proficient | Distinguished |
|-----|---------------|--------|--------|------------|------------|---------------|
|     | Regular Lunch | 20,660 | 11.6%  | 44.8%      | 27.9%      | 15.8%         |
| IEP | Non-IEP       | 44,134 | 15.4%  | 49.3%      | 23.8%      | 11.5%         |
|     | IEP           | 5,470  | 57.4%  | 36.6%      | 4.6%       | 1.4%          |

### Grade 11 On-Demand Writing

|                       | Test Group                       | N      | Novice | Apprentice | Proficient | Distinguished |
|-----------------------|----------------------------------|--------|--------|------------|------------|---------------|
| All                   | Students Tested                  | 45,111 | 14.3%  | 34.2%      | 43.1%      | 8.4%          |
| Gender                | Female                           | 22,159 | 9.7%   | 31.6%      | 47.8%      | 11%           |
|                       | Male                             | 22,950 | 18.7%  | 36.7%      | 38.6%      | 6%            |
| Ethnicity             | Hispanic                         | 2,719  | 24.2%  | 41.4%      | 30.2%      | 4.2%          |
|                       | Asian                            | 903    | 17.5%  | 24.9%      | 40.3%      | 17.3%         |
|                       | Native Hawaiian/Pacific Islander | 53     | 20.8%  | 39.6%      | 35.8%      | 3.8%          |
|                       | Black/African American           | 4,591  | 29.1%  | 43.9%      | 24.6%      | 2.3%          |
|                       | American Indian                  | 56     | 19.6%  | 33.9%      | 39.3%      | 7.1%          |
|                       | White                            | 34,964 | 11.4%  | 32.2%      | 47%        | 9.5%          |
|                       | Other                            | 1,256  | 16.6%  | 37%        | 40.7%      | 5.7%          |
|                       | Missing                          | 569    | 12.8%  | 52.7%      | 28.8%      | 5.6%          |
| Migrant               | Non-Migrant                      | 44,988 | 14.2%  | 34.2%      | 43.2%      | 8.4%          |
|                       | Migrant                          | 123    | 49.6%  | 30.1%      | 19.5%      | 0.8%          |
| LEP                   | Non-LEP                          | 43,676 | 13%    | 34.1%      | 44.2%      | 8.7%          |
|                       | LEP                              | 1,435  | 53%    | 36.2%      | 10.5%      | 0.3%          |
| Economic Disadvantage | Free Lunch                       | 21,703 | 19.9%  | 39.6%      | 35.9%      | 4.6%          |
|                       | Reduced-Price Lunch              | 1,932  | 12.5%  | 35.1%      | 44.3%      | 8.1%          |
|                       | Regular Lunch                    | 21,476 | 8.8%   | 28.7%      | 50.3%      | 12.3%         |
| IEP                   | Non-IEP                          | 41,375 | 11.3%  | 33.6%      | 46%        | 9.1%          |
|                       | IEP                              | 3,736  | 47.2%  | 40.8%      | 11.3%      | 0.7%          |

## Appendix M. Reliability<sup>10</sup>

### Overall Test

#### Grade 3 Reading

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 45,757 | 0.87  | 0.86     | 0.46     | 6.49 |
| Gender                | Female                           | 22,291 | 0.86  | 0.85     | 0.45     | 6.54 |
|                       | Male                             | 23,463 | 0.87  | 0.86     | 0.45     | 6.44 |
| Ethnicity             | Hispanic                         | 3,506  | 0.85  | 0.84     | 0.44     | 6.37 |
|                       | Asian                            | 862    | 0.88  | 0.87     | 0.44     | 6.71 |
|                       | Native Hawaiian/Pacific Islander | 63     | 0.82  | 0.80     | 0.49     | 6.20 |
|                       | Black/African American           | 4,547  | 0.87  | 0.86     | 0.49     | 6.26 |
|                       | American Indian                  | 51     | 0.87  | 0.85     | 0.50     | 6.26 |
|                       | White                            | 34,580 | 0.86  | 0.85     | 0.45     | 6.55 |
|                       | Other                            | 2,144  | 0.87  | 0.86     | 0.42     | 6.39 |
|                       | Missing                          | 4      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 45,524 | 0.87  | 0.86     | 0.46     | 6.49 |
|                       | Migrant                          | 233    | 0.84  | 0.83     | 0.46     | 6.19 |
| LEP                   | Non-LEP                          | 42,641 | 0.87  | 0.86     | 0.46     | 6.50 |
|                       | LEP                              | 3,116  | 0.84  | 0.83     | 0.40     | 6.23 |
| Economic Disadvantage | Free Lunch                       | 27,089 | 0.86  | 0.85     | 0.46     | 6.37 |
|                       | Reduced-Price Lunch              | 1,896  | 0.86  | 0.85     | 0.42     | 6.55 |
|                       | Regular Lunch                    | 16,772 | 0.85  | 0.84     | 0.41     | 6.71 |
| IEP                   | Non-IEP                          | 37,265 | 0.86  | 0.85     | 0.42     | 6.53 |
|                       | IEP                              | 8,492  | 0.88  | 0.87     | 0.53     | 6.45 |

#### Grade 4 Reading

|           | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------|----------------------------------|--------|-------|----------|----------|------|
| All       | Students Tested                  | 47,524 | 0.84  | 0.80     | 0.59     | 6.05 |
| Gender    | Female                           | 23,746 | 0.84  | 0.80     | 0.59     | 6.06 |
|           | Male                             | 23,775 | 0.84  | 0.81     | 0.59     | 6.02 |
| Ethnicity | Hispanic                         | 3,608  | 0.82  | 0.78     | 0.57     | 5.97 |
|           | Asian                            | 794    | 0.85  | 0.82     | 0.65     | 6.21 |
|           | Native Hawaiian/Pacific Islander | 61     | 0.80  | 0.75     | 0.61     | 5.87 |
|           | Black/African American           | 4,621  | 0.83  | 0.79     | 0.61     | 5.99 |
|           | American Indian                  | 51     | 0.80  | 0.77     | 0.55     | 5.78 |
|           | White                            | 36,183 | 0.83  | 0.80     | 0.57     | 6.04 |
|           | Other                            | 2,203  | 0.83  | 0.80     | 0.59     | 6.05 |
|           | Missing                          | 3      | --    | --       | --       | --   |
| Migrant   | Non-Migrant                      | 47,286 | 0.84  | 0.80     | 0.59     | 6.05 |

<sup>10</sup> Alternate K-PREP students are not included.

|                       | Test Group          | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|---------------------|--------|-------|----------|----------|------|
|                       | Migrant             | 238    | 0.77  | 0.72     | 0.49     | 6.09 |
| LEP                   | Non-LEP             | 44,662 | 0.84  | 0.80     | 0.59     | 6.04 |
|                       | LEP                 | 2,862  | 0.80  | 0.75     | 0.55     | 6.02 |
| Economic Disadvantage | Free Lunch          | 27,812 | 0.82  | 0.79     | 0.59     | 5.99 |
|                       | Reduced-Price Lunch | 1,949  | 0.82  | 0.78     | 0.58     | 6.00 |
|                       | Regular Lunch       | 17,763 | 0.82  | 0.79     | 0.55     | 6.08 |
| IEP                   | Non-IEP             | 39,964 | 0.83  | 0.79     | 0.57     | 6.02 |
|                       | IEP                 | 7,560  | 0.86  | 0.82     | 0.63     | 6.17 |

### *Grade 5 Reading*

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 50,407 | 0.84  | 0.82     | 0.50     | 6.15 |
| Gender                | Female                           | 24,914 | 0.84  | 0.81     | 0.48     | 6.19 |
|                       | Male                             | 25,491 | 0.85  | 0.83     | 0.49     | 6.08 |
| Ethnicity             | Hispanic                         | 3,900  | 0.83  | 0.80     | 0.49     | 6.10 |
|                       | Asian                            | 849    | 0.87  | 0.85     | 0.56     | 6.38 |
|                       | Native Hawaiian/Pacific Islander | 77     | 0.87  | 0.85     | 0.58     | 6.27 |
|                       | Black/African American           | 5,196  | 0.84  | 0.81     | 0.53     | 6.08 |
|                       | American Indian                  | 62     | 0.84  | 0.82     | 0.51     | 5.86 |
|                       | White                            | 38,038 | 0.84  | 0.82     | 0.48     | 6.15 |
|                       | Other                            | 2,280  | 0.84  | 0.82     | 0.49     | 6.16 |
|                       | Missing                          | 5      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 50,172 | 0.84  | 0.82     | 0.50     | 6.15 |
|                       | Migrant                          | 235    | 0.82  | 0.79     | 0.51     | 6.04 |
| LEP                   | Non-LEP                          | 47,879 | 0.84  | 0.82     | 0.49     | 6.15 |
|                       | LEP                              | 2,528  | 0.83  | 0.80     | 0.52     | 6.14 |
| Economic Disadvantage | Free Lunch                       | 29,584 | 0.83  | 0.81     | 0.49     | 6.06 |
|                       | Reduced-Price Lunch              | 2,007  | 0.82  | 0.80     | 0.47     | 6.08 |
|                       | Regular Lunch                    | 18,816 | 0.82  | 0.81     | 0.46     | 6.26 |
| IEP                   | Non-IEP                          | 42,679 | 0.83  | 0.81     | 0.46     | 6.15 |
|                       | IEP                              | 7,728  | 0.86  | 0.84     | 0.58     | 6.12 |

### *Grade 6 Reading*

|           | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------|----------------------------------|--------|-------|----------|----------|------|
| All       | Students Tested                  | 50,106 | 0.88  | 0.86     | 0.64     | 5.31 |
| Gender    | Female                           | 24,837 | 0.87  | 0.85     | 0.62     | 5.36 |
|           | Male                             | 25,267 | 0.88  | 0.86     | 0.65     | 5.24 |
| Ethnicity | Hispanic                         | 3,678  | 0.87  | 0.85     | 0.62     | 5.28 |
|           | Asian                            | 845    | 0.89  | 0.87     | 0.67     | 5.43 |
|           | Native Hawaiian/Pacific Islander | 72     | 0.88  | 0.85     | 0.72     | 5.37 |
|           | Black/African American           | 5,159  | 0.87  | 0.85     | 0.64     | 5.27 |
|           | American Indian                  | 61     | 0.88  | 0.86     | 0.73     | 5.41 |
|           | White                            | 38,063 | 0.87  | 0.85     | 0.63     | 5.31 |

|                       | Test Group          | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|---------------------|--------|-------|----------|----------|------|
|                       | Other               | 2,223  | 0.87  | 0.85     | 0.63     | 5.33 |
|                       | Missing             | 5      | --    | --       | --       | --   |
| Migrant               | Non-Migrant         | 49,894 | 0.88  | 0.86     | 0.64     | 5.31 |
|                       | Migrant             | 212    | 0.87  | 0.84     | 0.71     | 5.28 |
| LEP                   | Non-LEP             | 47,995 | 0.88  | 0.86     | 0.64     | 5.31 |
|                       | LEP                 | 2,111  | 0.87  | 0.85     | 0.65     | 5.29 |
| Economic Disadvantage | Free Lunch          | 28,879 | 0.87  | 0.85     | 0.63     | 5.27 |
|                       | Reduced-Price Lunch | 2,121  | 0.87  | 0.85     | 0.61     | 5.29 |
|                       | Regular Lunch       | 19,106 | 0.86  | 0.84     | 0.61     | 5.33 |
| IEP                   | Non-IEP             | 43,432 | 0.87  | 0.85     | 0.62     | 5.31 |
|                       | IEP                 | 6,674  | 0.87  | 0.85     | 0.67     | 5.27 |

### *Grade 7 Reading*

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 48,499 | 0.86  | 0.84     | 0.57     | 5.65 |
| Gender                | Female                           | 23,785 | 0.86  | 0.84     | 0.53     | 5.63 |
|                       | Male                             | 24,714 | 0.86  | 0.84     | 0.58     | 5.62 |
| Ethnicity             | Hispanic                         | 3,503  | 0.85  | 0.83     | 0.56     | 5.60 |
|                       | Asian                            | 856    | 0.88  | 0.86     | 0.56     | 5.62 |
|                       | Native Hawaiian/Pacific Islander | 46     | 0.85  | 0.83     | 0.52     | 5.72 |
|                       | Black/African American           | 4,721  | 0.85  | 0.83     | 0.59     | 5.67 |
|                       | American Indian                  | 71     | 0.88  | 0.87     | 0.52     | 5.56 |
|                       | White                            | 37,337 | 0.85  | 0.83     | 0.56     | 5.65 |
|                       | Other                            | 1,963  | 0.85  | 0.83     | 0.56     | 5.65 |
|                       | Missing                          | 2      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 48,304 | 0.86  | 0.84     | 0.57     | 5.65 |
|                       | Migrant                          | 195    | 0.81  | 0.78     | 0.43     | 5.61 |
| LEP                   | Non-LEP                          | 46,511 | 0.86  | 0.84     | 0.57     | 5.65 |
|                       | LEP                              | 1,988  | 0.86  | 0.84     | 0.58     | 5.72 |
| Economic Disadvantage | Free Lunch                       | 27,140 | 0.85  | 0.83     | 0.56     | 5.62 |
|                       | Reduced-Price Lunch              | 2,028  | 0.84  | 0.82     | 0.55     | 5.65 |
|                       | Regular Lunch                    | 19,331 | 0.84  | 0.81     | 0.53     | 5.66 |
| IEP                   | Non-IEP                          | 42,719 | 0.85  | 0.82     | 0.54     | 5.64 |
|                       | IEP                              | 5,780  | 0.86  | 0.84     | 0.59     | 5.63 |

### *Grade 8 Reading*

|           | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------|----------------------------------|--------|-------|----------|----------|------|
| All       | Students Tested                  | 48,134 | 0.87  | 0.85     | 0.61     | 5.54 |
| Gender    | Female                           | 23,712 | 0.86  | 0.85     | 0.56     | 5.54 |
|           | Male                             | 24,422 | 0.87  | 0.86     | 0.61     | 5.49 |
| Ethnicity | Hispanic                         | 3,198  | 0.87  | 0.84     | 0.61     | 5.49 |
|           | Asian                            | 865    | 0.88  | 0.87     | 0.62     | 5.58 |
|           | Native Hawaiian/Pacific Islander | 63     | 0.89  | 0.87     | 0.61     | 5.63 |

|                       | Test Group             | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|------------------------|--------|-------|----------|----------|------|
|                       | Black/African American | 4,864  | 0.87  | 0.85     | 0.63     | 5.58 |
|                       | American Indian        | 55     | 0.87  | 0.85     | 0.65     | 5.42 |
|                       | White                  | 37,268 | 0.87  | 0.85     | 0.59     | 5.53 |
|                       | Other                  | 1,817  | 0.86  | 0.84     | 0.59     | 5.55 |
|                       | Missing                | 4      | --    | --       | --       | --   |
| Migrant               | Non-Migrant            | 47,966 | 0.87  | 0.85     | 0.60     | 5.54 |
|                       | Migrant                | 168    | 0.85  | 0.83     | 0.62     | 5.49 |
| LEP                   | Non-LEP                | 46,208 | 0.87  | 0.85     | 0.60     | 5.54 |
|                       | LEP                    | 1,926  | 0.87  | 0.85     | 0.63     | 5.57 |
| Economic Disadvantage | Free Lunch             | 26,291 | 0.86  | 0.84     | 0.60     | 5.52 |
|                       | Reduced-Price Lunch    | 1,967  | 0.86  | 0.84     | 0.57     | 5.52 |
|                       | Regular Lunch          | 19,876 | 0.85  | 0.83     | 0.56     | 5.55 |
| IEP                   | Non-IEP                | 42,835 | 0.86  | 0.84     | 0.58     | 5.53 |
|                       | IEP                    | 5,299  | 0.85  | 0.83     | 0.65     | 5.58 |

### *Grade 3 Mathematics*

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 46,542 | 0.91  | 0.90     | 0.61     | 6.15 |
| Gender                | Female                           | 22,682 | 0.91  | 0.90     | 0.60     | 6.09 |
|                       | Male                             | 23,856 | 0.91  | 0.90     | 0.62     | 6.20 |
| Ethnicity             | Hispanic                         | 3,567  | 0.90  | 0.89     | 0.60     | 5.97 |
|                       | Asian                            | 865    | 0.92  | 0.91     | 0.63     | 7.02 |
|                       | Native Hawaiian/Pacific Islander | 65     | 0.89  | 0.88     | 0.61     | 5.77 |
|                       | Black/African American           | 4,729  | 0.90  | 0.89     | 0.59     | 5.75 |
|                       | American Indian                  | 51     | 0.89  | 0.88     | 0.56     | 6.54 |
|                       | White                            | 35,061 | 0.91  | 0.90     | 0.59     | 6.20 |
|                       | Other                            | 2,199  | 0.90  | 0.89     | 0.58     | 6.00 |
|                       | Missing                          | 5      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 46,309 | 0.91  | 0.90     | 0.61     | 6.15 |
|                       | Migrant                          | 233    | 0.88  | 0.87     | 0.57     | 5.68 |
| LEP                   | Non-LEP                          | 43,424 | 0.91  | 0.90     | 0.60     | 6.17 |
|                       | LEP                              | 3,118  | 0.90  | 0.89     | 0.59     | 5.89 |
| Economic Disadvantage | Free Lunch                       | 27,570 | 0.90  | 0.89     | 0.60     | 5.90 |
|                       | Reduced-Price Lunch              | 1,930  | 0.90  | 0.89     | 0.59     | 6.28 |
|                       | Regular Lunch                    | 17,042 | 0.90  | 0.89     | 0.55     | 6.50 |
| IEP                   | Non-IEP                          | 38,068 | 0.90  | 0.89     | 0.58     | 6.23 |
|                       | IEP                              | 8,474  | 0.91  | 0.90     | 0.66     | 5.98 |

### *Grade 4 Mathematics*

|        | Test Group      | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|--------|-----------------|--------|-------|----------|----------|------|
| All    | Students Tested | 48,674 | 0.91  | 0.89     | 0.70     | 5.73 |
| Gender | Female          | 24,027 | 0.90  | 0.88     | 0.69     | 5.73 |
|        | Male            | 24,644 | 0.91  | 0.90     | 0.71     | 5.72 |

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| Ethnicity             | Hispanic                         | 3,687  | 0.89  | 0.87     | 0.67     | 5.46 |
|                       | Asian                            | 810    | 0.93  | 0.92     | 0.75     | 6.19 |
|                       | Native Hawaiian/Pacific Islander | 66     | 0.90  | 0.88     | 0.73     | 5.31 |
|                       | Black/African American           | 4,989  | 0.89  | 0.86     | 0.67     | 5.42 |
|                       | American Indian                  | 54     | 0.92  | 0.91     | 0.73     | 6.44 |
|                       | White                            | 36,806 | 0.90  | 0.89     | 0.69     | 5.77 |
|                       | Other                            | 2,259  | 0.90  | 0.88     | 0.68     | 5.60 |
|                       | Missing                          | 3      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 48,428 | 0.91  | 0.89     | 0.70     | 5.74 |
|                       | Migrant                          | 246    | 0.88  | 0.85     | 0.72     | 5.38 |
| LEP                   | Non-LEP                          | 45,685 | 0.91  | 0.89     | 0.70     | 5.75 |
|                       | LEP                              | 2,989  | 0.89  | 0.86     | 0.68     | 5.44 |
| Economic Disadvantage | Free Lunch                       | 28,759 | 0.89  | 0.87     | 0.69     | 5.53 |
|                       | Reduced-Price Lunch              | 1,991  | 0.90  | 0.89     | 0.68     | 5.75 |
|                       | Regular Lunch                    | 17,924 | 0.90  | 0.89     | 0.66     | 5.95 |
| IEP                   | Non-IEP                          | 40,682 | 0.90  | 0.89     | 0.68     | 5.75 |
|                       | IEP                              | 7,992  | 0.90  | 0.88     | 0.76     | 5.66 |

### *Grade 5 Mathematics*

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 49,393 | 0.91  | 0.90     | 0.67     | 5.70 |
| Gender                | Female                           | 24,393 | 0.91  | 0.89     | 0.65     | 5.65 |
|                       | Male                             | 24,998 | 0.92  | 0.91     | 0.68     | 5.74 |
| Ethnicity             | Hispanic                         | 3,807  | 0.90  | 0.88     | 0.62     | 5.48 |
|                       | Asian                            | 833    | 0.93  | 0.92     | 0.68     | 6.21 |
|                       | Native Hawaiian/Pacific Islander | 74     | 0.93  | 0.92     | 0.71     | 5.73 |
|                       | Black/African American           | 5,050  | 0.89  | 0.88     | 0.61     | 5.46 |
|                       | American Indian                  | 61     | 0.90  | 0.88     | 0.59     | 5.63 |
|                       | White                            | 37,357 | 0.91  | 0.90     | 0.66     | 5.72 |
|                       | Other                            | 2,206  | 0.91  | 0.89     | 0.65     | 5.64 |
|                       | Missing                          | 5      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 49,155 | 0.91  | 0.90     | 0.67     | 5.70 |
|                       | Migrant                          | 238    | 0.90  | 0.88     | 0.57     | 5.43 |
| LEP                   | Non-LEP                          | 46,904 | 0.91  | 0.90     | 0.66     | 5.71 |
|                       | LEP                              | 2,489  | 0.90  | 0.88     | 0.67     | 5.61 |
| Economic Disadvantage | Free Lunch                       | 28,922 | 0.90  | 0.89     | 0.64     | 5.52 |
|                       | Reduced-Price Lunch              | 1,954  | 0.90  | 0.89     | 0.64     | 5.71 |
|                       | Regular Lunch                    | 18,517 | 0.91  | 0.90     | 0.64     | 5.89 |
| IEP                   | Non-IEP                          | 41,758 | 0.91  | 0.90     | 0.65     | 5.73 |
|                       | IEP                              | 7,635  | 0.90  | 0.89     | 0.71     | 5.58 |

**Grade 6 Mathematics**

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 49,434 | 0.91  | 0.89     | 0.67     | 5.46 |
| Gender                | Female                           | 24,591 | 0.90  | 0.89     | 0.67     | 5.48 |
|                       | Male                             | 24,841 | 0.91  | 0.90     | 0.68     | 5.44 |
| Ethnicity             | Hispanic                         | 3,584  | 0.89  | 0.87     | 0.68     | 5.33 |
|                       | Asian                            | 840    | 0.93  | 0.92     | 0.69     | 5.84 |
|                       | Native Hawaiian/Pacific Islander | 71     | 0.89  | 0.88     | 0.66     | 5.24 |
|                       | Black/African American           | 5,045  | 0.87  | 0.84     | 0.69     | 5.22 |
|                       | American Indian                  | 61     | 0.94  | 0.93     | 0.76     | 5.64 |
|                       | White                            | 37,637 | 0.91  | 0.89     | 0.65     | 5.48 |
|                       | Other                            | 2,191  | 0.90  | 0.88     | 0.68     | 5.41 |
|                       | Missing                          | 5      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 49,229 | 0.91  | 0.89     | 0.67     | 5.46 |
|                       | Migrant                          | 205    | 0.87  | 0.85     | 0.68     | 5.35 |
| LEP                   | Non-LEP                          | 47,368 | 0.91  | 0.89     | 0.67     | 5.46 |
|                       | LEP                              | 2,066  | 0.90  | 0.87     | 0.73     | 5.39 |
| Economic Disadvantage | Free Lunch                       | 28,433 | 0.89  | 0.87     | 0.67     | 5.32 |
|                       | Reduced-Price Lunch              | 2,082  | 0.90  | 0.88     | 0.65     | 5.37 |
|                       | Regular Lunch                    | 18,919 | 0.91  | 0.89     | 0.62     | 5.60 |
| IEP                   | Non-IEP                          | 42,859 | 0.90  | 0.89     | 0.64     | 5.47 |
|                       | IEP                              | 6,575  | 0.89  | 0.86     | 0.75     | 5.33 |

**Grade 7 Mathematics**

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 48,425 | 0.90  | 0.89     | 0.63     | 5.52 |
| Gender                | Female                           | 23,712 | 0.90  | 0.88     | 0.61     | 5.54 |
|                       | Male                             | 24,713 | 0.91  | 0.89     | 0.65     | 5.48 |
| Ethnicity             | Hispanic                         | 3,480  | 0.88  | 0.86     | 0.60     | 5.33 |
|                       | Asian                            | 853    | 0.92  | 0.91     | 0.69     | 6.24 |
|                       | Native Hawaiian/Pacific Islander | 50     | 0.89  | 0.87     | 0.62     | 5.54 |
|                       | Black/African American           | 4,719  | 0.87  | 0.84     | 0.62     | 5.33 |
|                       | American Indian                  | 69     | 0.90  | 0.89     | 0.56     | 5.70 |
|                       | White                            | 37,295 | 0.90  | 0.89     | 0.61     | 5.51 |
|                       | Other                            | 1,957  | 0.89  | 0.88     | 0.61     | 5.39 |
|                       | Missing                          | 2      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 48,236 | 0.90  | 0.89     | 0.63     | 5.52 |
|                       | Migrant                          | 189    | 0.82  | 0.78     | 0.57     | 5.29 |
| LEP                   | Non-LEP                          | 46,434 | 0.90  | 0.89     | 0.63     | 5.51 |
|                       | LEP                              | 1,991  | 0.90  | 0.87     | 0.69     | 5.53 |
| Economic Disadvantage | Free Lunch                       | 27,081 | 0.88  | 0.86     | 0.60     | 5.37 |
|                       | Reduced-Price Lunch              | 2,033  | 0.89  | 0.87     | 0.61     | 5.50 |
|                       | Regular Lunch                    | 19,311 | 0.90  | 0.89     | 0.61     | 5.62 |

|     | Test Group | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----|------------|--------|-------|----------|----------|------|
| IEP | Non-IEP    | 42,661 | 0.90  | 0.88     | 0.61     | 5.52 |
|     | IEP        | 5,764  | 0.86  | 0.83     | 0.65     | 5.37 |

***Grade 8 Mathematics***

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 47,020 | 0.90  | 0.89     | 0.71     | 5.49 |
| Gender                | Female                           | 23,224 | 0.90  | 0.88     | 0.70     | 5.49 |
|                       | Male                             | 23,796 | 0.91  | 0.89     | 0.72     | 5.48 |
| Ethnicity             | Hispanic                         | 3,105  | 0.89  | 0.87     | 0.68     | 5.36 |
|                       | Asian                            | 854    | 0.93  | 0.92     | 0.73     | 6.04 |
|                       | Native Hawaiian/Pacific Islander | 63     | 0.89  | 0.87     | 0.61     | 5.14 |
|                       | Black/African American           | 4,660  | 0.88  | 0.85     | 0.68     | 5.29 |
|                       | American Indian                  | 52     | 0.90  | 0.88     | 0.74     | 5.42 |
|                       | White                            | 36,521 | 0.90  | 0.88     | 0.70     | 5.48 |
|                       | Other                            | 1,762  | 0.90  | 0.87     | 0.70     | 5.46 |
|                       | Missing                          | 3      | --    | --       | --       | --   |
| Migrant               | Non-Migrant                      | 46,855 | 0.90  | 0.89     | 0.71     | 5.49 |
|                       | Migrant                          | 165    | 0.84  | 0.81     | 0.59     | 5.18 |
| LEP                   | Non-LEP                          | 45,127 | 0.90  | 0.88     | 0.71     | 5.49 |
|                       | LEP                              | 1,893  | 0.89  | 0.87     | 0.70     | 5.45 |
| Economic Disadvantage | Free Lunch                       | 25,584 | 0.89  | 0.86     | 0.68     | 5.30 |
|                       | Reduced-Price Lunch              | 1,923  | 0.90  | 0.88     | 0.68     | 5.51 |
|                       | Regular Lunch                    | 19,513 | 0.90  | 0.89     | 0.68     | 5.63 |
| IEP                   | Non-IEP                          | 41,807 | 0.90  | 0.88     | 0.69     | 5.50 |
|                       | IEP                              | 5,213  | 0.87  | 0.83     | 0.71     | 5.28 |

***Grade 4 Science, operational set #1***

|           | Test Group                       | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------|----------------------------------|--------|-------|----------|----------|----------|------|
| All       | Students Tested                  | 24,318 | 0.74  | 0.68     | 0.30     | 0.31     | 6.45 |
| Gender    | Female                           | 12,058 | 0.73  | 0.66     | 0.28     | 0.29     | 6.48 |
|           | Male                             | 12,259 | 0.76  | 0.70     | 0.32     | 0.33     | 6.42 |
| Ethnicity | Hispanic                         | 1,844  | 0.72  | 0.65     | 0.28     | 0.34     | 6.34 |
|           | Asian                            | 388    | 0.76  | 0.72     | 0.35     | 0.29     | 6.67 |
|           | Native Hawaiian/Pacific Islander | 34     | 0.67  | 0.58     | 0.36     | 0.11     | 6.40 |
|           | Black/African American           | 2,470  | 0.74  | 0.66     | 0.27     | 0.38     | 6.33 |
|           | American Indian                  | 26     | 0.57  | 0.49     | -0.55    | -0.38    | 6.20 |
|           | White                            | 18,378 | 0.72  | 0.66     | 0.29     | 0.28     | 6.46 |
|           | Other                            | 1,177  | 0.73  | 0.66     | 0.30     | 0.29     | 6.35 |
|           | Missing                          | 1      | --    | --       | --       | --       | --   |
| Migrant   | Non-Migrant                      | 24,187 | 0.74  | 0.68     | 0.30     | 0.31     | 6.45 |
|           | Migrant                          | 131    | 0.71  | 0.63     | 0.26     | 0.43     | 6.39 |

|                       | Test Group          | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|---------------------|--------|-------|----------|----------|----------|------|
| LEP                   | Non-LEP             | 22,869 | 0.74  | 0.68     | 0.30     | 0.31     | 6.46 |
|                       | LEP                 | 1,449  | 0.70  | 0.62     | 0.24     | 0.33     | 6.33 |
| Economic Disadvantage | Free Lunch          | 14,380 | 0.73  | 0.66     | 0.27     | 0.33     | 6.37 |
|                       | Reduced-Price Lunch | 974    | 0.72  | 0.66     | 0.37     | 0.27     | 6.45 |
|                       | Regular Lunch       | 8,964  | 0.70  | 0.64     | 0.31     | 0.23     | 6.56 |
| IEP                   | Non-IEP             | 20,314 | 0.73  | 0.66     | 0.30     | 0.28     | 6.43 |
|                       | IEP                 | 4,004  | 0.78  | 0.72     | 0.30     | 0.41     | 6.47 |

***Grade 4 Science, operational set #2***

|                       | Test Group                       | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|----------|------|
| All                   | Students Tested                  | 23,952 | 0.73  | 0.68     | 0.36     | 0.30     | 6.05 |
| Gender                | Female                           | 11,906 | 0.72  | 0.67     | 0.33     | 0.29     | 6.10 |
|                       | Male                             | 12,044 | 0.74  | 0.70     | 0.38     | 0.31     | 6.00 |
| Ethnicity             | Hispanic                         | 1,823  | 0.69  | 0.64     | 0.33     | 0.23     | 6.02 |
|                       | Asian                            | 413    | 0.76  | 0.71     | 0.42     | 0.34     | 6.21 |
|                       | Native Hawaiian/Pacific Islander | 29     | 0.78  | 0.73     | 0.32     | 0.11     | 5.80 |
|                       | Black/African American           | 2,470  | 0.70  | 0.66     | 0.25     | 0.17     | 6.11 |
|                       | American Indian                  | 28     | 0.80  | 0.76     | 0.25     | -0.04    | 6.40 |
|                       | White                            | 18,118 | 0.72  | 0.66     | 0.36     | 0.31     | 6.02 |
|                       | Other                            | 1,069  | 0.73  | 0.67     | 0.36     | 0.35     | 6.16 |
|                       | Missing                          | 2      | 0.94  | 0.88     | 1.00     | 0.89     | 6.44 |
| Migrant               | Non-Migrant                      | 23,838 | 0.73  | 0.68     | 0.36     | 0.30     | 6.05 |
|                       | Migrant                          | 114    | 0.66  | 0.61     | 0.24     | 0.23     | 6.14 |
| LEP                   | Non-LEP                          | 22,442 | 0.73  | 0.68     | 0.36     | 0.31     | 6.05 |
|                       | LEP                              | 1,510  | 0.67  | 0.63     | 0.28     | 0.19     | 6.05 |
| Economic Disadvantage | Free Lunch                       | 14,082 | 0.71  | 0.66     | 0.30     | 0.24     | 6.04 |
|                       | Reduced-Price Lunch              | 1,008  | 0.71  | 0.65     | 0.36     | 0.31     | 6.04 |
|                       | Regular Lunch                    | 8,862  | 0.71  | 0.65     | 0.40     | 0.33     | 6.05 |
| IEP                   | Non-IEP                          | 20,151 | 0.72  | 0.67     | 0.36     | 0.30     | 6.04 |
|                       | IEP                              | 3,801  | 0.76  | 0.72     | 0.33     | 0.26     | 6.04 |

***Grade 7 Science, operational set #1***

|           | Test Group      | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------|-----------------|--------|-------|----------|----------|----------|------|
| All       | Students Tested | 24,091 | 0.78  | 0.75     | 0.19     | 0.31     | 6.05 |
| Gender    | Female          | 11,831 | 0.76  | 0.73     | 0.17     | 0.29     | 6.07 |
|           | Male            | 12,260 | 0.79  | 0.77     | 0.21     | 0.33     | 6.02 |
| Ethnicity | Hispanic        | 1,791  | 0.75  | 0.72     | 0.13     | 0.26     | 6.13 |
|           | Asian           | 440    | 0.81  | 0.79     | 0.29     | 0.40     | 6.30 |

|                       | Test Group                       | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|----------|------|
|                       | Native Hawaiian/Pacific Islander | 23     | 0.73  | 0.63     | -.33     | 0.43     | 5.89 |
|                       | Black/African American           | 2,322  | 0.71  | 0.67     | 0.12     | 0.26     | 6.24 |
|                       | American Indian                  | 39     | 0.80  | 0.78     | 0.09     | 0.41     | 6.15 |
|                       | White                            | 18,535 | 0.77  | 0.74     | 0.20     | 0.31     | 6.03 |
|                       | Other                            | 941    | 0.76  | 0.73     | 0.18     | 0.28     | 5.95 |
|                       | Missing                          | --     | --    | --       | --       | --       | --   |
| Migrant               | Non-Migrant                      | 23,989 | 0.78  | 0.75     | 0.19     | 0.31     | 6.06 |
|                       | Migrant                          | 102    | 0.42  | 0.41     | -.07     | 0.20     | 6.19 |
| LEP                   | Non-LEP                          | 23,003 | 0.77  | 0.75     | 0.19     | 0.32     | 6.05 |
|                       | LEP                              | 1,088  | 0.76  | 0.74     | 0.13     | 0.24     | 6.02 |
| Economic Disadvantage | Free Lunch                       | 13,496 | 0.73  | 0.71     | 0.11     | 0.27     | 6.08 |
|                       | Reduced-Price Lunch              | 998    | 0.75  | 0.73     | 0.18     | 0.31     | 6.08 |
|                       | Regular Lunch                    | 9,597  | 0.77  | 0.74     | 0.25     | 0.33     | 6.04 |
| IEP                   | Non-IEP                          | 20,934 | 0.77  | 0.74     | 0.19     | 0.31     | 6.04 |
|                       | IEP                              | 3,157  | 0.71  | 0.67     | 0.10     | 0.26     | 6.04 |

***Grade 7 Science, operational set #2***

|                       | Test Group                       | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|----------|------|
| All                   | Students Tested                  | 23,141 | 0.75  | 0.71     | 0.16     | 0.10     | 5.97 |
| Gender                | Female                           | 11,500 | 0.74  | 0.70     | 0.13     | 0.09     | 6.06 |
|                       | Male                             | 11,640 | 0.77  | 0.73     | 0.18     | 0.12     | 5.88 |
| Ethnicity             | Hispanic                         | 1,629  | 0.71  | 0.68     | 0.03     | -.01     | 5.91 |
|                       | Asian                            | 406    | 0.79  | 0.75     | 0.17     | 0.05     | 6.38 |
|                       | Native Hawaiian/Pacific Islander | 24     | 0.67  | 0.59     | -.22     | -.22     | 5.96 |
|                       | Black/African American           | 2,202  | 0.69  | 0.66     | 0.10     | 0.04     | 5.88 |
|                       | American Indian                  | 32     | 0.78  | 0.74     | -.02     | 0.14     | 6.09 |
|                       | White                            | 17,869 | 0.75  | 0.71     | 0.16     | 0.12     | 5.98 |
|                       | Other                            | 976    | 0.75  | 0.70     | 0.16     | 0.03     | 6.02 |
|                       | Missing                          | 3      | --    | --       | --       | --       | --   |
| Migrant               | Non-Migrant                      | 23,056 | 0.75  | 0.71     | 0.16     | 0.10     | 5.98 |
|                       | Migrant                          | 85     | 0.51  | 0.54     | -.02     | -.05     | 5.79 |
| LEP                   | Non-LEP                          | 22,282 | 0.75  | 0.71     | 0.16     | 0.11     | 5.98 |
|                       | LEP                              | 859    | 0.76  | 0.74     | 0.10     | 0.04     | 5.87 |
| Economic Disadvantage | Free Lunch                       | 12,761 | 0.72  | 0.68     | 0.12     | 0.06     | 5.90 |
|                       | Reduced-Price Lunch              | 989    | 0.73  | 0.68     | 0.09     | 0.03     | 5.94 |
|                       | Regular Lunch                    | 9,391  | 0.75  | 0.70     | 0.15     | 0.12     | 6.06 |
| IEP                   | Non-IEP                          | 20,791 | 0.75  | 0.71     | 0.16     | 0.10     | 5.99 |
|                       | IEP                              | 2,350  | 0.72  | 0.69     | 0.11     | 0.06     | 5.72 |

**Grade 11 Science, operational set #1**

|                       | Test Group                       | N      | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|----------|------|
| All                   | Students Tested                  | 10,975 | 0.82  | 0.79     | 0.41     | 0.20     | 5.81 |
| Gender                | Female                           | 5,465  | 0.81  | 0.78     | 0.41     | 0.17     | 5.83 |
|                       | Male                             | 5,510  | 0.83  | 0.80     | 0.42     | 0.23     | 5.74 |
| Ethnicity             | Hispanic                         | 646    | 0.78  | 0.74     | 0.33     | 0.18     | 5.89 |
|                       | Asian                            | 234    | 0.87  | 0.84     | 0.51     | 0.27     | 6.05 |
|                       | Native Hawaiian/Pacific Islander | 17     | 0.82  | 0.78     | 0.22     | 0.37     | 6.00 |
|                       | Black/African American           | 1,019  | 0.75  | 0.71     | 0.23     | 0.17     | 5.93 |
|                       | American Indian                  | 12     | 0.66  | 0.59     | 0.35     | -.70     | 5.90 |
|                       | White                            | 8,754  | 0.82  | 0.78     | 0.41     | 0.20     | 5.76 |
|                       | Other                            | 292    | 0.82  | 0.78     | 0.37     | 0.10     | 5.89 |
|                       | Missing                          | 1      | --    | --       | --       | --       | --   |
| Migrant               | Non-Migrant                      | 10,955 | 0.82  | 0.79     | 0.41     | 0.20     | 5.81 |
|                       | Migrant                          | 20     | 0.70  | 0.68     | 0.49     | -.10     | 5.71 |
| LEP                   | Non-LEP                          | 10,593 | 0.82  | 0.78     | 0.41     | 0.20     | 5.79 |
|                       | LEP                              | 382    | 0.63  | 0.61     | 0.10     | 0.06     | 5.98 |
| Economic Disadvantage | Free Lunch                       | 5,338  | 0.79  | 0.75     | 0.33     | 0.16     | 5.84 |
|                       | Reduced-Price Lunch              | 456    | 0.79  | 0.74     | 0.35     | 0.10     | 5.71 |
|                       | Regular Lunch                    | 5,181  | 0.83  | 0.79     | 0.43     | 0.21     | 5.74 |
| IEP                   | Non-IEP                          | 9,458  | 0.81  | 0.77     | 0.41     | 0.18     | 5.73 |
|                       | IEP                              | 1,517  | 0.70  | 0.66     | 0.18     | 0.10     | 5.94 |

**Grade 11 Science, operational set #2**

|           | Test Group                       | N     | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------|----------------------------------|-------|-------|----------|----------|----------|------|
| All       | Students Tested                  | 9,867 | 0.80  | 0.71     | 0.44     | 0.32     | 5.71 |
| Gender    | Female                           | 5,027 | 0.79  | 0.69     | 0.42     | 0.31     | 5.70 |
|           | Male                             | 4,840 | 0.82  | 0.74     | 0.46     | 0.35     | 5.67 |
| Ethnicity | Hispanic                         | 601   | 0.79  | 0.69     | 0.41     | 0.34     | 5.66 |
|           | Asian                            | 207   | 0.85  | 0.78     | 0.47     | 0.43     | 5.80 |
|           | Native Hawaiian/Pacific Islander | 12    | 0.77  | 0.59     | 0.56     | 0.55     | 6.45 |
|           | Black/African American           | 939   | 0.74  | 0.63     | 0.35     | 0.19     | 5.83 |
|           | American Indian                  | 14    | 0.82  | 0.73     | 0.16     | 0.50     | 5.93 |
|           | White                            | 7,810 | 0.80  | 0.71     | 0.43     | 0.32     | 5.68 |
|           | Other                            | 283   | 0.78  | 0.69     | 0.34     | 0.28     | 5.70 |
|           | Missing                          | 1     | .     | .        | .        | .        | .    |
| Migrant   | Non-Migrant                      | 9,839 | 0.80  | 0.71     | 0.44     | 0.32     | 5.71 |
|           | Migrant                          | 28    | 0.67  | 0.61     | 0.07     | -.31     | 6.28 |
| LEP       | Non-LEP                          | 9,601 | 0.80  | 0.71     | 0.44     | 0.32     | 5.69 |
|           | LEP                              | 266   | 0.71  | 0.59     | 0.24     | 0.23     | 6.04 |
| Economic  | Free Lunch                       | 4,579 | 0.77  | 0.67     | 0.37     | 0.25     | 5.77 |

|              | Test Group          | N     | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|--------------|---------------------|-------|-------|----------|----------|----------|------|
| Disadvantage | Reduced-Price Lunch | 409   | 0.79  | 0.70     | 0.39     | 0.24     | 5.63 |
|              | Regular Lunch       | 4,879 | 0.81  | 0.72     | 0.45     | 0.34     | 5.63 |
| IEP          | Non-IEP             | 9,302 | 0.80  | 0.71     | 0.43     | 0.31     | 5.68 |
|              | IEP                 | 565   | 0.74  | 0.64     | 0.28     | 0.19     | 5.80 |

***Grade 11 Science, operational set #3***

|                       | Test Group                       | N     | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|-------|-------|----------|----------|----------|------|
| All                   | Students Tested                  | 9,788 | 0.83  | 0.79     | 0.38     | 0.23     | 5.75 |
| Gender                | Female                           | 4,991 | 0.82  | 0.78     | 0.36     | 0.24     | 5.80 |
|                       | Male                             | 4,796 | 0.84  | 0.80     | 0.41     | 0.22     | 5.67 |
| Ethnicity             | Hispanic                         | 545   | 0.82  | 0.77     | 0.38     | 0.21     | 5.71 |
|                       | Asian                            | 211   | 0.86  | 0.82     | 0.47     | 0.33     | 5.92 |
|                       | Native Hawaiian/Pacific Islander | 8     | 0.78  | 0.57     | 0.53     | 0.70     | 6.18 |
|                       | Black/African American           | 901   | 0.79  | 0.73     | 0.29     | 0.12     | 5.81 |
|                       | American Indian                  | 10    | 0.83  | 0.70     | 0.65     | 0.26     | 4.93 |
|                       | White                            | 7,839 | 0.83  | 0.78     | 0.37     | 0.23     | 5.71 |
|                       | Other                            | 271   | 0.84  | 0.80     | 0.43     | 0.14     | 5.82 |
|                       | Missing                          | 3     | --    | --       | --       | --       | --   |
| Migrant               | Non-Migrant                      | 9,765 | 0.83  | 0.79     | 0.38     | 0.23     | 5.75 |
|                       | Migrant                          | 23    | 0.81  | 0.80     | -0.37    | -0.04    | 5.94 |
| LEP                   | Non-LEP                          | 9,540 | 0.83  | 0.79     | 0.38     | 0.23     | 5.73 |
|                       | LEP                              | 248   | 0.71  | 0.64     | 0.20     | 0.11     | 6.03 |
| Economic Disadvantage | Free Lunch                       | 4,623 | 0.80  | 0.76     | 0.33     | 0.13     | 5.77 |
|                       | Reduced-Price Lunch              | 471   | 0.82  | 0.77     | 0.40     | 0.27     | 5.70 |
|                       | Regular Lunch                    | 4,694 | 0.84  | 0.79     | 0.38     | 0.28     | 5.71 |
| IEP                   | Non-IEP                          | 9,237 | 0.83  | 0.79     | 0.38     | 0.23     | 5.72 |
|                       | IEP                              | 551   | 0.72  | 0.66     | 0.25     | 0.00     | 5.95 |

***Grade 11 Science, operational set #4***

|           | Test Group                       | N     | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------|----------------------------------|-------|-------|----------|----------|----------|------|
| All       | Students Tested                  | 9,691 | 0.81  | 0.74     | 0.46     | 0.25     | 5.62 |
| Gender    | Female                           | 5,108 | 0.80  | 0.72     | 0.45     | 0.25     | 5.60 |
|           | Male                             | 4,582 | 0.82  | 0.75     | 0.47     | 0.25     | 5.60 |
| Ethnicity | Hispanic                         | 610   | 0.79  | 0.73     | 0.43     | 0.23     | 5.58 |
|           | Asian                            | 199   | 0.86  | 0.80     | 0.49     | 0.39     | 5.83 |
|           | Native Hawaiian/Pacific Islander | 11    | 0.81  | 0.70     | 0.64     | -0.21    | 6.28 |
|           | Black/African American           | 855   | 0.73  | 0.64     | 0.41     | 0.11     | 5.67 |

|                       | Test Group          | N     | Alpha | MC Alpha | MS Alpha | CR Alpha | SEM  |
|-----------------------|---------------------|-------|-------|----------|----------|----------|------|
|                       | American Indian     | 13    | 0.82  | 0.81     | -.03     | -.30     | 5.68 |
|                       | White               | 7,743 | 0.80  | 0.73     | 0.45     | 0.26     | 5.59 |
|                       | Other               | 259   | 0.78  | 0.70     | 0.41     | 0.15     | 5.68 |
|                       | Missing             | 1     | --    | --       | --       | --       | --   |
| Migrant               | Non-Migrant         | 9,667 | 0.81  | 0.74     | 0.46     | 0.25     | 5.61 |
|                       | Migrant             | 24    | 0.69  | 0.66     | 0.28     | -.10     | 5.58 |
| LEP                   | Non-LEP             | 9,426 | 0.80  | 0.73     | 0.45     | 0.25     | 5.60 |
|                       | LEP                 | 265   | 0.72  | 0.63     | 0.46     | 0.04     | 5.66 |
| Economic Disadvantage | Free Lunch          | 4,562 | 0.78  | 0.70     | 0.45     | 0.17     | 5.63 |
|                       | Reduced-Price Lunch | 436   | 0.78  | 0.71     | 0.43     | 0.23     | 5.59 |
|                       | Regular Lunch       | 4,693 | 0.81  | 0.74     | 0.43     | 0.29     | 5.55 |
| IEP                   | Non-IEP             | 9,107 | 0.80  | 0.73     | 0.45     | 0.26     | 5.60 |
|                       | IEP                 | 584   | 0.72  | 0.65     | 0.33     | -.05     | 5.63 |

### *Grade 5 Social Studies*

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
| All                   | Students Tested                  | 50,535 | 0.90  | 0.88     | 0.67     | 5.55 |
| Gender                | Female                           | 24,933 | 0.89  | 0.87     | 0.67     | 5.65 |
|                       | Male                             | 25,600 | 0.90  | 0.89     | 0.67     | 5.43 |
| Ethnicity             | Hispanic                         | 3,911  | 0.88  | 0.86     | 0.64     | 5.36 |
|                       | Asian                            | 845    | 0.91  | 0.91     | 0.72     | 6.27 |
|                       | Native Hawaiian/Pacific Islander | 79     | 0.91  | 0.90     | 0.74     | 5.70 |
|                       | Black/African American           | 5,248  | 0.88  | 0.87     | 0.68     | 5.26 |
|                       | American Indian                  | 63     | 0.88  | 0.87     | 0.46     | 5.30 |
|                       | White                            | 38,108 | 0.89  | 0.88     | 0.65     | 5.57 |
|                       | Other                            | 2,276  | 0.89  | 0.87     | 0.65     | 5.42 |
|                       | Missing                          | 5      | 0.88  | 0.85     | 0.92     | 5.59 |
| Migrant               | Non-Migrant                      | 50,300 | 0.90  | 0.88     | 0.67     | 5.55 |
|                       | Migrant                          | 235    | 0.87  | 0.84     | 0.65     | 5.23 |
| LEP                   | Non-LEP                          | 48,027 | 0.89  | 0.88     | 0.66     | 5.55 |
|                       | LEP                              | 2,508  | 0.88  | 0.86     | 0.70     | 5.51 |
| Economic Disadvantage | Free Lunch                       | 29,653 | 0.89  | 0.87     | 0.65     | 5.35 |
|                       | Reduced-Price Lunch              | 2,010  | 0.88  | 0.87     | 0.66     | 5.54 |
|                       | Regular Lunch                    | 18,872 | 0.88  | 0.87     | 0.63     | 5.79 |
| IEP                   | Non-IEP                          | 42,820 | 0.89  | 0.87     | 0.64     | 5.61 |
|                       | IEP                              | 7,715  | 0.90  | 0.88     | 0.74     | 5.33 |

### *Grade 8 Social Studies*

|        | Test Group      | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|--------|-----------------|--------|-------|----------|----------|------|
| All    | Students Tested | 48,173 | 0.91  | 0.90     | 0.69     | 5.63 |
| Gender | Female          | 23,697 | 0.90  | 0.89     | 0.67     | 5.72 |

|                       | Test Group                       | N      | Alpha | MC Alpha | CR Alpha | SEM  |
|-----------------------|----------------------------------|--------|-------|----------|----------|------|
|                       | Male                             | 24,476 | 0.91  | 0.91     | 0.69     | 5.50 |
| Ethnicity             | Hispanic                         | 3,190  | 0.90  | 0.89     | 0.70     | 5.53 |
|                       | Asian                            | 864    | 0.92  | 0.91     | 0.77     | 6.05 |
|                       | Native Hawaiian/Pacific Islander | 65     | 0.91  | 0.90     | 0.74     | 5.70 |
|                       | Black/African American           | 4,853  | 0.89  | 0.88     | 0.72     | 5.49 |
|                       | American Indian                  | 55     | 0.92  | 0.92     | 0.73     | 5.37 |
|                       | White                            | 37,317 | 0.90  | 0.90     | 0.67     | 5.63 |
|                       | Other                            | 1,826  | 0.90  | 0.89     | 0.65     | 5.54 |
|                       | Missing                          | 3      | 0.63  | 0.68     | 0.00     | 4.40 |
| Migrant               | Non-Migrant                      | 48,010 | 0.91  | 0.90     | 0.69     | 5.63 |
|                       | Migrant                          | 163    | 0.88  | 0.87     | 0.74     | 5.41 |
| LEP                   | Non-LEP                          | 46,260 | 0.91  | 0.90     | 0.68     | 5.63 |
|                       | LEP                              | 1,913  | 0.90  | 0.88     | 0.77     | 5.58 |
| Economic Disadvantage | Free Lunch                       | 26,319 | 0.90  | 0.89     | 0.68     | 5.48 |
|                       | Reduced-Price Lunch              | 1,967  | 0.90  | 0.89     | 0.66     | 5.55 |
|                       | Regular Lunch                    | 19,887 | 0.90  | 0.89     | 0.66     | 5.77 |
| IEP                   | Non-IEP                          | 42,882 | 0.90  | 0.90     | 0.66     | 5.66 |
|                       | IEP                              | 5,291  | 0.89  | 0.88     | 0.71     | 5.35 |

## Subdomain (Reporting Category)

### Grade 3 Reading

|                       | Test Group                       | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------------------|----------------------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| All                   | Students Tested                  | 45,756 | 0.87  | 0.59      | 0.65                | 0.68                 | 0.59                       |
| Gender                | Female                           | 22,291 | 0.86  | 0.58      | 0.65                | 0.67                 | 0.58                       |
|                       | Male                             | 23,462 | 0.87  | 0.60      | 0.66                | 0.68                 | 0.61                       |
| Ethnicity             | Hispanic                         | 3,506  | 0.85  | 0.57      | 0.62                | 0.64                 | 0.56                       |
|                       | Asian                            | 861    | 0.88  | 0.59      | 0.70                | 0.71                 | 0.56                       |
|                       | Native Hawaiian/Pacific Islander | 63     | 0.82  | 0.52      | 0.64                | 0.58                 | 0.40                       |
|                       | Black/African American           | 4,547  | 0.87  | 0.62      | 0.64                | 0.65                 | 0.62                       |
|                       | American Indian                  | 51     | 0.87  | 0.57      | 0.62                | 0.68                 | 0.60                       |
|                       | White                            | 34,580 | 0.86  | 0.57      | 0.63                | 0.67                 | 0.57                       |
|                       | Other                            | 2,144  | 0.87  | 0.61      | 0.66                | 0.66                 | 0.59                       |
|                       | Missing                          | 4      | --    | --        | --                  | --                   | --                         |
| Migrant               | Non-Migrant                      | 45,523 | 0.87  | 0.59      | 0.65                | 0.68                 | 0.59                       |
|                       | Migrant                          | 233    | 0.84  | 0.60      | 0.54                | 0.57                 | 0.59                       |
| LEP                   | Non-LEP                          | 42,640 | 0.87  | 0.59      | 0.65                | 0.68                 | 0.60                       |
|                       | LEP                              | 3,116  | 0.84  | 0.57      | 0.60                | 0.61                 | 0.54                       |
| Economic Disadvantage | Free Lunch                       | 27,088 | 0.86  | 0.60      | 0.64                | 0.66                 | 0.60                       |
|                       | Reduced-Price Lunch              | 1,896  | 0.86  | 0.56      | 0.62                | 0.65                 | 0.55                       |
|                       | Regular Lunch                    | 16,772 | 0.85  | 0.53      | 0.62                | 0.65                 | 0.53                       |
| IEP                   | Non-IEP                          | 37,265 | 0.86  | 0.56      | 0.64                | 0.66                 | 0.56                       |
|                       | IEP                              | 8,491  | 0.88  | 0.63      | 0.65                | 0.68                 | 0.63                       |

### Grade 4 Reading

|           | Test Group                       | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------|----------------------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| All       | Students Tested                  | 47,524 | 0.84  | 0.62      | 0.48                | 0.58                 | 0.54                       |
| Gender    | Female                           | 23,746 | 0.84  | 0.62      | 0.47                | 0.60                 | 0.52                       |
|           | Male                             | 23,775 | 0.84  | 0.63      | 0.49                | 0.57                 | 0.56                       |
| Ethnicity | Hispanic                         | 3,608  | 0.82  | 0.59      | 0.46                | 0.54                 | 0.52                       |
|           | Asian                            | 794    | 0.85  | 0.65      | 0.56                | 0.61                 | 0.53                       |
|           | Native Hawaiian/Pacific Islander | 61     | 0.80  | 0.59      | 0.37                | 0.40                 | 0.55                       |
|           | Black/African American           | 4,621  | 0.83  | 0.61      | 0.45                | 0.56                 | 0.54                       |
|           | American Indian                  | 51     | 0.80  | 0.63      | 0.44                | 0.59                 | 0.34                       |
|           | White                            | 36,183 | 0.83  | 0.61      | 0.47                | 0.58                 | 0.52                       |
|           | Other                            | 2,203  | 0.83  | 0.62      | 0.47                | 0.57                 | 0.52                       |
|           | Missing                          | 3      | --    | --        | --                  | --                   | --                         |
| Migrant   | Non-Migrant                      | 47,286 | 0.84  | 0.62      | 0.48                | 0.58                 | 0.54                       |
|           | Migrant                          | 238    | 0.77  | 0.55      | 0.46                | 0.48                 | 0.46                       |
| LEP       | Non-LEP                          | 44,662 | 0.84  | 0.62      | 0.48                | 0.58                 | 0.53                       |
|           | LEP                              | 2,862  | 0.80  | 0.56      | 0.40                | 0.51                 | 0.49                       |
| Economic  | Free Lunch                       | 27,812 | 0.82  | 0.61      | 0.45                | 0.55                 | 0.53                       |

|              | Test Group          | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|--------------|---------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| Disadvantage | Reduced-Price Lunch | 1,949  | 0.82  | 0.59      | 0.45                | 0.56                 | 0.48                       |
|              | Regular Lunch       | 17,763 | 0.82  | 0.59      | 0.47                | 0.58                 | 0.50                       |
| IEP          | Non-IEP             | 39,964 | 0.83  | 0.60      | 0.47                | 0.58                 | 0.50                       |
|              | IEP                 | 7,560  | 0.86  | 0.66      | 0.48                | 0.58                 | 0.61                       |

### *Grade 5 Reading*

|                       | Test Group                       | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------------------|----------------------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| All                   | Students Tested                  | 50,407 | 0.84  | 0.62      | 0.54                | 0.56                 | 0.60                       |
| Gender                | Female                           | 24,914 | 0.84  | 0.60      | 0.53                | 0.54                 | 0.60                       |
|                       | Male                             | 25,491 | 0.85  | 0.64      | 0.56                | 0.58                 | 0.61                       |
| Ethnicity             | Hispanic                         | 3,900  | 0.83  | 0.61      | 0.53                | 0.51                 | 0.55                       |
|                       | Asian                            | 849    | 0.87  | 0.67      | 0.59                | 0.58                 | 0.67                       |
|                       | Native Hawaiian/Pacific Islander | 77     | 0.87  | 0.77      | 0.52                | 0.60                 | 0.62                       |
|                       | Black/African American           | 5,196  | 0.84  | 0.65      | 0.51                | 0.54                 | 0.57                       |
|                       | American Indian                  | 62     | 0.84  | 0.55      | 0.54                | 0.54                 | 0.66                       |
|                       | White                            | 38,038 | 0.84  | 0.60      | 0.53                | 0.55                 | 0.60                       |
|                       | Other                            | 2,280  | 0.84  | 0.62      | 0.53                | 0.55                 | 0.58                       |
|                       | Missing                          | 5      | --    | --        | --                  | --                   | --                         |
| Migrant               | Non-Migrant                      | 50,172 | 0.84  | 0.62      | 0.54                | 0.56                 | 0.60                       |
|                       | Migrant                          | 235    | 0.82  | 0.60      | 0.47                | 0.55                 | 0.51                       |
| LEP                   | Non-LEP                          | 47,879 | 0.84  | 0.62      | 0.54                | 0.56                 | 0.60                       |
|                       | LEP                              | 2,528  | 0.83  | 0.65      | 0.51                | 0.52                 | 0.51                       |
| Economic Disadvantage | Free Lunch                       | 29,584 | 0.83  | 0.62      | 0.52                | 0.54                 | 0.57                       |
|                       | Reduced-Price Lunch              | 2,007  | 0.82  | 0.59      | 0.49                | 0.53                 | 0.57                       |
|                       | Regular Lunch                    | 18,816 | 0.82  | 0.56      | 0.53                | 0.53                 | 0.59                       |
| IEP                   | Non-IEP                          | 42,679 | 0.83  | 0.58      | 0.52                | 0.54                 | 0.59                       |
|                       | IEP                              | 7,728  | 0.86  | 0.67      | 0.57                | 0.59                 | 0.61                       |

### *Grade 6 Reading*

|           | Test Group                       | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------|----------------------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| All       | Students Tested                  | 50,100 | 0.88  | 0.67      | 0.64                | 0.67                 | 0.62                       |
| Gender    | Female                           | 24,835 | 0.87  | 0.66      | 0.63                | 0.65                 | 0.60                       |
|           | Male                             | 25,263 | 0.88  | 0.69      | 0.64                | 0.68                 | 0.63                       |
| Ethnicity | Hispanic                         | 3,676  | 0.87  | 0.65      | 0.64                | 0.65                 | 0.61                       |
|           | Asian                            | 845    | 0.89  | 0.69      | 0.66                | 0.69                 | 0.67                       |
|           | Native Hawaiian/Pacific Islander | 72     | 0.88  | 0.61      | 0.65                | 0.72                 | 0.60                       |
|           | Black/African American           | 5,158  | 0.87  | 0.62      | 0.64                | 0.67                 | 0.59                       |
|           | American Indian                  | 61     | 0.88  | 0.65      | 0.70                | 0.64                 | 0.59                       |
|           | White                            | 38,060 | 0.87  | 0.67      | 0.63                | 0.65                 | 0.60                       |
|           | Other                            | 2,223  | 0.87  | 0.64      | 0.64                | 0.66                 | 0.62                       |

|                       | Test Group          | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------------------|---------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
|                       | Missing             | 5      | --    | --        | --                  | --                   | --                         |
| Migrant               | Non-Migrant         | 49,888 | 0.88  | 0.67      | 0.64                | 0.67                 | 0.62                       |
|                       | Migrant             | 212    | 0.87  | 0.63      | 0.64                | 0.68                 | 0.54                       |
| LEP                   | Non-LEP             | 47,989 | 0.88  | 0.67      | 0.64                | 0.66                 | 0.61                       |
|                       | LEP                 | 2,111  | 0.87  | 0.62      | 0.65                | 0.67                 | 0.59                       |
| Economic Disadvantage | Free Lunch          | 28,874 | 0.87  | 0.65      | 0.63                | 0.66                 | 0.60                       |
|                       | Reduced-Price Lunch | 2,121  | 0.87  | 0.65      | 0.63                | 0.64                 | 0.59                       |
|                       | Regular Lunch       | 19,105 | 0.86  | 0.66      | 0.60                | 0.63                 | 0.58                       |
| IEP                   | Non-IEP             | 43,431 | 0.87  | 0.66      | 0.62                | 0.65                 | 0.60                       |
|                       | IEP                 | 6,669  | 0.87  | 0.64      | 0.61                | 0.68                 | 0.62                       |

### *Grade 7 Reading*

|                       | Test Group                       | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------------------|----------------------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| All                   | Students Tested                  | 48,499 | 0.86  | 0.62      | 0.66                | 0.49                 | 0.62                       |
| Gender                | Female                           | 23,785 | 0.86  | 0.62      | 0.66                | 0.48                 | 0.61                       |
|                       | Male                             | 24,714 | 0.86  | 0.62      | 0.66                | 0.49                 | 0.64                       |
| Ethnicity             | Hispanic                         | 3,503  | 0.85  | 0.62      | 0.65                | 0.47                 | 0.60                       |
|                       | Asian                            | 856    | 0.88  | 0.68      | 0.70                | 0.51                 | 0.65                       |
|                       | Native Hawaiian/Pacific Islander | 46     | 0.85  | 0.57      | 0.66                | 0.47                 | 0.58                       |
|                       | Black/African American           | 4,721  | 0.85  | 0.62      | 0.64                | 0.49                 | 0.59                       |
|                       | American Indian                  | 71     | 0.88  | 0.71      | 0.67                | 0.48                 | 0.67                       |
|                       | White                            | 37,337 | 0.85  | 0.60      | 0.65                | 0.48                 | 0.61                       |
|                       | Other                            | 1,963  | 0.85  | 0.61      | 0.64                | 0.47                 | 0.60                       |
|                       | Missing                          | 2      | --    | --        | --                  | --                   | --                         |
| Migrant               | Non-Migrant                      | 48,304 | 0.86  | 0.62      | 0.66                | 0.49                 | 0.62                       |
|                       | Migrant                          | 195    | 0.81  | 0.49      | 0.50                | 0.50                 | 0.51                       |
| LEP                   | Non-LEP                          | 46,511 | 0.86  | 0.61      | 0.66                | 0.48                 | 0.62                       |
|                       | LEP                              | 1,988  | 0.86  | 0.65      | 0.65                | 0.51                 | 0.59                       |
| Economic Disadvantage | Free Lunch                       | 27,140 | 0.85  | 0.61      | 0.64                | 0.47                 | 0.60                       |
|                       | Reduced-Price Lunch              | 2,028  | 0.84  | 0.57      | 0.61                | 0.47                 | 0.59                       |
|                       | Regular Lunch                    | 19,331 | 0.84  | 0.57      | 0.62                | 0.45                 | 0.58                       |
| IEP                   | Non-IEP                          | 42,719 | 0.85  | 0.59      | 0.63                | 0.46                 | 0.60                       |
|                       | IEP                              | 5,780  | 0.86  | 0.62      | 0.64                | 0.49                 | 0.62                       |

### *Grade 8 Reading*

|           | Test Group      | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------|-----------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
| All       | Students Tested | 48,134 | 0.87  | 0.71      | 0.65                | 0.48                 | 0.65                       |
| Gender    | Female          | 23,712 | 0.86  | 0.69      | 0.63                | 0.47                 | 0.65                       |
|           | Male            | 24,422 | 0.87  | 0.71      | 0.65                | 0.49                 | 0.65                       |
| Ethnicity | Hispanic        | 3,198  | 0.87  | 0.70      | 0.64                | 0.43                 | 0.65                       |

|                       | Test Group                       | N      | Alpha | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-----------------------|----------------------------------|--------|-------|-----------|---------------------|----------------------|----------------------------|
|                       | Asian                            | 865    | 0.88  | 0.71      | 0.69                | 0.48                 | 0.69                       |
|                       | Native Hawaiian/Pacific Islander | 63     | 0.89  | 0.71      | 0.74                | 0.58                 | 0.66                       |
|                       | Black/African American           | 4,864  | 0.87  | 0.71      | 0.67                | 0.43                 | 0.64                       |
|                       | American Indian                  | 55     | 0.87  | 0.68      | 0.69                | 0.36                 | 0.67                       |
|                       | White                            | 37,268 | 0.87  | 0.69      | 0.63                | 0.48                 | 0.64                       |
|                       | Other                            | 1,817  | 0.86  | 0.69      | 0.63                | 0.46                 | 0.62                       |
|                       | Missing                          | 4      | 0.90  | 0.41      | 0.69                | 0.54                 | 0.80                       |
| Migrant               | Non-Migrant                      | 47,966 | 0.87  | 0.71      | 0.65                | 0.48                 | 0.65                       |
|                       | Migrant                          | 168    | 0.85  | 0.70      | 0.62                | 0.38                 | 0.60                       |
| LEP                   | Non-LEP                          | 46,208 | 0.87  | 0.70      | 0.64                | 0.48                 | 0.65                       |
|                       | LEP                              | 1,926  | 0.87  | 0.71      | 0.67                | 0.44                 | 0.62                       |
| Economic Disadvantage | Free Lunch                       | 26,291 | 0.86  | 0.70      | 0.63                | 0.44                 | 0.63                       |
|                       | Reduced-Price Lunch              | 1,967  | 0.86  | 0.69      | 0.61                | 0.47                 | 0.64                       |
|                       | Regular Lunch                    | 19,876 | 0.85  | 0.66      | 0.60                | 0.48                 | 0.61                       |
| IEP                   | Non-IEP                          | 42,835 | 0.86  | 0.68      | 0.62                | 0.47                 | 0.63                       |
|                       | IEP                              | 5,299  | 0.85  | 0.69      | 0.61                | 0.40                 | 0.60                       |

### *Grade 3 Mathematics*

|                       | Test Group                       | N      | Alpha | Operations and Algebraic Thinking | Number and Operations in Base Ten | Number and Operations - Fractions | Measurement and Data, Geometry |
|-----------------------|----------------------------------|--------|-------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| All                   | Students Tested                  | 46,542 | 0.91  | 0.72                              | 0.74                              | 0.75                              | 0.70                           |
| Gender                | Female                           | 22,682 | 0.91  | 0.72                              | 0.74                              | 0.74                              | 0.69                           |
|                       | Male                             | 23,856 | 0.91  | 0.73                              | 0.74                              | 0.76                              | 0.71                           |
| Ethnicity             | Hispanic                         | 3,567  | 0.90  | 0.72                              | 0.73                              | 0.72                              | 0.68                           |
|                       | Asian                            | 865    | 0.92  | 0.74                              | 0.78                              | 0.76                              | 0.73                           |
|                       | Native Hawaiian/Pacific Islander | 65     | 0.89  | 0.64                              | 0.78                              | 0.64                              | 0.69                           |
|                       | Black/African American           | 4,729  | 0.90  | 0.73                              | 0.72                              | 0.73                              | 0.66                           |
|                       | American Indian                  | 51     | 0.89  | 0.70                              | 0.63                              | 0.78                              | 0.66                           |
|                       | White                            | 35,061 | 0.91  | 0.71                              | 0.73                              | 0.74                              | 0.69                           |
|                       | Other                            | 2,199  | 0.90  | 0.70                              | 0.73                              | 0.75                              | 0.70                           |
| Migrant               | Non-Migrant                      | 46,309 | 0.91  | 0.72                              | 0.74                              | 0.75                              | 0.70                           |
|                       | Migrant                          | 233    | 0.88  | 0.69                              | 0.73                              | 0.67                              | 0.62                           |
| LEP                   | Non-LEP                          | 43,424 | 0.91  | 0.72                              | 0.74                              | 0.75                              | 0.70                           |
|                       | LEP                              | 3,118  | 0.90  | 0.72                              | 0.74                              | 0.72                              | 0.68                           |
| Economic Disadvantage | Free Lunch                       | 27,570 | 0.90  | 0.71                              | 0.73                              | 0.73                              | 0.68                           |
|                       | Reduced-Price Lunch              | 1,930  | 0.90  | 0.69                              | 0.72                              | 0.73                              | 0.67                           |
|                       | Regular Lunch                    | 17,042 | 0.90  | 0.69                              | 0.72                              | 0.73                              | 0.68                           |
| IEP                   | Non-IEP                          | 38,068 | 0.90  | 0.70                              | 0.73                              | 0.73                              | 0.68                           |
|                       | IEP                              | 8,474  | 0.91  | 0.73                              | 0.74                              | 0.76                              | 0.71                           |

**Grade 4 Mathematics**

|                       | Test Group                       | N      | Alpha | Operations and Algebraic Thinking | Number and Operations in Base Ten | Number and Operations - Fractions | Measurement and Data, Geometry |
|-----------------------|----------------------------------|--------|-------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| All                   | Students Tested                  | 48,674 | 0.91  | 0.64                              | 0.74                              | 0.74                              | 0.75                           |
| Gender                | Female                           | 24,027 | 0.90  | 0.63                              | 0.73                              | 0.71                              | 0.73                           |
|                       | Male                             | 24,644 | 0.91  | 0.65                              | 0.75                              | 0.76                              | 0.76                           |
| Ethnicity             | Hispanic                         | 3,687  | 0.89  | 0.59                              | 0.72                              | 0.71                              | 0.70                           |
|                       | Asian                            | 810    | 0.93  | 0.70                              | 0.78                              | 0.78                              | 0.81                           |
|                       | Native Hawaiian/Pacific Islander | 66     | 0.90  | 0.63                              | 0.75                              | 0.67                              | 0.74                           |
|                       | Black/African American           | 4,989  | 0.89  | 0.58                              | 0.72                              | 0.70                              | 0.68                           |
|                       | American Indian                  | 54     | 0.92  | 0.66                              | 0.75                              | 0.73                              | 0.82                           |
|                       | White                            | 36,806 | 0.90  | 0.63                              | 0.73                              | 0.73                              | 0.75                           |
|                       | Other                            | 2,259  | 0.90  | 0.62                              | 0.71                              | 0.72                              | 0.73                           |
|                       | Missing                          | 3      | --    | --                                | --                                | --                                | --                             |
| Migrant               | Non-Migrant                      | 48,428 | 0.91  | 0.64                              | 0.74                              | 0.74                              | 0.75                           |
|                       | Migrant                          | 246    | 0.88  | 0.58                              | 0.70                              | 0.67                              | 0.67                           |
| LEP                   | Non-LEP                          | 45,685 | 0.91  | 0.64                              | 0.74                              | 0.74                              | 0.75                           |
|                       | LEP                              | 2,989  | 0.89  | 0.59                              | 0.73                              | 0.70                              | 0.69                           |
| Economic Disadvantage | Free Lunch                       | 28,759 | 0.89  | 0.61                              | 0.72                              | 0.70                              | 0.71                           |
|                       | Reduced-Price Lunch              | 1,991  | 0.90  | 0.62                              | 0.73                              | 0.73                              | 0.73                           |
|                       | Regular Lunch                    | 17,924 | 0.90  | 0.62                              | 0.73                              | 0.73                              | 0.75                           |
| IEP                   | Non-IEP                          | 40,682 | 0.90  | 0.62                              | 0.73                              | 0.73                              | 0.74                           |
|                       | IEP                              | 7,992  | 0.90  | 0.67                              | 0.72                              | 0.72                              | 0.74                           |

**Grade 5 Mathematics**

|           | Test Group                       | N      | Alpha | Operations and Algebraic Thinking | Number and Operations in Base Ten | Number and Operations - Fractions | Measurement and Data, Geometry |
|-----------|----------------------------------|--------|-------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| All       | Students Tested                  | 49,393 | 0.91  | 0.72                              | 0.75                              | 0.71                              | 0.75                           |
| Gender    | Female                           | 24,393 | 0.91  | 0.70                              | 0.74                              | 0.70                              | 0.73                           |
|           | Male                             | 24,998 | 0.92  | 0.73                              | 0.76                              | 0.73                              | 0.76                           |
| Ethnicity | Hispanic                         | 3,807  | 0.90  | 0.69                              | 0.72                              | 0.66                              | 0.71                           |
|           | Asian                            | 833    | 0.93  | 0.74                              | 0.78                              | 0.76                              | 0.77                           |
|           | Native Hawaiian/Pacific Islander | 74     | 0.93  | 0.79                              | 0.78                              | 0.72                              | 0.78                           |
|           | Black/African American           | 5,050  | 0.89  | 0.70                              | 0.72                              | 0.60                              | 0.70                           |
|           | American Indian                  | 61     | 0.90  | 0.76                              | 0.69                              | 0.64                              | 0.70                           |
|           | White                            | 37,357 | 0.91  | 0.71                              | 0.75                              | 0.71                              | 0.74                           |
|           | Other                            | 2,206  | 0.91  | 0.71                              | 0.74                              | 0.69                              | 0.73                           |

|                       | Test Group          | N      | Alpha | Operations and Algebraic Thinking | Number and Operations in Base Ten | Number and Operations - Fractions | Measurement and Data, Geometry |
|-----------------------|---------------------|--------|-------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
|                       | Missing             | 5      | --    | --                                | --                                | --                                | --                             |
| Migrant               | Non-Migrant         | 49,155 | 0.91  | 0.72                              | 0.75                              | 0.71                              | 0.75                           |
|                       | Migrant             | 238    | 0.90  | 0.71                              | 0.74                              | 0.56                              | 0.71                           |
| LEP                   | Non-LEP             | 46,904 | 0.91  | 0.72                              | 0.75                              | 0.71                              | 0.75                           |
|                       | LEP                 | 2,489  | 0.90  | 0.70                              | 0.74                              | 0.66                              | 0.72                           |
| Economic Disadvantage | Free Lunch          | 28,922 | 0.90  | 0.70                              | 0.73                              | 0.66                              | 0.72                           |
|                       | Reduced-Price Lunch | 1,954  | 0.90  | 0.70                              | 0.73                              | 0.69                              | 0.73                           |
|                       | Regular Lunch       | 18,517 | 0.91  | 0.70                              | 0.74                              | 0.72                              | 0.73                           |
| IEP                   | Non-IEP             | 41,758 | 0.91  | 0.70                              | 0.75                              | 0.72                              | 0.73                           |
|                       | IEP                 | 7,635  | 0.90  | 0.71                              | 0.72                              | 0.63                              | 0.75                           |

**Grade 6 Mathematics**

|                       | Test Group                       | N      | Alpha | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |
|-----------------------|----------------------------------|--------|-------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|
| All                   | Students Tested                  | 49,434 | 0.91  | 0.66                                  | 0.61              | 0.71                      | 0.75     | 0.62                       |
| Gender                | Female                           | 24,591 | 0.90  | 0.65                                  | 0.61              | 0.70                      | 0.73     | 0.61                       |
|                       | Male                             | 24,841 | 0.91  | 0.66                                  | 0.61              | 0.71                      | 0.76     | 0.63                       |
| Ethnicity             | Hispanic                         | 3,584  | 0.89  | 0.62                                  | 0.58              | 0.66                      | 0.70     | 0.58                       |
|                       | Asian                            | 840    | 0.93  | 0.70                                  | 0.64              | 0.79                      | 0.80     | 0.65                       |
|                       | Native Hawaiian/Pacific Islander | 71     | 0.89  | 0.66                                  | 0.57              | 0.67                      | 0.62     | 0.56                       |
|                       | Black/African American           | 5,045  | 0.87  | 0.59                                  | 0.60              | 0.59                      | 0.61     | 0.57                       |
|                       | American Indian                  | 61     | 0.94  | 0.70                                  | 0.70              | 0.86                      | 0.75     | 0.75                       |
|                       | White                            | 37,637 | 0.91  | 0.65                                  | 0.60              | 0.71                      | 0.75     | 0.61                       |
|                       | Other                            | 2,191  | 0.90  | 0.64                                  | 0.61              | 0.68                      | 0.72     | 0.58                       |
|                       | Missing                          | 5      | 0.86  | 0.66                                  | 0.62              | 0.66                      | -0.12    | 0.66                       |
| Migrant               | Non-Migrant                      | 49,229 | 0.91  | 0.66                                  | 0.61              | 0.71                      | 0.75     | 0.62                       |
|                       | Migrant                          | 205    | 0.87  | 0.60                                  | 0.58              | 0.61                      | 0.67     | 0.50                       |
| LEP                   | Non-LEP                          | 47,368 | 0.91  | 0.66                                  | 0.61              | 0.71                      | 0.75     | 0.62                       |
|                       | LEP                              | 2,066  | 0.90  | 0.64                                  | 0.60              | 0.66                      | 0.68     | 0.61                       |
| Economic Disadvantage | Free Lunch                       | 28,433 | 0.89  | 0.63                                  | 0.59              | 0.65                      | 0.69     | 0.59                       |
|                       | Reduced-Price Lunch              | 2,082  | 0.90  | 0.65                                  | 0.60              | 0.68                      | 0.74     | 0.61                       |
|                       | Regular Lunch                    | 18,919 | 0.91  | 0.65                                  | 0.59              | 0.73                      | 0.77     | 0.59                       |
| IEP                   | Non-IEP                          | 42,859 | 0.90  | 0.64                                  | 0.60              | 0.70                      | 0.75     | 0.60                       |
|                       | IEP                              | 6,575  | 0.89  | 0.63                                  | 0.60              | 0.63                      | 0.66     | 0.60                       |

**Grade 7 Mathematics**

|                       | Test Group                       | N      | Alpha | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |
|-----------------------|----------------------------------|--------|-------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|
| All                   | Students Tested                  | 48,425 | 0.90  | 0.68                                  | 0.65              | 0.61                      | 0.64     | 0.67                       |
| Gender                | Female                           | 23,712 | 0.90  | 0.67                                  | 0.65              | 0.59                      | 0.63     | 0.65                       |
|                       | Male                             | 24,713 | 0.91  | 0.69                                  | 0.66              | 0.64                      | 0.65     | 0.68                       |
| Ethnicity             | Hispanic                         | 3,480  | 0.88  | 0.63                                  | 0.59              | 0.57                      | 0.59     | 0.62                       |
|                       | Asian                            | 853    | 0.92  | 0.75                                  | 0.74              | 0.61                      | 0.69     | 0.72                       |
|                       | Native Hawaiian/Pacific Islander | 50     | 0.89  | 0.61                                  | 0.58              | 0.52                      | 0.73     | 0.61                       |
|                       | Black/African American           | 4,719  | 0.87  | 0.61                                  | 0.54              | 0.59                      | 0.53     | 0.61                       |
|                       | American Indian                  | 69     | 0.90  | 0.71                                  | 0.62              | 0.57                      | 0.66     | 0.67                       |
|                       | White                            | 37,295 | 0.90  | 0.68                                  | 0.65              | 0.61                      | 0.64     | 0.66                       |
|                       | Other                            | 1,957  | 0.89  | 0.66                                  | 0.63              | 0.61                      | 0.60     | 0.65                       |
|                       | Missing                          | 2      | --    | --                                    | --                | --                        | --       | --                         |
| Migrant               | Non-Migrant                      | 48,236 | 0.90  | 0.68                                  | 0.65              | 0.61                      | 0.64     | 0.67                       |
|                       | Migrant                          | 189    | 0.82  | 0.52                                  | 0.54              | 0.51                      | 0.45     | 0.58                       |
| LEP                   | Non-LEP                          | 46,434 | 0.90  | 0.68                                  | 0.65              | 0.61                      | 0.64     | 0.66                       |
|                       | LEP                              | 1,991  | 0.90  | 0.67                                  | 0.63              | 0.63                      | 0.62     | 0.64                       |
| Economic Disadvantage | Free Lunch                       | 27,081 | 0.88  | 0.62                                  | 0.59              | 0.58                      | 0.58     | 0.62                       |
|                       | Reduced-Price Lunch              | 2,033  | 0.89  | 0.64                                  | 0.63              | 0.59                      | 0.62     | 0.63                       |
|                       | Regular Lunch                    | 19,311 | 0.90  | 0.68                                  | 0.67              | 0.60                      | 0.65     | 0.65                       |
| IEP                   | Non-IEP                          | 42,661 | 0.90  | 0.67                                  | 0.66              | 0.60                      | 0.63     | 0.65                       |
|                       | IEP                              | 5,764  | 0.86  | 0.57                                  | 0.55              | 0.59                      | 0.53     | 0.58                       |

**Grade 8 Mathematics**

|           | Test Group                       | N      | Alpha | The Number System and Expressions & Equations | Functions | Geometry | Statistics and Probability |
|-----------|----------------------------------|--------|-------|---|-----------|----------|----------------------------|
| All       | Students Tested                  | 47,020 | 0.90  | 0.77  | 0.61      | 0.76     | 0.62                       |
| Gender    | Female                           | 23,224 | 0.90  | 0.76  | 0.59      | 0.74     | 0.60                       |
|           | Male                             | 23,796 | 0.91  | 0.78  | 0.62      | 0.77     | 0.64                       |
| Ethnicity | Hispanic                         | 3,105  | 0.89  | 0.74  | 0.58      | 0.74     | 0.56                       |
|           | Asian                            | 854    | 0.93  | 0.83  | 0.71      | 0.80     | 0.65                       |
|           | Native Hawaiian/Pacific Islander | 63     | 0.89  | 0.79  | 0.62      | 0.66     | 0.52                       |
|           | Black/African American           | 4,660  | 0.88  | 0.71  | 0.55      | 0.70     | 0.55                       |
|           | American Indian                  | 52     | 0.90  | 0.74  | 0.69      | 0.70     | 0.61                       |
|           | White                            | 36,521 | 0.90  | 0.77  | 0.60      | 0.76     | 0.61                       |
|           | Other                            | 1,762  | 0.90  | 0.76  | 0.60      | 0.73     | 0.60                       |
|           | Missing                          | 3      | --    | --  | --        | --       | --                         |

|                       | Test Group          | N      | Alpha | The Number System and Expressions & Equations | Functions | Geometry | Statistics and Probability |
|-----------------------|---------------------|--------|-------|---|-----------|----------|----------------------------|
| Migrant               | Non-Migrant         | 46,855 | 0.90  | 0.77  | 0.61      | 0.76     | 0.62                       |
|                       | Migrant             | 165    | 0.84  | 0.64  | 0.46      | 0.69     | 0.43                       |
| LEP                   | Non-LEP             | 45,127 | 0.90  | 0.77  | 0.61      | 0.76     | 0.62                       |
|                       | LEP                 | 1,893  | 0.89  | 0.75  | 0.61      | 0.75     | 0.56                       |
| Economic Disadvantage | Free Lunch          | 25,584 | 0.89  | 0.73  | 0.55      | 0.73     | 0.57                       |
|                       | Reduced-Price Lunch | 1,923  | 0.90  | 0.76  | 0.61      | 0.74     | 0.60                       |
|                       | Regular Lunch       | 19,513 | 0.90  | 0.77  | 0.61      | 0.75     | 0.61                       |
| IEP                   | Non-IEP             | 41,807 | 0.90  | 0.77  | 0.60      | 0.75     | 0.61                       |
|                       | IEP                 | 5,213  | 0.87  | 0.70  | 0.50      | 0.69     | 0.54                       |

*Grade 4 Science, operational set #1*

|                       | Test Group                       | N      | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|----------------------------------|--------|-------|--------------|------------------|-------------------------|--------------------|
| All                   | Students Tested                  | 24,318 | 0.80  | 0.51         | 0.51             | 0.64                    | 0.18               |
| Gender                | Female                           | 12,058 | 0.79  | 0.49         | 0.48             | 0.63                    | 0.16               |
|                       | Male                             | 12,259 | 0.81  | 0.52         | 0.53             | 0.64                    | 0.20               |
| Ethnicity             | Hispanic                         | 1,844  | 0.77  | 0.48         | 0.47             | 0.60                    | 0.14               |
|                       | Asian                            | 388    | 0.82  | 0.56         | 0.53             | 0.66                    | 0.27               |
|                       | Native Hawaiian/Pacific Islander | 34     | 0.74  | 0.55         | 0.46             | 0.55                    | 0.34               |
|                       | Black/African American           | 2,470  | 0.78  | 0.51         | 0.47             | 0.62                    | 0.10               |
|                       | American Indian                  | 26     | 0.67  | 0.54         | 0.41             | 0.34                    | -0.02              |
|                       | White                            | 18,378 | 0.78  | 0.49         | 0.49             | 0.62                    | 0.19               |
|                       | Other                            | 1,177  | 0.78  | 0.45         | 0.50             | 0.62                    | 0.16               |
|                       | Missing                          | 1      | --    | --           | --               | --                      | --                 |
| Migrant               | Non-Migrant                      | 24,187 | 0.80  | 0.51         | 0.51             | 0.64                    | 0.18               |
|                       | Migrant                          | 131    | 0.76  | 0.40         | 0.40             | 0.63                    | 0.18               |
| LEP                   | Non-LEP                          | 22,869 | 0.79  | 0.50         | 0.51             | 0.64                    | 0.18               |
|                       | LEP                              | 1,449  | 0.75  | 0.43         | 0.43             | 0.58                    | 0.14               |
| Economic Disadvantage | Free Lunch                       | 14,380 | 0.78  | 0.49         | 0.48             | 0.62                    | 0.15               |
|                       | Reduced-Price Lunch              | 974    | 0.79  | 0.45         | 0.50             | 0.62                    | 0.07               |
|                       | Regular Lunch                    | 8,964  | 0.78  | 0.48         | 0.49             | 0.60                    | 0.23               |
| IEP                   | Non-IEP                          | 20,314 | 0.79  | 0.48         | 0.50             | 0.62                    | 0.17               |
|                       | IEP                              | 4,004  | 0.82  | 0.56         | 0.54             | 0.66                    | 0.23               |

**Grade 4 Science, operational set #2**

|                       | Test Group                       | N      | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design <sup>11</sup> |
|-----------------------|----------------------------------|--------|-------|--------------|------------------|-------------------------|----------------------------------|
| All                   | Students Tested                  | 23,952 | 0.76  | 0.25         | 0.53             | 0.57                    | --                               |
| Gender                | Female                           | 11,906 | 0.75  | 0.24         | 0.50             | 0.57                    | --                               |
|                       | Male                             | 12,044 | 0.77  | 0.25         | 0.55             | 0.58                    | --                               |
| Ethnicity             | Hispanic                         | 1,823  | 0.72  | 0.26         | 0.44             | 0.53                    | --                               |
|                       | Asian                            | 413    | 0.80  | 0.25         | 0.59             | 0.64                    | --                               |
|                       | Native Hawaiian/Pacific Islander | 29     | 0.78  | 0.26         | 0.58             | 0.61                    | --                               |
|                       | Black/African American           | 2,470  | 0.72  | 0.21         | 0.43             | 0.52                    | --                               |
|                       | American Indian                  | 28     | 0.81  | 0.47         | 0.47             | 0.65                    | --                               |
|                       | White                            | 18,118 | 0.75  | 0.24         | 0.52             | 0.56                    | --                               |
|                       | Other                            | 1,069  | 0.75  | 0.22         | 0.50             | 0.57                    | --                               |
|                       | Missing                          | 2      | --    | --           | --               | --                      | --                               |
| Migrant               | Non-Migrant                      | 23,838 | 0.76  | 0.25         | 0.53             | 0.57                    | --                               |
|                       | Migrant                          | 114    | 0.69  | 0.09         | 0.31             | 0.52                    | --                               |
| LEP                   | Non-LEP                          | 22,442 | 0.76  | 0.25         | 0.53             | 0.57                    | --                               |
|                       | LEP                              | 1,510  | 0.69  | 0.23         | 0.37             | 0.52                    | --                               |
| Economic Disadvantage | Free Lunch                       | 14,082 | 0.74  | 0.24         | 0.47             | 0.55                    | --                               |
|                       | Reduced-Price Lunch              | 1,008  | 0.74  | 0.24         | 0.51             | 0.54                    | --                               |
|                       | Regular Lunch                    | 8,862  | 0.75  | 0.23         | 0.54             | 0.55                    | --                               |
| IEP                   | Non-IEP                          | 20,151 | 0.75  | 0.25         | 0.52             | 0.56                    | --                               |
|                       | IEP                              | 3,801  | 0.78  | 0.24         | 0.54             | 0.62                    | --                               |

**Grade 7 Science, operational set #1**

|           | Test Group                       | N      | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------|----------------------------------|--------|-------|--------------|------------------|-------------------------|--------------------|
| All       | Students Tested                  | 24,091 | 0.79  | 0.58         | 0.54             | 0.46                    | 0.42               |
| Gender    | Female                           | 11,831 | 0.78  | 0.54         | 0.52             | 0.44                    | 0.39               |
|           | Male                             | 12,260 | 0.81  | 0.61         | 0.56             | 0.47                    | 0.45               |
| Ethnicity | Hispanic                         | 1,791  | 0.77  | 0.54         | 0.47             | 0.43                    | 0.41               |
|           | Asian                            | 440    | 0.83  | 0.64         | 0.60             | 0.52                    | 0.45               |
|           | Native Hawaiian/Pacific Islander | 23     | 0.75  | 0.63         | 0.35             | 0.35                    | 0.06               |
|           | Black/African American           | 2,322  | 0.72  | 0.43         | 0.44             | 0.38                    | 0.43               |
|           | American Indian                  | 39     | 0.82  | 0.62         | 0.57             | 0.44                    | 0.47               |
|           | White                            | 18,535 | 0.79  | 0.58         | 0.54             | 0.46                    | 0.40               |
|           | Other                            | 941    | 0.77  | 0.55         | 0.52             | 0.44                    | 0.40               |
|           | Missing                          | --     | --    | --           | --               | --                      | --                 |
| Migrant   | Non-Migrant                      | 23,989 | 0.79  | 0.58         | 0.54             | 0.46                    | 0.42               |

<sup>11</sup> Insufficient data corresponding to this subject category in the operational set.

|                       | Test Group          | N      | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|---------------------|--------|-------|--------------|------------------|-------------------------|--------------------|
|                       | Migrant             | 102    | 0.45  | 0.05         | 0.14             | 0.29                    | 0.03               |
| LEP                   | Non-LEP             | 23,003 | 0.79  | 0.58         | 0.54             | 0.46                    | 0.42               |
|                       | LEP                 | 1,088  | 0.78  | 0.55         | 0.49             | 0.41                    | 0.42               |
| Economic Disadvantage | Free Lunch          | 13,496 | 0.75  | 0.52         | 0.45             | 0.42                    | 0.42               |
|                       | Reduced-Price Lunch | 998    | 0.77  | 0.56         | 0.51             | 0.43                    | 0.41               |
|                       | Regular Lunch       | 9,597  | 0.80  | 0.59         | 0.58             | 0.46                    | 0.36               |
| IEP                   | Non-IEP             | 20,934 | 0.79  | 0.58         | 0.54             | 0.46                    | 0.40               |
|                       | IEP                 | 3,157  | 0.72  | 0.46         | 0.42             | 0.37                    | 0.41               |

***Grade 7 Science, operational set #2***

|                       | Test Group                       | N      | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|----------------------------------|--------|-------|--------------|------------------|-------------------------|--------------------|
| All                   | Students Tested                  | 23,141 | 0.80  | 0.57         | 0.51             | 0.34                    | 0.45               |
| Gender                | Female                           | 11,500 | 0.79  | 0.56         | 0.48             | 0.34                    | 0.43               |
|                       | Male                             | 11,640 | 0.81  | 0.58         | 0.55             | 0.35                    | 0.47               |
| Ethnicity             | Hispanic                         | 1,629  | 0.75  | 0.54         | 0.44             | 0.27                    | 0.36               |
|                       | Asian                            | 406    | 0.84  | 0.62         | 0.62             | 0.39                    | 0.53               |
|                       | Native Hawaiian/Pacific Islander | 24     | 0.72  | 0.26         | 0.46             | 0.31                    | 0.42               |
|                       | Black/African American           | 2,202  | 0.72  | 0.46         | 0.41             | 0.27                    | 0.34               |
|                       | American Indian                  | 32     | 0.83  | 0.60         | 0.64             | 0.47                    | 0.30               |
|                       | White                            | 17,869 | 0.80  | 0.57         | 0.51             | 0.35                    | 0.45               |
|                       | Other                            | 976    | 0.78  | 0.52         | 0.54             | 0.33                    | 0.42               |
|                       | Missing                          | 3      | --    | --           | --               | --                      | --                 |
| Migrant               | Non-Migrant                      | 23,056 | 0.80  | 0.57         | 0.51             | 0.35                    | 0.45               |
|                       | Migrant                          | 85     | 0.56  | 0.28         | 0.32             | 0.12                    | 0.21               |
| LEP                   | Non-LEP                          | 22,282 | 0.79  | 0.57         | 0.51             | 0.34                    | 0.45               |
|                       | LEP                              | 859    | 0.79  | 0.54         | 0.52             | 0.34                    | 0.42               |
| Economic Disadvantage | Free Lunch                       | 12,761 | 0.76  | 0.52         | 0.45             | 0.29                    | 0.41               |
|                       | Reduced-Price Lunch              | 989    | 0.77  | 0.58         | 0.45             | 0.31                    | 0.40               |
|                       | Regular Lunch                    | 9,391  | 0.80  | 0.58         | 0.53             | 0.35                    | 0.45               |
| IEP                   | Non-IEP                          | 20,791 | 0.79  | 0.57         | 0.51             | 0.35                    | 0.44               |
|                       | IEP                              | 2,350  | 0.74  | 0.51         | 0.42             | 0.23                    | 0.46               |

**Grade 11 Science, operational set #1**

|                       | Test Group                       | N      | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|----------------------------------|--------|-------|--------------|------------------|-------------------------|--------------------|
| All                   | Students Tested                  | 10,975 | 0.82  | 0.63         | 0.48             | 0.54                    | 0.49               |
| Gender                | Female                           | 5,465  | 0.81  | 0.61         | 0.42             | 0.54                    | 0.50               |
|                       | Male                             | 5,510  | 0.83  | 0.65         | 0.53             | 0.55                    | 0.49               |
| Ethnicity             | Hispanic                         | 646    | 0.78  | 0.61         | 0.36             | 0.46                    | 0.43               |
|                       | Asian                            | 234    | 0.87  | 0.69         | 0.61             | 0.64                    | 0.48               |
|                       | Native Hawaiian/Pacific Islander | 17     | 0.82  | 0.52         | 0.62             | 0.54                    | 0.26               |
|                       | Black/African American           | 1,019  | 0.75  | 0.58         | 0.32             | 0.46                    | 0.42               |
|                       | American Indian                  | 12     | 0.66  | 0.29         | -0.92            | 0.31                    | 0.47               |
|                       | White                            | 8,754  | 0.82  | 0.63         | 0.48             | 0.54                    | 0.50               |
|                       | Other                            | 292    | 0.82  | 0.62         | 0.45             | 0.54                    | 0.45               |
|                       | Missing                          | 1      | --    | --           | --               | --                      | --                 |
| Migrant               | Non-Migrant                      | 10,955 | 0.82  | 0.63         | 0.48             | 0.54                    | 0.50               |
|                       | Migrant                          | 20     | 0.70  | 0.67         | 0.05             | 0.43                    | 0.28               |
| LEP                   | Non-LEP                          | 10,593 | 0.82  | 0.63         | 0.48             | 0.54                    | 0.49               |
|                       | LEP                              | 382    | 0.63  | 0.49         | 0.11             | 0.26                    | 0.21               |
| Economic Disadvantage | Free Lunch                       | 5,338  | 0.79  | 0.61         | 0.36             | 0.49                    | 0.46               |
|                       | Reduced-Price Lunch              | 456    | 0.79  | 0.60         | 0.38             | 0.50                    | 0.46               |
|                       | Regular Lunch                    | 5,181  | 0.83  | 0.62         | 0.53             | 0.55                    | 0.50               |
| IEP                   | Non-IEP                          | 9,458  | 0.81  | 0.61         | 0.49             | 0.53                    | 0.48               |
|                       | IEP                              | 1,517  | 0.70  | 0.53         | 0.17             | 0.41                    | 0.36               |

**Grade 11 Science, operational set #2**

|           | Test Group                       | N     | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------|----------------------------------|-------|-------|--------------|------------------|-------------------------|--------------------|
| All       | Students Tested                  | 9,867 | 0.80  | 0.63         | 0.45             | 0.50                    | 0.34               |
| Gender    | Female                           | 5,027 | 0.79  | 0.61         | 0.40             | 0.50                    | 0.31               |
|           | Male                             | 4,840 | 0.82  | 0.66         | 0.49             | 0.51                    | 0.37               |
| Ethnicity | Hispanic                         | 601   | 0.79  | 0.60         | 0.45             | 0.46                    | 0.28               |
|           | Asian                            | 207   | 0.85  | 0.72         | 0.58             | 0.58                    | 0.31               |
|           | Native Hawaiian/Pacific Islander | 12    | 0.77  | 0.70         | 0.27             | 0.31                    | 0.47               |
|           | Black/African American           | 939   | 0.74  | 0.56         | 0.39             | 0.36                    | 0.18               |
|           | American Indian                  | 14    | 0.82  | 0.42         | 0.51             | 0.55                    | 0.47               |
|           | White                            | 7,810 | 0.80  | 0.63         | 0.44             | 0.50                    | 0.35               |
|           | Other                            | 283   | 0.78  | 0.61         | 0.33             | 0.47                    | 0.28               |
|           | Missing                          | 1     | --    | --           | --               | --                      | --                 |
| Migrant   | Non-Migrant                      | 9,839 | 0.80  | 0.63         | 0.45             | 0.50                    | 0.34               |
|           | Migrant                          | 28    | 0.67  | 0.39         | 0.12             | 0.11                    | -0.11              |

|                       | Test Group          | N     | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|---------------------|-------|-------|--------------|------------------|-------------------------|--------------------|
| LEP                   | Non-LEP             | 9,601 | 0.80  | 0.63         | 0.45             | 0.50                    | 0.34               |
|                       | LEP                 | 266   | 0.71  | 0.49         | 0.42             | 0.28                    | 0.07               |
| Economic Disadvantage | Free Lunch          | 4,579 | 0.77  | 0.60         | 0.41             | 0.44                    | 0.28               |
|                       | Reduced-Price Lunch | 409   | 0.79  | 0.63         | 0.39             | 0.48                    | 0.30               |
|                       | Regular Lunch       | 4,879 | 0.81  | 0.63         | 0.45             | 0.51                    | 0.35               |
| IEP                   | Non-IEP             | 9,302 | 0.80  | 0.63         | 0.44             | 0.50                    | 0.34               |
|                       | IEP                 | 565   | 0.74  | 0.57         | 0.38             | 0.40                    | 0.18               |

*Grade 11 Science, operational set #3*

|                       | Test Group                       | N     | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|----------------------------------|-------|-------|--------------|------------------|-------------------------|--------------------|
| All                   | Students Tested                  | 9,788 | 0.83  | 0.75         | 0.40             | 0.52                    | 0.34               |
| Gender                | Female                           | 4,991 | 0.82  | 0.74         | 0.37             | 0.53                    | 0.32               |
|                       | Male                             | 4,796 | 0.84  | 0.76         | 0.44             | 0.51                    | 0.37               |
| Ethnicity             | Hispanic                         | 545   | 0.82  | 0.73         | 0.37             | 0.50                    | 0.27               |
|                       | Asian                            | 211   | 0.86  | 0.78         | 0.51             | 0.48                    | 0.37               |
|                       | Native Hawaiian/Pacific Islander | 8     | --    | --           | --               | --                      | --                 |
|                       | Black/African American           | 901   | 0.79  | 0.67         | 0.29             | 0.48                    | 0.25               |
|                       | American Indian                  | 10    | 0.83  | 0.70         | 0.16             | 0.71                    | 0.13               |
|                       | White                            | 7,839 | 0.83  | 0.75         | 0.39             | 0.51                    | 0.34               |
|                       | Other                            | 271   | 0.84  | 0.77         | 0.38             | 0.58                    | 0.38               |
|                       | Missing                          | 3     | --    | --           | --               | --                      | --                 |
| Migrant               | Non-Migrant                      | 9,765 | 0.83  | 0.75         | 0.40             | 0.52                    | 0.34               |
|                       | Migrant                          | 23    | 0.81  | 0.62         | 0.54             | 0.26                    | 0.13               |
| LEP                   | Non-LEP                          | 9,540 | 0.83  | 0.75         | 0.40             | 0.51                    | 0.34               |
|                       | LEP                              | 248   | 0.71  | 0.53         | 0.36             | 0.31                    | -0.03              |
| Economic Disadvantage | Free Lunch                       | 4,623 | 0.80  | 0.72         | 0.34             | 0.47                    | 0.29               |
|                       | Reduced-Price Lunch              | 471   | 0.82  | 0.74         | 0.41             | 0.50                    | 0.31               |
|                       | Regular Lunch                    | 4,694 | 0.84  | 0.75         | 0.41             | 0.52                    | 0.35               |
| IEP                   | Non-IEP                          | 9,237 | 0.83  | 0.75         | 0.39             | 0.51                    | 0.34               |
|                       | IEP                              | 551   | 0.72  | 0.63         | 0.19             | 0.40                    | 0.17               |

**Grade 11 Science, operational set #4**

|                       | Test Group                       | N     | Alpha | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-----------------------|----------------------------------|-------|-------|--------------|------------------|-------------------------|--------------------|
| All                   | Students Tested                  | 9,691 | 0.81  | 0.60         | 0.43             | 0.51                    | 0.47               |
| Gender                | Female                           | 5,108 | 0.80  | 0.59         | 0.38             | 0.50                    | 0.48               |
|                       | Male                             | 4,582 | 0.82  | 0.62         | 0.48             | 0.51                    | 0.47               |
| Ethnicity             | Hispanic                         | 610   | 0.79  | 0.59         | 0.40             | 0.46                    | 0.47               |
|                       | Asian                            | 199   | 0.86  | 0.72         | 0.54             | 0.59                    | 0.51               |
|                       | Native Hawaiian/Pacific Islander | 11    | 0.81  | 0.23         | 0.63             | 0.62                    | -.45               |
|                       | Black/African American           | 855   | 0.73  | 0.47         | 0.37             | 0.42                    | 0.36               |
|                       | American Indian                  | 13    | 0.82  | 0.73         | 0.29             | 0.35                    | 0.06               |
|                       | White                            | 7,743 | 0.80  | 0.60         | 0.43             | 0.50                    | 0.48               |
|                       | Other                            | 259   | 0.78  | 0.54         | 0.39             | 0.51                    | 0.45               |
|                       | Missing                          | 1     | --    | --           | --               | --                      | --                 |
| Migrant               | Non-Migrant                      | 9,667 | 0.81  | 0.60         | 0.43             | 0.51                    | 0.47               |
|                       | Migrant                          | 24    | 0.69  | 0.06         | 0.63             | 0.25                    | -.02               |
| LEP                   | Non-LEP                          | 9,426 | 0.80  | 0.60         | 0.43             | 0.50                    | 0.47               |
|                       | LEP                              | 265   | 0.72  | 0.51         | 0.34             | 0.29                    | 0.37               |
| Economic Disadvantage | Free Lunch                       | 4,562 | 0.78  | 0.56         | 0.37             | 0.47                    | 0.43               |
|                       | Reduced-Price Lunch              | 436   | 0.78  | 0.59         | 0.35             | 0.42                    | 0.45               |
|                       | Regular Lunch                    | 4,693 | 0.81  | 0.61         | 0.46             | 0.50                    | 0.48               |
| IEP                   | Non-IEP                          | 9,107 | 0.80  | 0.60         | 0.43             | 0.50                    | 0.47               |
|                       | IEP                              | 584   | 0.72  | 0.46         | 0.37             | 0.36                    | 0.46               |

**Grade 5 Social Studies**

|           | Test Group                       | N      | Alpha | Government and Civics | Cultures and Societies | Economics | Geography | Historical Perspective |
|-----------|----------------------------------|--------|-------|-----------------------|------------------------|-----------|-----------|------------------------|
| All       | Students Tested                  | 50,535 | 0.90  | 0.67                  | 0.57                   | 0.65      | 0.50      | 0.73                   |
| Gender    | Female                           | 24,933 | 0.89  | 0.65                  | 0.56                   | 0.63      | 0.46      | 0.69                   |
|           | Male                             | 25,600 | 0.90  | 0.68                  | 0.58                   | 0.67      | 0.54      | 0.75                   |
| Ethnicity | Hispanic                         | 3,911  | 0.88  | 0.64                  | 0.54                   | 0.63      | 0.46      | 0.68                   |
|           | Asian                            | 845    | 0.91  | 0.71                  | 0.59                   | 0.70      | 0.58      | 0.78                   |
|           | Native Hawaiian/Pacific Islander | 79     | 0.91  | 0.74                  | 0.60                   | 0.67      | 0.66      | 0.69                   |
|           | Black/African American           | 5,248  | 0.88  | 0.62                  | 0.57                   | 0.64      | 0.47      | 0.69                   |
|           | American Indian                  | 63     | 0.88  | 0.65                  | 0.49                   | 0.70      | 0.38      | 0.61                   |
|           | White                            | 38,108 | 0.89  | 0.66                  | 0.55                   | 0.63      | 0.48      | 0.72                   |
|           | Other                            | 2,276  | 0.89  | 0.65                  | 0.56                   | 0.64      | 0.49      | 0.70                   |
|           | Missing                          | 5      | --    | --                    | --                     | --        | --        | --                     |
| Migrant   | Non-Migrant                      | 50,300 | 0.90  | 0.67                  | 0.57                   | 0.65      | 0.50      | 0.73                   |
|           | Migrant                          | 235    | 0.87  | 0.57                  | 0.56                   | 0.58      | 0.42      | 0.65                   |

|                       | Test Group          | N      | Alpha | Government and Civics | Cultures and Societies | Economics | Geography | Historical Perspective |
|-----------------------|---------------------|--------|-------|-----------------------|------------------------|-----------|-----------|------------------------|
| LEP                   | Non-LEP             | 48,027 | 0.89  | 0.67                  | 0.56                   | 0.65      | 0.50      | 0.73                   |
|                       | LEP                 | 2,508  | 0.88  | 0.64                  | 0.54                   | 0.64      | 0.47      | 0.68                   |
| Economic Disadvantage | Free Lunch          | 29,653 | 0.89  | 0.64                  | 0.56                   | 0.65      | 0.48      | 0.70                   |
|                       | Reduced-Price Lunch | 2,010  | 0.88  | 0.65                  | 0.55                   | 0.62      | 0.43      | 0.71                   |
|                       | Regular Lunch       | 18,872 | 0.88  | 0.66                  | 0.52                   | 0.60      | 0.48      | 0.72                   |
| IEP                   | Non-IEP             | 42,820 | 0.89  | 0.66                  | 0.54                   | 0.63      | 0.46      | 0.71                   |
|                       | IEP                 | 7,715  | 0.90  | 0.65                  | 0.60                   | 0.67      | 0.55      | 0.71                   |

***Grade 8 Social Studies***

|                       | Test Group                       | N      | Alpha | Government and Civics | Cultures and Societies | Economics | Geography | Historical Perspective |
|-----------------------|----------------------------------|--------|-------|-----------------------|------------------------|-----------|-----------|------------------------|
| All                   | Students Tested                  | 48,173 | 0.91  | 0.70                  | 0.58                   | 0.60      | 0.59      | 0.76                   |
| Gender                | Female                           | 23,697 | 0.90  | 0.68                  | 0.56                   | 0.59      | 0.57      | 0.74                   |
|                       | Male                             | 24,476 | 0.91  | 0.72                  | 0.62                   | 0.62      | 0.60      | 0.78                   |
| Ethnicity             | Hispanic                         | 3,190  | 0.90  | 0.65                  | 0.56                   | 0.59      | 0.58      | 0.73                   |
|                       | Asian                            | 864    | 0.92  | 0.74                  | 0.60                   | 0.66      | 0.61      | 0.78                   |
|                       | Native Hawaiian/Pacific Islander | 65     | 0.91  | 0.68                  | 0.65                   | 0.63      | 0.58      | 0.79                   |
|                       | Black/African American           | 4,853  | 0.89  | 0.64                  | 0.57                   | 0.59      | 0.54      | 0.70                   |
|                       | American Indian                  | 55     | 0.92  | 0.76                  | 0.60                   | 0.70      | 0.53      | 0.79                   |
|                       | White                            | 37,317 | 0.90  | 0.70                  | 0.57                   | 0.58      | 0.57      | 0.76                   |
|                       | Other                            | 1,826  | 0.90  | 0.68                  | 0.57                   | 0.57      | 0.55      | 0.74                   |
|                       | Missing                          | 3      | --    | --                    | --                     | --        | --        | --                     |
| Migrant               | Non-Migrant                      | 48,010 | 0.91  | 0.70                  | 0.58                   | 0.60      | 0.59      | 0.76                   |
|                       | Migrant                          | 163    | 0.88  | 0.60                  | 0.51                   | 0.56      | 0.49      | 0.69                   |
| LEP                   | Non-LEP                          | 46,260 | 0.91  | 0.70                  | 0.58                   | 0.60      | 0.58      | 0.76                   |
|                       | LEP                              | 1,913  | 0.90  | 0.63                  | 0.57                   | 0.61      | 0.58      | 0.71                   |
| Economic Disadvantage | Free Lunch                       | 26,319 | 0.90  | 0.67                  | 0.57                   | 0.58      | 0.55      | 0.73                   |
|                       | Reduced-Price Lunch              | 1,967  | 0.90  | 0.67                  | 0.56                   | 0.57      | 0.55      | 0.75                   |
|                       | Regular Lunch                    | 19,887 | 0.90  | 0.69                  | 0.53                   | 0.56      | 0.54      | 0.75                   |
| IEP                   | Non-IEP                          | 42,882 | 0.90  | 0.69                  | 0.55                   | 0.58      | 0.56      | 0.75                   |
|                       | IEP                              | 5,291  | 0.89  | 0.62                  | 0.55                   | 0.56      | 0.56      | 0.71                   |

## Appendix N. Scoring Metrics for K-PREP Constructed-Response Items

| Subject | Grade       | Item Type | Validity <sup>12</sup> |            | Reliability |            | Score Distribution |            |            |            |            |          |          |     |          |          |          |
|---------|-------------|-----------|------------------------|------------|-------------|------------|--------------------|------------|------------|------------|------------|----------|----------|-----|----------|----------|----------|
|         |             |           | Perfect                | Non-Adj    | Perfect     | Non-Adj    | 0                  | 1          | 2          | 3          | 4          | B        | A        | F   | I        | O        |          |
| Reading | 3           | SA        | 97.3<br>97             | 0.3<br>0   | 83.1<br>86  | 1.0<br>0   | 19.5<br>21         | 38.1<br>38 | 41.3<br>40 | -          | -          | 0.9<br>1 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         |             | SA        | 95<br>97               | 0.1<br>0   | 81.8<br>84  | 0.2<br>0   | 16.0<br>17         | 51.4<br>50 | 26.9<br>28 | -          | -          | 5.7<br>5 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         | 4           | SA        | 93.0<br>89             | 0.1<br>0   | 80.9<br>78  | 0.2<br>0   | 19.3<br>19         | 38.9<br>40 | 40.2<br>40 | -          | -          | 0.9<br>1 | 0.0      | 0.0 | 0.1<br>0 | 0.6<br>0 |          |
|         |             | ER        | 92.7<br>95             | 0.5<br>0   | 76.1<br>80  | 4.5<br>4   | 28.5<br>29         | 10.5<br>9  | 30.3<br>32 | 12.7<br>14 | 13.7<br>14 | 2.7<br>2 | 0.7<br>0 | 0.0 | 0.2<br>0 | 0.8<br>0 |          |
|         |             | SA        | 95.7<br>95             | 0.4<br>0   | 82.7<br>84  | 2.9<br>2   | 43.3<br>42         | 32.0<br>33 | 22.1<br>22 | -          | -          | 1.7<br>0 | 0.1<br>0 | 0.0 | 0.1<br>0 | 0.8<br>2 |          |
|         | 5           | SA        | 94.0<br>95             | 0.3<br>0   | 80.1<br>81  | 0.8<br>0   | 32.3<br>32         | 44.7<br>45 | 22.2<br>23 | -          | -          | 0.7<br>0 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         |             | ER        | 79.0<br>80             | 2.4<br>2   | 65.1<br>68  | 8.9<br>8   | 18.4<br>18         | 16.0<br>16 | 41.8<br>41 | 13.1<br>13 | 8.8<br>7   | 1.7<br>2 | 0.0      | 0.0 | 0.0      | 0.1<br>3 |          |
|         |             | SA        | 92.0<br>95             | 0.2<br>0   | 80.2<br>80  | 0.2<br>0   | 8.0<br>8           | 57.3<br>49 | 34.0<br>42 | -          | -          | 0.6<br>1 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         | 6           | SA        | 88.3<br>91             | 0.0<br>0   | 80.0<br>81  | 0.9<br>0   | 33.2<br>35         | 42.2<br>32 | 23.8<br>33 | -          | -          | 0.7<br>0 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         |             | ER        | 80.2<br>89             | 2.0<br>2   | 65.1<br>75  | 7.3<br>0   | 27.6<br>30         | 24.0<br>23 | 25.6<br>24 | 10.8<br>11 | 10.6<br>11 | 1.4<br>1 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         |             | SA        | 92.6<br>92             | 0.5<br>0   | 80.1<br>83  | 2.2<br>0   | 28.4<br>31         | 41.4<br>45 | 28.1<br>22 | -          | -          | 1.8<br>2 | 0.0      | 0.0 | 0.1<br>0 | 0.1<br>0 |          |
|         | 7           | SA        | 93.3<br>95             | 0.0<br>0   | 80.0<br>83  | 0.1<br>0   | 10.9<br>12         | 49.9<br>55 | 37.0<br>31 | -          | -          | 2.0<br>2 | 0.0      | 0.0 | 0.1<br>0 | 0.1<br>0 |          |
|         |             | ER        | 77.5<br>71             | 3.3<br>4   | 66.1<br>65  | 7.7<br>0   | 9.9<br>7           | 9.8<br>11  | 19.1<br>21 | 29.8<br>35 | 30.3<br>25 | 0.8<br>1 | 0.0      | 0.0 | 0.1<br>0 | 0.1<br>0 |          |
|         |             | SA        | 90.4<br>94             | 0.2<br>0   | 80.1<br>86  | 0.5<br>0   | 19.8<br>15         | 61.6<br>70 | 17.3<br>12 | -          | -          | 1.0<br>1 | 0.1<br>0 | 0.0 | 0.0      | 0.2<br>2 |          |
|         | 8           | SA        | 96.8<br>97             | 0.0<br>0   | 82.2<br>84  | 0.9<br>0   | 23.2<br>21         | 29.8<br>31 | 45.8<br>47 | -          | -          | 1.1<br>1 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         |             | ER        | 81.4<br>86             | 0.4<br>1   | 65.6<br>65  | 7.3<br>0   | 14.8<br>18         | 17.4<br>16 | 31.4<br>30 | 23.6<br>24 | 10.9<br>11 | 1.5<br>1 | 0.0      | 0.0 | 0.2<br>0 | 0.3<br>0 |          |
|         |             | SA        | 96.1<br>98             | 0.0<br>0   | 80.8<br>85  | 1.2<br>2   | 11.7<br>10         | 51.6<br>54 | 35.8<br>36 | -          | -          | 0.8<br>0 | 0.0      | 0.0 | 0.0      | 0.1<br>0 |          |
|         | Mathematics | 3         | SA                     | 96.0<br>97 | 0.0<br>0    | 84.9<br>89 | 0.2<br>0           | 24.3<br>22 | 62.5<br>68 | 10.9<br>8  | -          | -        | 2.2<br>2 | 0.0 | 0.0      | 0.0      | 0.2<br>0 |
|         |             |           | SA                     | 96.2<br>98 | 0.0<br>0    | 93.7<br>95 | 0.4<br>0           | 40.4<br>38 | 10.4<br>11 | 46.8<br>48 | -          | -        | 2.1<br>2 | 0.0 | 0.0      | 0.0      | 0.3<br>1 |
|         |             |           | SA                     | 95.5<br>97 | 0.1<br>0    | 92.7<br>94 | 0.2<br>0           | 21.4<br>20 | 30.7<br>31 | 46.3<br>48 | -          | -        | 0.9<br>1 | 0.0 | 0.0      | 0.0      | 0.2<br>0 |
|         |             | 4         | SA                     | 95.1<br>98 | 0.1<br>0    | 94.5<br>94 | 0.3<br>0           | 41.7<br>42 | 28.9<br>28 | 27.8<br>28 | -          | -        | 1.4<br>2 | 0.0 | 0.0      | 0.0      | 0.1<br>0 |
|         |             |           | SA                     | 98         | 0.0         | 95.9       | 0.1                | 64.5       | 16.4       | 17.3       | -          | -        | 1.7      | 0.0 | 0.0      | 0.0      | 0.1      |

<sup>12</sup> Validity statistics (highlighted in blue) are captured for items' most recent *operational* use.

|         |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |
|---------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
|         |      |      | 98   | 0    | 95   | 0    | 64   | 16   | 18   |      |      | 2   |     |     | 0   |     |
|         | ER   | 90.6 | 90   | 0.9  | 81   | 2.7  | 17.3 | 39.3 | 18.8 | 5.8  | 16.6 | 2.2 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 1    |      | 2    | 16   | 39   | 20   | 6    | 178  | 2   |     |     | 0   |     |
|         | SA   | 92.3 | 94   | 0.0  | 87   | 0.3  | 23.9 | 45.1 | 29.6 | -    | -    | 1.3 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 0    |      | 0    | 25   | 44   | 30   |      |      | 1   |     |     | 0   |     |
|         | 5    | SA   | 94.8 | 0.0  | 84.4 | 0.2  | 35.1 | 45.6 | 18.3 | -    | -    | 0.9 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 0    |      | 0    | 36   | 36   | 27   |      |      | 1   |     |     | 0   |     |
|         | SA   | 96.1 | 97   | 0.3  | 86.4 | 0.8  | 56.9 | 21.1 | 21.0 | -    | -    | 0.9 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 0    |      | 0    | 55   | 22   | 22   |      |      | 1   |     |     | 0   |     |
|         | ER   | 92.3 | 91   | 0.2  | 85.2 | 0.8  | 10.6 | 58.5 | 14.3 | 8.9  | 4.2  | 3.3 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 0    |      | 2    | 12   | 61   | 13   | 8    | 3    | 3   |     |     | 0   |     |
|         | SA   | 97.5 | 98   | 0.0  | 81.2 | 0.2  | 32.8 | 43.5 | 22.4 | -    | -    | 1.2 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 0    |      | 0    | 38   | 39   | 22   |      |      | 1   |     |     | 0   |     |
|         | 6    | SA   | 98.1 | 0.0  | 90.4 | 0.2  | 12.6 | 39.0 | 47.3 | -    | -    | 1.0 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 0    |      | 0    | 12   | 39   | 48   |      |      | 1   |     |     | 0   |     |
|         | SA   | 96.8 | 98   | 0.1  | 93.8 | 0.3  | 22.9 | 63.1 | 11.7 | -    | -    | 1.6 | 0.0 | 0.0 | 0.0 | 0.6 |
|         |      |      |      | 0    |      | 0    | 23   | 63   | 12   |      |      | 1   |     |     | 1   |     |
|         | ER   | 91.2 | 88   | 0.2  | 73.3 | 2.2  | 33.0 | 26.9 | 17.7 | 11.8 | 7.5  | 2.8 | 0.0 | 0.0 | 0.0 | 0.3 |
|         |      |      |      | 0    |      | 2    | 34   | 27   | 17   | 11   | 9    | 2   |     |     | 0   |     |
|         | SA   | 96.1 | 96   | 0.1  | 88.4 | 0.3  | 38.7 | 40.4 | 19.8 | -    | -    | 0.9 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 0    |      | 0    | 36   | 41   | 22   |      |      | 1   |     |     | 0   |     |
|         | 7    | SA   | 96.9 | 0.0  | 91.4 | 0.2  | 37.3 | 50.4 | 10.3 | -    | -    | 1.6 | 0.0 | 0.0 | 0.0 | 0.3 |
|         |      |      |      | 0    |      | 0    | 37   | 50   | 11   |      |      | 2   |     |     | 0   |     |
|         | SA   | 95.5 | 94   | 0.1  | 93.4 | 0.3  | 70.3 | 13.6 | 15.1 | -    | -    | 0.9 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 0    |      | 0    | 68   | 15   | 16   |      |      | 1   |     |     | 0   |     |
|         | ER   | 93.5 | 90   | 0.3  | 83.6 | 0.7  | 38.5 | 14.1 | 20.3 | 19.0 | 6.6  | 1.4 | 0.0 | 0.0 | 0.0 | 0.1 |
|         |      |      |      | 0    |      | 0    | 38   | 14   | 22   | 19   | 6    | 1   |     |     | 0   |     |
|         | SA   | 95.6 | 90   | 0.0  | 80.1 | 1.5  | 38.8 | 23.2 | 36.2 | -    | -    | 1.6 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 1    |      | 2    | 39   | 22   | 37   |      |      | 2   |     |     | 0   |     |
|         | 8    | SA   | 95.4 | 0.2  | 89.5 | 0.7  | 36.8 | 23.4 | 37.8 | -    | -    | 1.7 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 0    |      | 0    | 36   | 25   | 38   |      |      | 1   |     |     | 0   |     |
|         | SA   | 93.5 | 95   | 0.1  | 88.7 | 0.4  | 72.0 | 13.2 | 12.9 | -    | -    | 1.7 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 0    |      | 0    | 73   | 13   | 13   |      |      | 1   |     |     | 0   |     |
|         | ER   | 89.8 | 92   | 0.3  | 73.3 | 1.6  | 10.5 | 34.8 | 19.5 | 19.2 | 13.5 | 2.3 | 0.0 | 0.0 | 0.0 | 0.2 |
|         |      |      |      | 0    |      | 2    | 10   | 35   | 20   | 20   | 13   | 2   |     |     | 0   |     |
|         | SA   | 95.6 | 95   | 0.4  | 87.6 | 1.3  | 40.4 | 22.5 | 34.6 | -    | -    | 1.7 | 0.0 | 0.0 | 0.0 | 0.8 |
|         |      |      |      | 0    |      | 0    | 35   | 24   | 37   |      |      | 1   |     |     | 3   |     |
| Science | 4    | ER   | 87.9 | 0.6  | 66.3 | 4.0  | 8.3  | 26.2 | 38.2 | 19.7 | 5.8  | 1.2 | 0.0 | 0.0 | 0.2 | 0.3 |
|         |      |      |      | 1    | 66   | 4    | 8    | 25   | 39   | 21   | 6    | 1   |     |     | 0   | 0   |
|         |      | ER   | 88.1 | 1.6  | 69.8 | 2.4  | 40.8 | 41.5 | 8.9  | 4.3  | 2.8  | 1.5 | 0.0 | 0.0 | 0.3 | 0.1 |
|         |      |      |      | 3    | 72   | 2    | 45   | 40   | 8    | 3    | 3    | 1   |     |     | 0   | 0   |
|         |      | ER   | 89.9 | 0.3  | 68.4 | 4.1  | 30.6 | 26.9 | 20.4 | 16.1 | 3.6  | 1.7 | 0.0 | 0.0 | 0.2 | 0.4 |
|         |      |      |      | 0    | 69   | 4    | 31   | 26   | 22   | 15   | 3    | 2   |     |     | 0   | 1   |
|         |      | ER   | 86.6 | 0.2  | 66.5 | 3.5  | 15.5 | 49.4 | 24.2 | 7.2  | 2.2  | 1.2 | 0.0 | 0.0 | 0.1 | 0.1 |
|         |      |      | 0    | 73   | 2    | 16   | 47   | 24   | 9    | 3    | 1    |     |     | 0   | 0   |     |
|         | ER   | 90.7 | 0.3  | 67.2 | 4.0  | 30.0 | 18.5 | 23.0 | 18.8 | 8.1  | 1.2  | 0.0 | 0.0 | 0.2 | 0.1 |     |
|         |      |      | 1    | 70   | 2    | 28   | 21   | 24   | 19   | 7    | 1    |     |     | 0   | 0   |     |
|         | ER   | 92.7 | 0.5  | 70.6 | 1.5  | 24.9 | 44.6 | 22.6 | 4.0  | 1.1  | 2.2  | 0.0 | 0.0 | 0.2 | 0.4 |     |
|         |      |      | 1    | 70   | 0    | 27   | 44   | 22   | 4    | 1    | 1    |     |     | 0   | 0   |     |
|         | ER   | 89.8 | 0.3  | 69.7 | 4.4  | 36.7 | 25.9 | 21.8 | 10.9 | 2.8  | 1.3  | 0.0 | 0.0 | 0.2 | 0.4 |     |
|         |      | 0    | 66   | 4    | 32   | 27   | 25   | 12   | 3    | 1    |      |     | 0   | 0   |     |     |
| 7       | ER   | 89.4 | 85   | 0.7  | 72.2 | 1.4  | 36.4 | 28.9 | 19.8 | 10.4 | 3.0  | 1.3 | 0.0 | 0.0 | 0.1 | 0.1 |
|         |      |      |      | 1    | 68   | 2    | 38   | 31   | 18   | 10   | 2    | 1   |     | 0   | 0   |     |
| ER      | 84.6 | 83   | 1.0  | 69.2 | 1.3  | 46.4 | 32.5 | 12.5 | 4.7  | 1.3  | 2.1  | 0.0 | 0.0 | 0.0 | 0.6 |     |
|         |      |      |      | 1    | 69   | 2    | 45   | 32   | 14   | 5    | 1    | 2   |     |     | 1   |     |

|                   |            |                |            |          |            |          |            |            |            |            |            |            |            |          |          |          |          |          |
|-------------------|------------|----------------|------------|----------|------------|----------|------------|------------|------------|------------|------------|------------|------------|----------|----------|----------|----------|----------|
|                   |            | ER             | 90.0<br>80 | 0.3<br>0 | 67.4<br>68 | 2.1<br>2 | 20.7<br>21 | 23.2<br>23 | 34.3<br>35 | 13.4<br>14 | 6.1<br>6   | 1.7<br>1   | 0.0        | 0.0      | 0.1<br>0 | 0.4<br>0 |          |          |
|                   |            | ER             | 88.2<br>88 | 0.4<br>0 | 68.5<br>67 | 1.8<br>2 | 30.4<br>33 | 25.5<br>26 | 24.9<br>24 | 12.2<br>12 | 4.9<br>4   | 1.7<br>1   | 0.0        | 0.0      | 0.1<br>0 | 0.3<br>0 |          |          |
|                   |            | ER             | 85<br>81   | 0.6<br>1 | 72.4<br>74 | 1.6<br>0 | 54.9<br>56 | 23.8<br>26 | 11.1<br>10 | 4.8<br>4   | 1.2<br>1   | 2.1<br>2   | 0.0        | 0.0      | 0.1<br>0 | 2.1<br>1 |          |          |
|                   |            | ER             | 88.4<br>81 | 0.2<br>0 | 65.6<br>66 | 1.5<br>0 | 34.0<br>29 | 37.3<br>41 | 18.9<br>21 | 6.7<br>6   | 1.1<br>1   | 1.4<br>2   | 0.0        | 0.0      | 0.1<br>0 | 0.4<br>0 |          |          |
|                   |            | ER             | 88.7<br>84 | 0.6<br>1 | 67.1<br>69 | 1.4<br>0 | 25.7<br>26 | 32.8<br>33 | 27.2<br>27 | 9.6<br>10  | 2.3<br>3   | 1.8<br>1   | 0.0        | 0.0      | 0.2<br>0 | 0.3<br>0 |          |          |
|                   | 11         | ER             | 83.8<br>-  | 0.2<br>- | 66.2<br>76 | 4.3<br>- | 40.6<br>34 | 21.7<br>26 | 18.9<br>25 | 6.6<br>9   | 1.8<br>1   | 4.0<br>3   | 0.6<br>0   | 0.0      | 1.1<br>0 | 4.6<br>2 |          |          |
|                   |            | ER             | 82.1<br>-  | 0.7<br>- | 68.9<br>79 | 3.3<br>- | 24.2<br>22 | 42.1<br>28 | 18.2<br>35 | 5.8<br>7   | 1.5<br>0   | 4.3<br>5   | 0.2<br>0   | 0.0      | 0.9<br>0 | 2.8<br>3 |          |          |
|                   |            | ER             | 79.8<br>-  | 1.3<br>- | 65.1<br>85 | 5.6<br>2 | 24.3<br>31 | 33.7<br>37 | 23.4<br>21 | 8.2<br>5   | 2.8<br>1   | 3.5<br>3   | 0.4<br>0   | 0.0      | 0.8<br>0 | 2.9<br>2 |          |          |
|                   |            | ER             | 88.1<br>-  | 0.0<br>- | 72.8<br>77 | 1.5<br>- | 18.7<br>16 | 39.9<br>51 | 23.3<br>23 | 7.6<br>5   | 1.9<br>1   | 3.9<br>2   | 0.4<br>0   | 0.0      | 1.0<br>1 | 3.3<br>1 |          |          |
|                   |            | ER             | 88.3<br>-  | 0.6<br>- | 72.2<br>81 | 1.0<br>- | 14.1<br>13 | 45.2<br>56 | 24.3<br>18 | 7.7<br>5   | 3.3<br>1   | 2.7<br>4   | 0.3<br>0   | 0.0      | 0.7<br>1 | 1.6<br>2 |          |          |
|                   |            | ER             | 87.6<br>-  | 0.6<br>- | 67.1<br>-  | 3.7<br>- | 37.2<br>-  | 27.8<br>-  | 19.2<br>-  | 7.6<br>-   | 2.3<br>-   | 3.3<br>-   | 0.2<br>-   | 0.0      | 0.7<br>- | 1.6<br>- |          |          |
|                   |            | ER             | 79.8<br>-  | 0.6<br>- | 73.2<br>73 | 2.2<br>2 | 31.6<br>39 | 32.5<br>35 | 24.7<br>18 | 7.2<br>5   | 1.7<br>0   | 1.2<br>2   | 0.1<br>0   | 0.0      | 0.4<br>0 | 0.6<br>1 |          |          |
|                   |            | ER             | 83.2<br>-  | 0.8<br>- | 67.3<br>67 | 7.7<br>4 | 23.8<br>22 | 22.4<br>28 | 27.3<br>30 | 16.9<br>13 | 6.8<br>4   | 1.8<br>2   | 0.1<br>0   | 0.0      | 0.3<br>0 | 0.7<br>1 |          |          |
|                   |            | ER             | 86.4<br>-  | 0.3<br>- | 66.0<br>66 | 3.5<br>4 | 19.7<br>17 | 33.6<br>32 | 29.0<br>32 | 10.2<br>12 | 2.6<br>3   | 2.6<br>3   | 0.2<br>0   | 0.0      | 0.5<br>0 | 1.5<br>1 |          |          |
|                   |            | ER             | 78.6<br>-  | 2.3<br>- | 65.7<br>72 | 5.6<br>2 | 40.9<br>34 | 31.6<br>32 | 18.4<br>18 | 4.9<br>6   | 1.0<br>1   | 1.9<br>7   | 0.1<br>0   | 0.0      | 0.3<br>0 | 1.0<br>2 |          |          |
|                   |            | Social Studies | 5          | ER       | 85.0<br>81 | 0.4<br>1 | 65.9<br>65 | 0.5<br>2   | 12.7<br>13 | 19.6<br>17 | 37.4<br>37 | 23.2<br>26 | 5.7<br>6   | 1.0<br>1 | 0.0      | 0.0      | 0.1<br>0 | 0.2<br>0 |
|                   |            |                |            | ER       | 80.6<br>84 | 1.4<br>1 | 67.1<br>67 | 0.4<br>2   | 18.7<br>21 | 38.3<br>38 | 27.7<br>29 | 11.5<br>10 | 3.0<br>2   | 0.6<br>0 | 0.0      | 0.0      | 0.1<br>0 | 0.1<br>0 |
|                   |            |                |            | ER       | 78.8<br>80 | 0.7<br>0 | 66.2<br>67 | 0.0<br>2   | 19.5<br>23 | 38.8<br>37 | 27.3<br>28 | 11.0<br>9  | 2.5<br>2   | 0.7<br>1 | 0.1<br>0 | 0.0      | 0.1<br>0 | 0.1<br>0 |
|                   |            |                | 8          | ER       | 81.7<br>80 | 2.2<br>2 | 67.1<br>71 | 0.0<br>0   | 7.7<br>6   | 5.4<br>7   | 34.5<br>37 | 38.3<br>34 | 12.3<br>15 | 1.5<br>1 | 0.0      | 0.0      | 0.0<br>0 | 0.2<br>0 |
| ER                | 84.8<br>84 |                |            | 1.1<br>1 | 67.3<br>70 | 0.0<br>0 | 3.8<br>4   | 5.2<br>6   | 51.8<br>47 | 29.1<br>31 | 9.0<br>11  | 0.9<br>1   | 0.0        | 0.0      | 0.0<br>0 | 0.2<br>0 |          |          |
| ER                | 85.9<br>82 |                |            | 0.3<br>0 | 66.7<br>70 | 0.0<br>0 | 5.1<br>5   | 10.1<br>8  | 40.3<br>40 | 30.5<br>29 | 12.6<br>17 | 1.1<br>1   | 0.0        | 0.0      | 0.0<br>0 | 0.2<br>0 |          |          |
| On Demand Writing | 5          | Prompt         | 82.7<br>87 | 0.0<br>0 | 68.6<br>69 | 0.4<br>0 | -<br>16    | 17.8<br>49 | 46.2<br>49 | 30.7<br>30 | 3.7<br>4   | 1.2<br>1   | 0.0        | 0.0      | 0.0<br>0 | 0.3<br>0 |          |          |
|                   |            | Prompt         | 81.8<br>86 | 0.0<br>0 | 65.7<br>67 | 0.9<br>0 | -<br>19    | 21.4<br>46 | 46.2<br>46 | 26.6<br>30 | 3.8<br>4   | 0.6<br>0   | 0.1<br>0   | 0.0      | 0.1<br>0 | 1.1<br>1 |          |          |
|                   |            | Prompt         | 82.4<br>87 | 0.1<br>0 | 66.3<br>65 | 0.4<br>2 | -<br>9     | 10.7<br>51 | 45.0<br>51 | 39.2<br>35 | 4.8<br>5   | 0.0<br>0   | 0.1<br>0   | 0.0      | 0.0<br>0 | 0.2<br>0 |          |          |
|                   | 8          | Prompt         | 86.2<br>87 | 0.0<br>0 | 69.3<br>67 | 0.5<br>0 | -<br>11    | 14.0<br>35 | 37.4<br>35 | 38.3<br>40 | 8.6<br>13  | 1.2<br>1   | 0.1<br>0   | 0.0      | 0.0<br>0 | 0.4<br>0 |          |          |
|                   |            | Prompt         | 84.9<br>84 | 0.1<br>0 | 69.1<br>68 | 0.2<br>0 | -<br>10    | 11.3<br>34 | 36.2<br>34 | 43.5<br>43 | 8.8<br>13  | 0.0<br>0   | 0.0        | 0.0      | 0.0<br>0 | 0.2<br>0 |          |          |
|                   |            | Prompt         | 85.7<br>84 | 0.1<br>0 | 71.0<br>66 | 0.1<br>0 | -<br>14    | 16.6<br>39 | 43.8<br>39 | 32.0<br>37 | 6.0<br>9   | 0.9<br>1   | 0.1<br>0   | 0.0      | 0.0<br>0 | 0.7<br>0 |          |          |
|                   | 11         | Prompt         | 87.0       | 0.3      | 69.0       | 0.4      | -          | 18.3       | 34.2       | 31.6       | 12.1       | 1.2        | 0.3        | 0.0      | 0.2      | 2.2      |          |          |

|  |         |  |      |     |      |     |   |     |      |      |      |     |     |     |     |     |
|--|---------|--|------|-----|------|-----|---|-----|------|------|------|-----|-----|-----|-----|-----|
|  |         |  | 84   | 0   | 68   | 0   |   | 17  | 40   | 33   | 7    | 2   | 0   |     | 0   | 1   |
|  | Prompt* |  | 86.5 | 0.0 | 68.7 | 0.3 | - | 9.4 | 25.0 | 36.2 | 27.6 | 0.7 | 0.1 | 0.0 | 0.1 | 1.0 |
|  |         |  | 89   | 0   | 72   | 0   |   | --  | --   | --   | --   | --  | --  | --  | --  | --  |

*\*On Demand Writing was administrated via computer. The online setup of choice prompts results in combined scoring metrics.*

## Appendix O. On-Demand Writing Score Distribution and Rater Agreement

| Prompt Type   | Grade | Final Prompt Score |     |     |     |     | Condition Code |    |   |    |     | Rater Agreement <sup>13</sup> |          |              |
|---------------|-------|--------------------|-----|-----|-----|-----|----------------|----|---|----|-----|-------------------------------|----------|--------------|
|               |       | 0                  | 1   | 2   | 3   | 4   | A              | B  | F | I  | O   | Perfect                       | Adjacent | Non-Adjacent |
| Passage-Based | 5     | 2%                 | 21% | 46% | 27% | 4%  | 14             | 28 | 1 | 6  | 117 | 66%                           | 33%      | 1%           |
|               | 8     | 1%                 | 16% | 44% | 32% | 6%  | 13             | 55 | 1 | 3  | 78  | 71%                           | 29%      | 0%           |
|               | 11    | 4%                 | 18% | 34% | 32% | 12% | 26             | 76 | 3 | 18 | 232 | 69%                           | 31%      | 0%           |
| Choice        | 5     | 1%                 | 14% | 45% | 36% | 4%  | 3              | 24 | 1 | 2  | 22  | 67%                           | 32%      | 0%           |
|               | 8     | 1%                 | 13% | 37% | 41% | 9%  | 6              | 36 | 1 | 2  | 35  | 69%                           | 31%      | 0%           |
|               | 11    | 2%                 | 9%  | 25% | 36% | 28% | 12             | 36 | 0 | 9  | 92  | 69%                           | 31%      | 0%           |

A = Insufficient Amount to Score; B = Non-Response; F = Non-English; I = Illegible; O = Off-Topic

<sup>13</sup> Approximately 20% of student responses are scored twice for interrater reliability.

## Appendix P. Accuracy and Consistency<sup>14</sup>

### Reading

**Table 1. Accuracy Classification for Reading Grade 3**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.18481        | 0.04060    | 0.00191    | 0.00000       | 71.52      |
| Apprentice    | 0.04790        | 0.14286    | 0.05932    | 0.00043       |            |
| Proficient    | 0.00193        | 0.05238    | 0.21981    | 0.04919       |            |
| Distinguished | 0.00000        | 0.00018    | 0.03100    | 0.16767       |            |

**Table 2. Accuracy Classification at Proficient Cut Point for Reading Grade 3**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.18481        | 0.04060    | 0.00191    | 0.00000       | 88.38      |
| Apprentice    | 0.04790        | 0.14286    | 0.05932    | 0.00043       |            |
| Proficient    | 0.00193        | 0.05238    | 0.21981    | 0.04919       |            |
| Distinguished | 0.00000        | 0.00018    | 0.03100    | 0.16767       |            |

**Table 3. Consistency Classification for Reading Grade 3**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.17277        | 0.05834    | 0.01037    | 0.00009       | 61.97         | 0.49  |
| Apprentice    | 0.05295        | 0.10871    | 0.07022    | 0.00330       |               |       |
| Proficient    | 0.00884        | 0.06599    | 0.17882    | 0.05449       |               |       |
| Distinguished | 0.00008        | 0.00299    | 0.05262    | 0.15941       |               |       |

**Table 4. Accuracy Classification for Reading Grade 4**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13763        | 0.03132    | 0.00066    | 0.00001       | 71.04      |
| Apprentice    | 0.05307        | 0.18472    | 0.06655    | 0.00020       |            |
| Proficient    | 0.00116        | 0.06027    | 0.28268    | 0.04943       |            |
| Distinguished | 0.00000        | 0.00008    | 0.02683    | 0.10537       |            |

<sup>14</sup> Alternate K-PREP students are not included.

**Table 5. Accuracy Classification at Proficient Cut Point for Reading Grade 4**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13763        | 0.03132    | 0.00066    | 0.00001       | 87.11      |
| Apprentice    | 0.05307        | 0.18472    | 0.06655    | 0.00020       |            |
| Proficient    | 0.00116        | 0.06027    | 0.28268    | 0.04943       |            |
| Distinguished | 0.00000        | 0.00008    | 0.02683    | 0.10537       |            |

**Table 6. Consistency Classification for Reading Grade 4**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.13028        | 0.05310    | 0.00684    | 0.00002       | 60.81         | 0.46  |
| Apprentice    | 0.05517        | 0.14438    | 0.08550    | 0.00231       |               |       |
| Proficient    | 0.00639        | 0.07687    | 0.23298    | 0.05223       |               |       |
| Distinguished | 0.00002        | 0.00204    | 0.05141    | 0.10045       |               |       |

**Table 7. Accuracy Classification for Reading Grade 5**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13026        | 0.02944    | 0.00124    | 0.00001       | 70.34      |
| Apprentice    | 0.05150        | 0.14699    | 0.06567    | 0.00031       |            |
| Proficient    | 0.00198        | 0.05825    | 0.28601    | 0.05311       |            |
| Distinguished | 0.00000        | 0.00014    | 0.03496    | 0.14012       |            |

**Table 8. Accuracy Classification at Proficient Cut Point for Reading Grade 5**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13026        | 0.02944    | 0.00124    | 0.00001       | 87.24      |
| Apprentice    | 0.05150        | 0.14699    | 0.06567    | 0.00031       |            |
| Proficient    | 0.00198        | 0.05825    | 0.28601    | 0.05311       |            |
| Distinguished | 0.00000        | 0.00014    | 0.03496    | 0.14012       |            |

**Table 9. Consistency Classification for Reading Grade 5**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.12283        | 0.04825    | 0.00943    | 0.00006       | 60.12         | 0.45  |
| Apprentice    | 0.05218        | 0.11278    | 0.08354    | 0.00298       |               |       |
| Proficient    | 0.00867        | 0.07106    | 0.23271    | 0.05759       |               |       |
| Distinguished | 0.00006        | 0.00274    | 0.06222    | 0.13291       |               |       |

**Table 10. Accuracy Classification for Reading Grade 6**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.15762        | 0.02687    | 0.00083    | 0.00000       | 74.92      |
| Apprentice    | 0.04710        | 0.12808    | 0.05241    | 0.00003       |            |
| Proficient    | 0.00125        | 0.04626    | 0.31134    | 0.04718       |            |
| Distinguished | 0.00000        | 0.00001    | 0.02883    | 0.15218       |            |

**Table 11. Accuracy Classification at Proficient Cut Point for Reading Grade 6**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.15762        | 0.02687    | 0.00083    | 0.00000       | 89.92      |
| Apprentice    | 0.04710        | 0.12808    | 0.05241    | 0.00003       |            |
| Proficient    | 0.00125        | 0.04626    | 0.31134    | 0.04718       |            |
| Distinguished | 0.00000        | 0.00001    | 0.02883    | 0.15218       |            |

**Table 12. Consistency Classification for Reading Grade 6**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.14805        | 0.04169    | 0.00633    | 0.00001       | 65.94         | 0.53  |
| Apprentice    | 0.05129        | 0.10002    | 0.06917    | 0.00075       |               |       |
| Proficient    | 0.00663        | 0.05890    | 0.26692    | 0.05423       |               |       |
| Distinguished | 0.00000        | 0.00060    | 0.05099    | 0.14440       |               |       |

**Table 13. Accuracy Classification for Reading Grade 7**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.15141        | 0.02853    | 0.00107    | 0.00002       | 72.19      |
| Apprentice    | 0.04750        | 0.13579    | 0.05656    | 0.00013       |            |
| Proficient    | 0.00186        | 0.05622    | 0.29606    | 0.05249       |            |
| Distinguished | 0.00000        | 0.00007    | 0.03362    | 0.13868       |            |

**Table 14. Accuracy Classification at Proficient Cut Point for Reading Grade 7**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.15141        | 0.02853    | 0.00107    | 0.00002       | 88.41      |
| Apprentice    | 0.04750        | 0.13579    | 0.05656    | 0.00013       |            |
| Proficient    | 0.00186        | 0.05622    | 0.29606    | 0.05249       |            |
| Distinguished | 0.00000        | 0.00007    | 0.03362    | 0.13868       |            |

**Table 15. Consistency Classification for Reading Grade 7**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.14329        | 0.04554    | 0.00807    | 0.00003       | 62.44         | 0.48  |
| Apprentice    | 0.04948        | 0.10515    | 0.07489    | 0.00194       |               |       |
| Proficient    | 0.00797        | 0.06813    | 0.24507    | 0.05850       |               |       |
| Distinguished | 0.00003        | 0.00179    | 0.05927    | 0.13085       |               |       |

**Table 16. Accuracy Classification for Reading Grade 8**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12773        | 0.02414    | 0.00086    | 0.00002       | 72.95      |
| Apprentice    | 0.04098        | 0.12073    | 0.04995    | 0.00021       |            |
| Proficient    | 0.00162        | 0.05225    | 0.26758    | 0.06014       |            |
| Distinguished | 0.00000        | 0.00013    | 0.04019    | 0.21348       |            |

**Table 17. Accuracy Classification at Proficient Cut Point for Reading Grade 8**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12773        | 0.02414    | 0.00086    | 0.00002       | 89.5       |
| Apprentice    | 0.04098        | 0.12073    | 0.04995    | 0.00021       |            |
| Proficient    | 0.00162        | 0.05225    | 0.26758    | 0.06014       |            |
| Distinguished | 0.00000        | 0.00013    | 0.04019    | 0.21348       |            |

**Table 18. Consistency Classification for Reading Grade 8**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.12108        | 0.03915    | 0.00685    | 0.00004       | 63.52         | 0.50  |
| Apprentice    | 0.04243        | 0.09411    | 0.06774    | 0.00272       |               |       |
| Proficient    | 0.00677        | 0.06171    | 0.21915    | 0.07026       |               |       |
| Distinguished | 0.00004        | 0.00228    | 0.06483    | 0.20083       |               |       |

## Mathematics

**Table 19. Accuracy Classification for Mathematics Grade 3**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.14477        | 0.04055    | 0.00009    | 0.00000       | 78.08      |
| Apprentice    | 0.04171        | 0.25376    | 0.05121    | 0.00000       |            |
| Proficient    | 0.00007        | 0.04351    | 0.27662    | 0.02414       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01792    | 0.10564       |            |

**Table 20. Accuracy Classification at Proficient Cut Point for Mathematics Grade 3**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.14477        | 0.04055    | 0.00009    | 0.00000       | 90.51      |
| Apprentice    | 0.04171        | 0.25376    | 0.05121    | 0.00000       |            |
| Proficient    | 0.00007        | 0.04351    | 0.27662    | 0.02414       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01792    | 0.10564       |            |

**Table 21. Consistency Classification for Mathematics Grade 3**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.13340        | 0.06164    | 0.00162    | 0.00000       | 69.32         | 0.57  |
| Apprentice    | 0.05183        | 0.21200    | 0.06598    | 0.00011       |               |       |
| Proficient    | 0.00132        | 0.06406    | 0.24660    | 0.02846       |               |       |
| Distinguished | 0.00000        | 0.00012    | 0.03165    | 0.10122       |               |       |

**Table 22. Accuracy Classification for Mathematics Grade 4**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.16745        | 0.03989    | 0.00011    | 0.00000       | 77.24      |
| Apprentice    | 0.04847        | 0.23405    | 0.05101    | 0.00001       |            |
| Proficient    | 0.00009        | 0.04003    | 0.23584    | 0.02767       |            |
| Distinguished | 0.00000        | 0.00000    | 0.02032    | 0.13506       |            |

**Table 23. Accuracy Classification at Proficient Cut Point for Mathematics Grade 4**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.16745        | 0.03989    | 0.00011    | 0.00000       | 90.88      |
| Apprentice    | 0.04847        | 0.23405    | 0.05101    | 0.00001       |            |
| Proficient    | 0.00009        | 0.04003    | 0.23584    | 0.02767       |            |
| Distinguished | 0.00000        | 0.00000    | 0.02032    | 0.13506       |            |

**Table 24. Consistency Classification for Mathematics Grade 4**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.15360        | 0.05967    | 0.00180    | 0.00000       | 68.38         | 0.57  |
| Apprentice    | 0.06074        | 0.19486    | 0.06484    | 0.00036       |               |       |
| Proficient    | 0.00167        | 0.05909    | 0.20581    | 0.03286       |               |       |
| Distinguished | 0.00000        | 0.00035    | 0.03483    | 0.12952       |               |       |

**Table 25. Accuracy Classification for Mathematics Grade 5**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12227        | 0.02946    | 0.00004    | 0.00000       | 77.7       |
| Apprentice    | 0.04300        | 0.24348    | 0.05029    | 0.00002       |            |
| Proficient    | 0.00004        | 0.04209    | 0.24435    | 0.03434       |            |
| Distinguished | 0.00000        | 0.00001    | 0.02372    | 0.16688       |            |

**Table 26. Accuracy Classification at Proficient Cut Point for Mathematics Grade 5**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12227        | 0.02946    | 0.00004    | 0.00000       | 90.75      |
| Apprentice    | 0.04300        | 0.24348    | 0.05029    | 0.00002       |            |
| Proficient    | 0.00004        | 0.04209    | 0.24435    | 0.03434       |            |
| Distinguished | 0.00000        | 0.00001    | 0.02372    | 0.16688       |            |

**Table 27. Consistency Classification for Mathematics Grade 5**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.11337        | 0.04841    | 0.00106    | 0.00000       | 68.99         | 0.58  |
| Apprentice    | 0.05092        | 0.20570    | 0.06628    | 0.00057       |               |       |
| Proficient    | 0.00101        | 0.06043    | 0.21106    | 0.04095       |               |       |
| Distinguished | 0.00000        | 0.00051    | 0.04002    | 0.15972       |               |       |

**Table 28. Accuracy Classification for Mathematics Grade 6**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.07929        | 0.03360    | 0.00001    | 0.00000       | 79.27      |
| Apprentice    | 0.03819        | 0.33580    | 0.05157    | 0.00000       |            |
| Proficient    | 0.00001        | 0.04305    | 0.26902    | 0.02375       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01713    | 0.10859       |            |

**Table 29. Accuracy Classification at Proficient Cut Point for Mathematics Grade 6**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.07929        | 0.03360    | 0.00001    | 0.00000       | 90.54      |
| Apprentice    | 0.03819        | 0.33580    | 0.05157    | 0.00000       |            |
| Proficient    | 0.00001        | 0.04305    | 0.26902    | 0.02375       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01713    | 0.10859       |            |

**Table 30. Consistency Classification for Mathematics Grade 6**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.07241        | 0.05673    | 0.00047    | 0.00000       | 70.73         | 0.57  |
| Apprentice    | 0.04471        | 0.29051    | 0.06693    | 0.00011       |               |       |
| Proficient    | 0.00036        | 0.06509    | 0.24021    | 0.02811       |               |       |
| Distinguished | 0.00000        | 0.00011    | 0.03012    | 0.10413       |               |       |

**Table 31. Accuracy Classification for Mathematics Grade 7**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.09298        | 0.03366    | 0.00002    | 0.00000       | 77.78      |
| Apprentice    | 0.04643        | 0.30681    | 0.05354    | 0.00000       |            |
| Proficient    | 0.00003        | 0.04495    | 0.26899    | 0.02607       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01744    | 0.10906       |            |

**Table 32. Accuracy Classification at Proficient Cut Point for Mathematics Grade 7**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.09298        | 0.03366    | 0.00002    | 0.00000       | 90.14      |
| Apprentice    | 0.04643        | 0.30681    | 0.05354    | 0.00000       |            |
| Proficient    | 0.00003        | 0.04495    | 0.26899    | 0.02607       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01744    | 0.10906       |            |

**Table 33. Consistency Classification for Mathematics Grade 7**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.08509        | 0.05715    | 0.00088    | 0.00000       | 68.92         | 0.56  |
| Apprentice    | 0.05354        | 0.26074    | 0.06913    | 0.00016       |               |       |
| Proficient    | 0.00080        | 0.06738    | 0.23887    | 0.03051       |               |       |
| Distinguished | 0.00000        | 0.00016    | 0.03113    | 0.10446       |               |       |

**Table 34. Accuracy Classification for Mathematics Grade 8**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12397        | 0.03676    | 0.00003    | 0.00000       | 77.84      |
| Apprentice    | 0.05037        | 0.29142    | 0.05361    | 0.00001       |            |
| Proficient    | 0.00003        | 0.04144    | 0.26879    | 0.02378       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01552    | 0.09426       |            |

**Table 35. Accuracy Classification at Proficient Cut Point for Mathematics Grade 8**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12397        | 0.03676    | 0.00003    | 0.00000       | 90.49      |
| Apprentice    | 0.05037        | 0.29142    | 0.05361    | 0.00001       |            |
| Proficient    | 0.00003        | 0.04144    | 0.26879    | 0.02378       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01552    | 0.09426       |            |

**Table 36. Consistency Classification for Mathematics Grade 8**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.11311        | 0.05919    | 0.00097    | 0.00000       | 69.12         | 0.56  |
| Apprentice    | 0.06036        | 0.24750    | 0.06854    | 0.00011       |               |       |
| Proficient    | 0.00090        | 0.06284    | 0.24028    | 0.02764       |               |       |
| Distinguished | 0.00000        | 0.00010    | 0.02816    | 0.09031       |               |       |

## Science

**Table 37. Accuracy Classification for Science Grade 4, Operational Set #1**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.10048        | 0.03559    | 0.00010    | 0.00002       | 71.47      |
| Apprentice    | 0.05524        | 0.41803    | 0.09127    | 0.00073       |            |
| Proficient    | 0.00013        | 0.06964    | 0.19354    | 0.03120       |            |
| Distinguished | 0.00000        | 0.00001    | 0.00134    | 0.00267       |            |

**Table 38. Accuracy Classification at Proficient Cut Point for Science Grade 4, Operational Set #1**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.10048        | 0.03559    | 0.00010    | 0.00002       | 83.81      |
| Apprentice    | 0.05524        | 0.41803    | 0.09127    | 0.00073       |            |
| Proficient    | 0.00013        | 0.06964    | 0.19354    | 0.03120       |            |
| Distinguished | 0.00000        | 0.00001    | 0.00134    | 0.00267       |            |

**Table 39. Consistency Classification for Science Grade 4, Operational Set #1**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.09612        | 0.07107    | 0.00273    | 0.00001       | 60.69         | 0.37  |
| Apprentice    | 0.05741        | 0.34063    | 0.10413    | 0.00344       |               |       |
| Proficient    | 0.00231        | 0.10898    | 0.16243    | 0.02347       |               |       |
| Distinguished | 0.00001        | 0.00260    | 0.01696    | 0.00772       |               |       |

**Table 40. Accuracy Classification for Science Grade 4, Operational Set #2**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.08173        | 0.03082    | 0.00005    | 0.00002       | 73.02      |
| Apprentice    | 0.05934        | 0.45425    | 0.09256    | 0.00033       |            |
| Proficient    | 0.00006        | 0.06029    | 0.18811    | 0.02423       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00210    | 0.00611       |            |

**Table 41. Accuracy Classification at Proficient Cut Point for Science Grade 4, Operational Set #2**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.08173        | 0.03082    | 0.00005    | 0.00002       | 84.6       |
| Apprentice    | 0.05934        | 0.45425    | 0.09256    | 0.00033       |            |
| Proficient    | 0.00006        | 0.06029    | 0.18811    | 0.02423       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00210    | 0.00611       |            |

**Table 42. Consistency Classification for Science Grade 4, Operational Set #2**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.07927        | 0.06701    | 0.00198    | 0.00000       | 62.67         | 0.38  |
| Apprentice    | 0.06007        | 0.37369    | 0.10270    | 0.00177       |               |       |
| Proficient    | 0.00179        | 0.10345    | 0.16464    | 0.01985       |               |       |
| Distinguished | 0.00000        | 0.00121    | 0.01349    | 0.00907       |               |       |

**Table 43. Accuracy Classification for Science Grade 7, Operational Set #1**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.16939        | 0.05506    | 0.00009    | 0.00001       | 74.93      |
| Apprentice    | 0.06769        | 0.42473    | 0.07036    | 0.00004       |            |
| Proficient    | 0.00005        | 0.04312    | 0.14893    | 0.01269       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00160    | 0.00622       |            |

**Table 44. Accuracy Classification at Proficient Cut Point for Science Grade 7, Operational Set #1**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.16939        | 0.05506    | 0.00009    | 0.00001       | 88.63      |
| Apprentice    | 0.06769        | 0.42473    | 0.07036    | 0.00004       |            |
| Proficient    | 0.00005        | 0.04312    | 0.14893    | 0.01269       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00160    | 0.00622       |            |

**Table 45. Consistency Classification for Science Grade 7, Operational Set #1**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.15732        | 0.09193    | 0.00196    | 0.00000       | 65.09         | 0.44  |
| Apprentice    | 0.07808        | 0.35095    | 0.07650    | 0.00033       |               |       |
| Proficient    | 0.00173        | 0.07982    | 0.13538    | 0.01134       |               |       |
| Distinguished | 0.00000        | 0.00022    | 0.00716    | 0.00728       |               |       |

**Table 46. Accuracy Classification for Science Grade 7, Operational Set #2**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.10492        | 0.05062    | 0.00011    | 0.00000       | 74.18      |
| Apprentice    | 0.06462        | 0.44889    | 0.08026    | 0.00003       |            |
| Proficient    | 0.00005        | 0.04818    | 0.18112    | 0.01223       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00212    | 0.00685       |            |

**Table 47. Accuracy Classification at Proficient Cut Point for Science Grade 7, Operational Set #2**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.10492        | 0.05062    | 0.00011    | 0.00000       | 87.14      |
| Apprentice    | 0.06462        | 0.44889    | 0.08026    | 0.00003       |            |
| Proficient    | 0.00005        | 0.04818    | 0.18112    | 0.01223       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00212    | 0.00685       |            |

**Table 48. Consistency Classification for Science Grade 7, Operational Set #2**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.09760        | 0.09099    | 0.00237    | 0.00000       | 63.83         | 0.41  |
| Apprentice    | 0.07015        | 0.36805    | 0.08751    | 0.00026       |               |       |
| Proficient    | 0.00184        | 0.08845    | 0.16487    | 0.01105       |               |       |
| Distinguished | 0.00000        | 0.00021    | 0.00886    | 0.00780       |               |       |

**Table 49. Accuracy Classification for Science Grade 11, Operational Set #1**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13392        | 0.04617    | 0.00003    | 0.00000       | 76.94      |
| Apprentice    | 0.05844        | 0.41045    | 0.06658    | 0.00001       |            |
| Proficient    | 0.00001        | 0.04285    | 0.21227    | 0.01314       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00336    | 0.01277       |            |

**Table 50. Accuracy Classification at Proficient Cut Point for Science Grade 11, Operational Set #1**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13392        | 0.04617    | 0.00003    | 0.00000       | 89.05      |
| Apprentice    | 0.05844        | 0.41045    | 0.06658    | 0.00001       |            |
| Proficient    | 0.00001        | 0.04285    | 0.21227    | 0.01314       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00336    | 0.01277       |            |

**Table 51. Consistency Classification for Science Grade 11, Operational Set #1**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.12311        | 0.07710    | 0.00098    | 0.00000       | 67.81         | 0.49  |
| Apprentice    | 0.06843        | 0.34832    | 0.07737    | 0.00008       |               |       |
| Proficient    | 0.00083        | 0.07398    | 0.19346    | 0.01262       |               |       |
| Distinguished | 0.00000        | 0.00006    | 0.01041    | 0.01322       |               |       |

**Table 52. Accuracy Classification for Science Grade 11, Operational Set #2**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13417        | 0.03908    | 0.00002    | 0.00000       | 76.5       |
| Apprentice    | 0.06686        | 0.42746    | 0.07100    | 0.00001       |            |
| Proficient    | 0.00002        | 0.04617    | 0.19842    | 0.00911       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00220    | 0.00548       |            |

**Table 53. Accuracy Classification at Proficient Cut Point for Science Grade 11, Operational Set #2**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13417        | 0.03908    | 0.00002    | 0.00000       | 88.28      |
| Apprentice    | 0.06686        | 0.42746    | 0.07100    | 0.00001       |            |
| Proficient    | 0.00002        | 0.04617    | 0.19842    | 0.00911       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00220    | 0.00548       |            |

**Table 54. Consistency Classification for Science Grade 11, Operational Set #2**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.12599        | 0.07189    | 0.00102    | 0.00000       | 67.31         | 0.47  |
| Apprentice    | 0.07404        | 0.36108    | 0.08202    | 0.00011       |               |       |
| Proficient    | 0.00102        | 0.07963    | 0.17983    | 0.00834       |               |       |
| Distinguished | 0.00000        | 0.00011    | 0.00876    | 0.00615       |               |       |

**Table 55. Accuracy Classification for Science Grade 11, Operational Set #3**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12082        | 0.04360    | 0.00003    | 0.00000       | 77.26      |
| Apprentice    | 0.05481        | 0.40696    | 0.06715    | 0.00001       |            |
| Proficient    | 0.00001        | 0.04524    | 0.23067    | 0.01165       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00495    | 0.01411       |            |

**Table 56. Accuracy Classification at Proficient Cut Point for Science Grade 11, Operational Set #3**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.12082        | 0.04360    | 0.00003    | 0.00000       | 88.76      |
| Apprentice    | 0.05481        | 0.40696    | 0.06715    | 0.00001       |            |
| Proficient    | 0.00001        | 0.04524    | 0.23067    | 0.01165       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00495    | 0.01411       |            |

**Table 57. Consistency Classification for Science Grade 11, Operational Set #3**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.11130        | 0.07400    | 0.00095    | 0.00000       | 67.99         | 0.50  |
| Apprentice    | 0.06355        | 0.34572    | 0.07949    | 0.00008       |               |       |
| Proficient    | 0.00078        | 0.07599    | 0.20870    | 0.01148       |               |       |
| Distinguished | 0.00000        | 0.00009    | 0.01365    | 0.01421       |               |       |

**Table 58. Accuracy Classification for Science Grade 11, Operational Set #4**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13268        | 0.03559    | 0.00001    | 0.00001       | 76.89      |
| Apprentice    | 0.06421        | 0.42386    | 0.07229    | 0.00001       |            |
| Proficient    | 0.00001        | 0.04440    | 0.20483    | 0.01219       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00242    | 0.00749       |            |

**Table 59. Accuracy Classification at Proficient Cut Point for Science Grade 11, Operational Set #4**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.13268        | 0.03559    | 0.00001    | 0.00001       | 88.33      |
| Apprentice    | 0.06421        | 0.42386    | 0.07229    | 0.00001       |            |
| Proficient    | 0.00001        | 0.04440    | 0.20483    | 0.01219       |            |
| Distinguished | 0.00000        | 0.00000    | 0.00242    | 0.00749       |            |

**Table 60. Consistency Classification for Science Grade 11, Operational Set #4**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.12535        | 0.06688    | 0.00081    | 0.00000       | 67.97         | 0.49  |
| Apprentice    | 0.07079        | 0.36110    | 0.08445    | 0.00016       |               |       |
| Proficient    | 0.00077        | 0.07574    | 0.18490    | 0.01120       |               |       |
| Distinguished | 0.00000        | 0.00012    | 0.00939    | 0.00835       |               |       |

## Social Studies

**Table 61. Accuracy Classification for Social Studies Grade 5**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.09834        | 0.02603    | 0.00003    | 0.00000       | 79.07      |
| Apprentice    | 0.04247        | 0.25554    | 0.05338    | 0.00000       |            |
| Proficient    | 0.00004        | 0.04514    | 0.34370    | 0.02672       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01555    | 0.09307       |            |

**Table 62. Accuracy Classification at Proficient Cut Point for Social Studies Grade 5**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.09834        | 0.02603    | 0.00003    | 0.00000       | 90.14      |
| Apprentice    | 0.04247        | 0.25554    | 0.05338    | 0.00000       |            |
| Proficient    | 0.00004        | 0.04514    | 0.34370    | 0.02672       |            |
| Distinguished | 0.00000        | 0.00000    | 0.01555    | 0.09307       |            |

**Table 63. Consistency Classification for Social Studies Grade 5**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.09161        | 0.04557    | 0.00099    | 0.00000       | 70.83         | 0.58  |
| Apprentice    | 0.04829        | 0.21621    | 0.07134    | 0.00004       |               |       |
| Proficient    | 0.00095        | 0.06489    | 0.31142    | 0.03074       |               |       |
| Distinguished | 0.00000        | 0.00003    | 0.02890    | 0.08902       |               |       |

**Table 64. Accuracy Classification for Social Studies Grade 8**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.06636        | 0.01903    | 0.00001    | 0.00000       | 80.29      |
| Apprentice    | 0.03104        | 0.24551    | 0.04931    | 0.00000       |            |
| Proficient    | 0.00001        | 0.04485    | 0.35754    | 0.03200       |            |
| Distinguished | 0.00000        | 0.00000    | 0.02084    | 0.13351       |            |

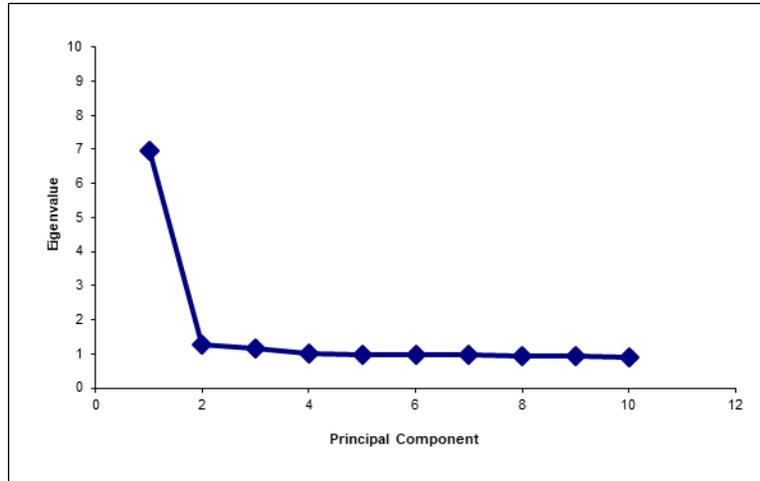
**Table 65. Accuracy Classification at Proficient Cut Point for Social Studies Grade 8**

| True Score    | Observed Score |            |            |               | Accuracy % |
|---------------|----------------|------------|------------|---------------|------------|
|               | Novice         | Apprentice | Proficient | Distinguished |            |
| Novice        | 0.06636        | 0.01903    | 0.00001    | 0.00000       | 90.58      |
| Apprentice    | 0.03104        | 0.24551    | 0.04931    | 0.00000       |            |
| Proficient    | 0.00001        | 0.04485    | 0.35754    | 0.03200       |            |
| Distinguished | 0.00000        | 0.00000    | 0.02084    | 0.13351       |            |

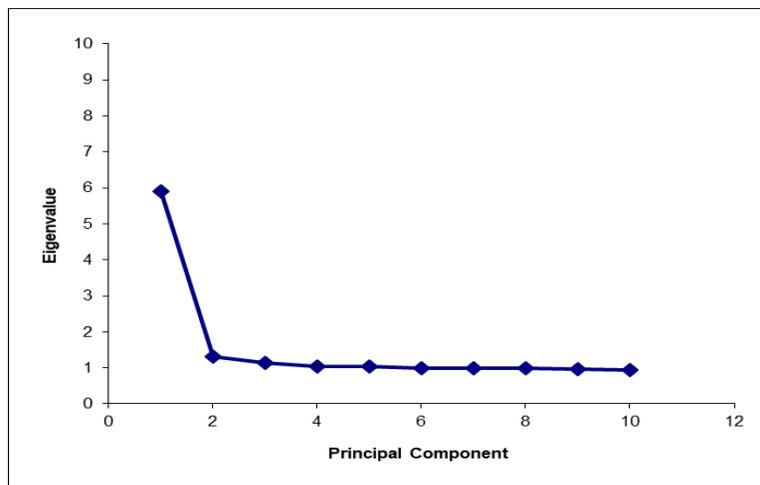
**Table 66. Consistency Classification for Social Studies Grade 8**

| First Form    | Alternate Form |            |            |               | Consistency % | Kappa |
|---------------|----------------|------------|------------|---------------|---------------|-------|
|               | Novice         | Apprentice | Proficient | Distinguished |               |       |
| Novice        | 0.06236        | 0.03539    | 0.00052    | 0.00000       | 72.32         | 0.60  |
| Apprentice    | 0.03458        | 0.21136    | 0.06855    | 0.00006       |               |       |
| Proficient    | 0.00046        | 0.06258    | 0.32194    | 0.03787       |               |       |
| Distinguished | 0.00000        | 0.00005    | 0.03669    | 0.12758       |               |       |

## Appendix Q. Principal Components Analysis—Scree Plots<sup>15</sup>

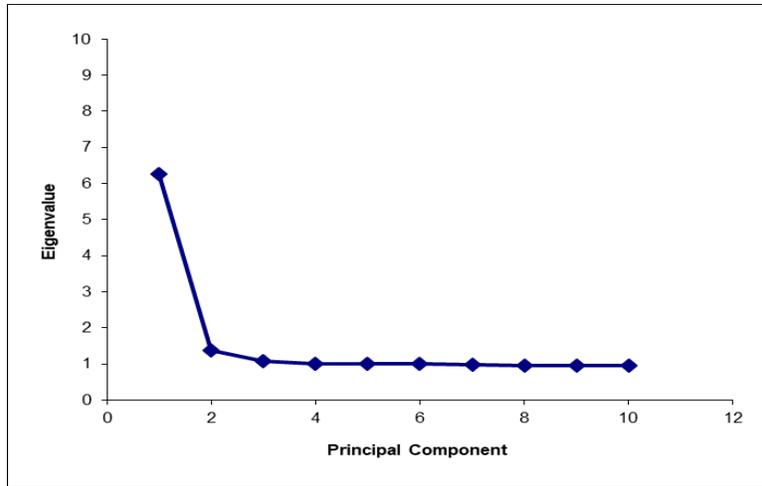


**Figure 1.** Reading Grade 3 Principal Components Scree Plot

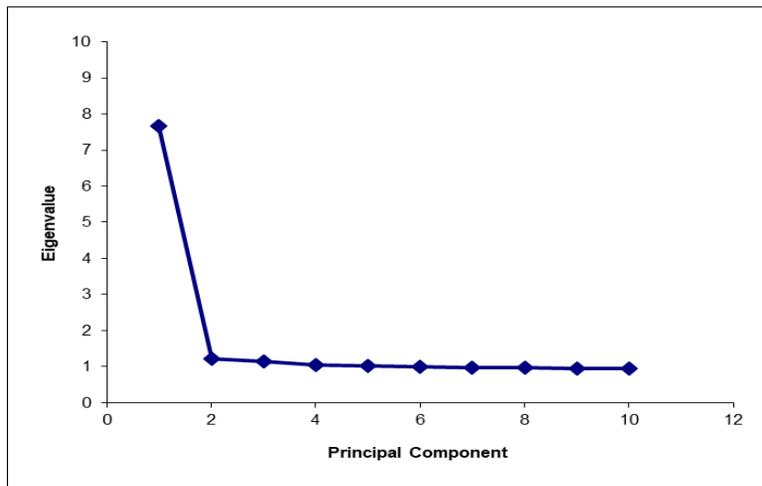


**Figure 2.** Reading Grade 4 Principal Components Scree Plot

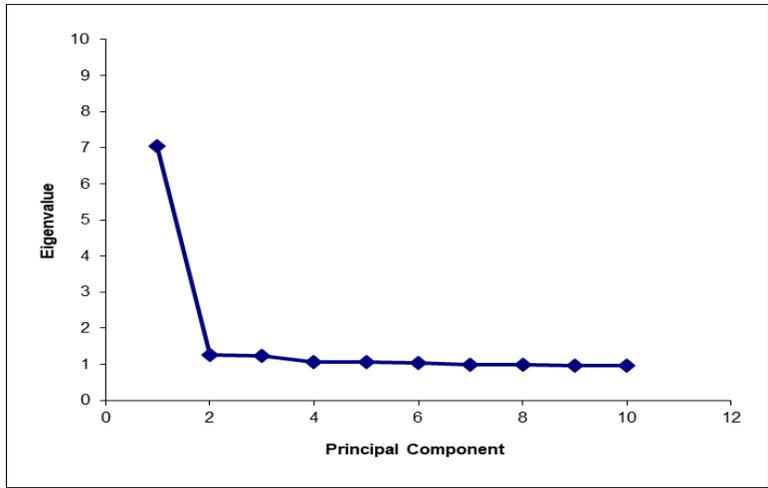
<sup>15</sup> The Alternate K-PREP assessment is not included.



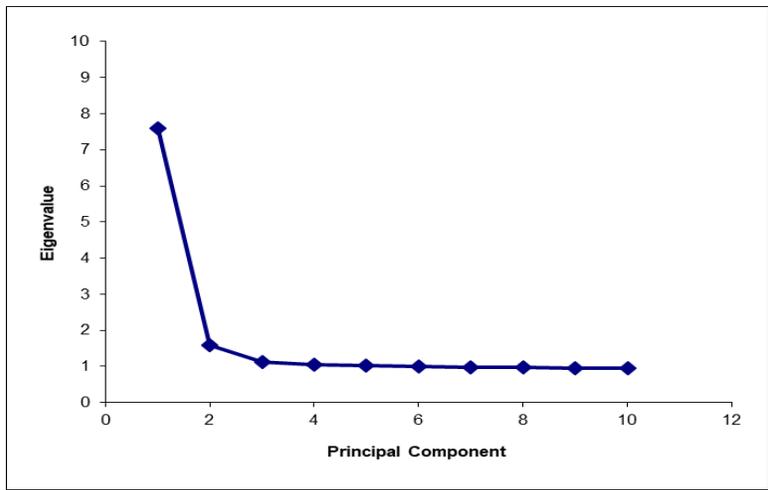
**Figure 3.** Reading Grade 5 Principal Components Scree Plot



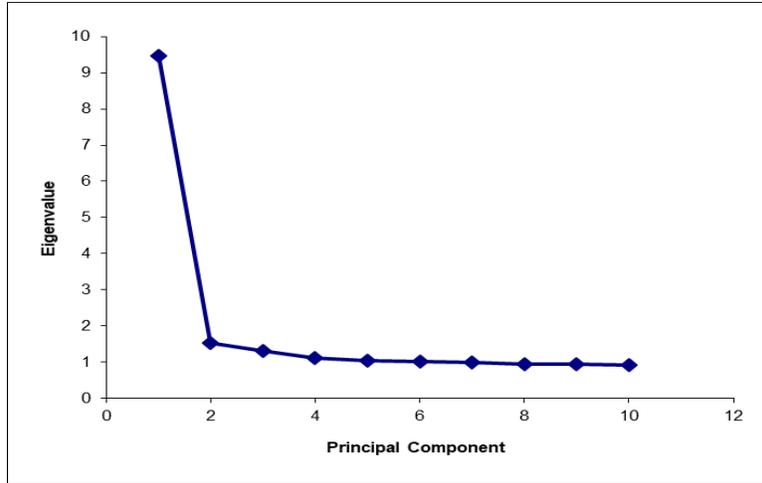
**Figure 4.** Reading Grade 6 Principal Components Scree Plot



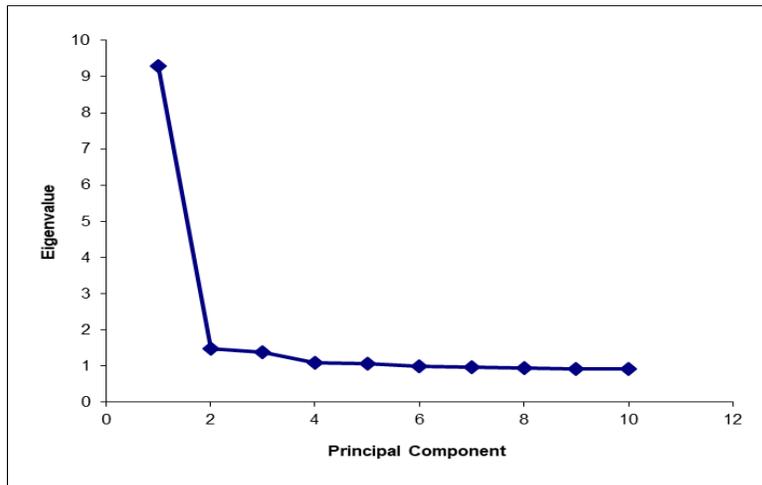
**Figure 5.** Reading Grade 7 Principal Components Scree Plot



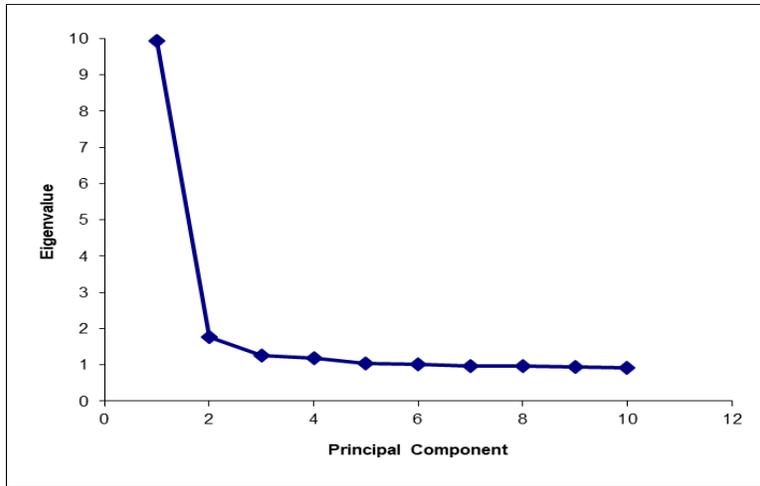
**Figure 6.** Reading Grade 8 Principal Components Scree Plot



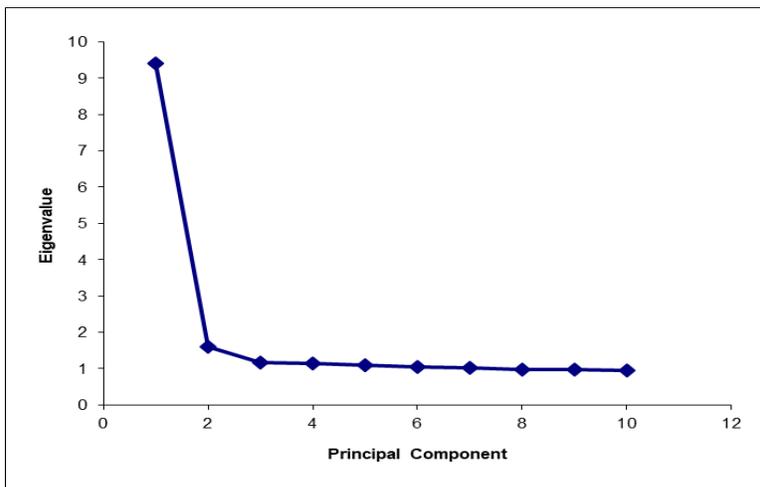
**Figure 7.** Mathematics Grade 3 Principal Components Scree Plot



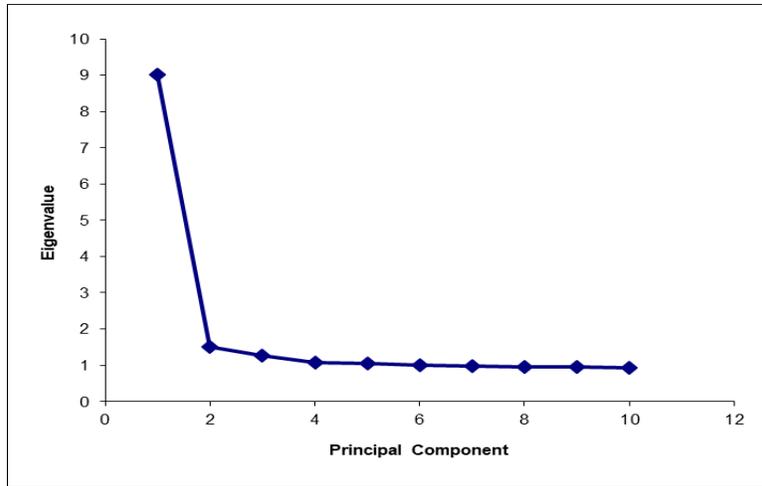
**Figure 8.** Mathematics Grade 4 Principal Components Scree Plot



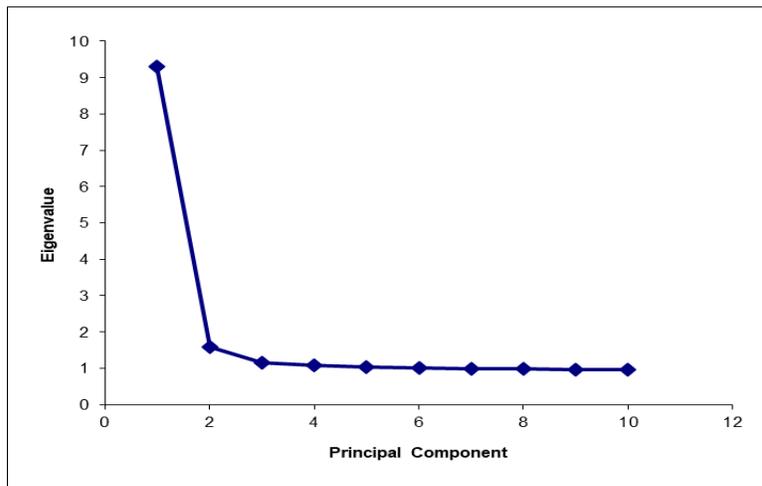
**Figure 9.** Mathematics Grade 5 Principal Components Scree Plot



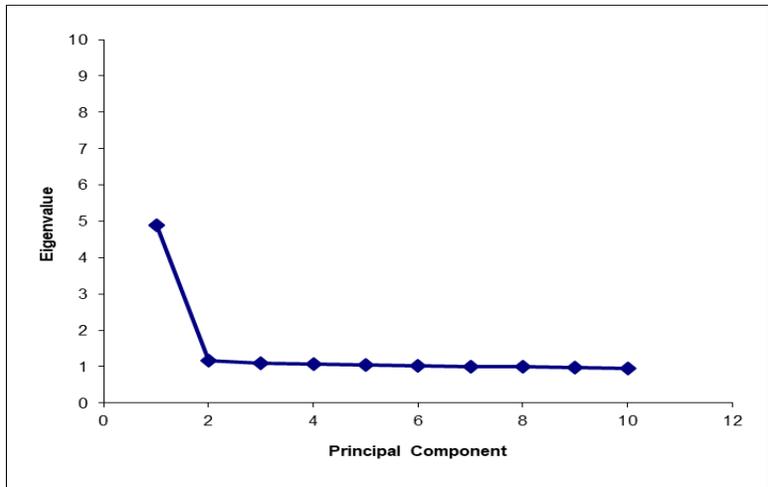
**Figure 10.** Mathematics Grade 6 Principal Components Scree Plot



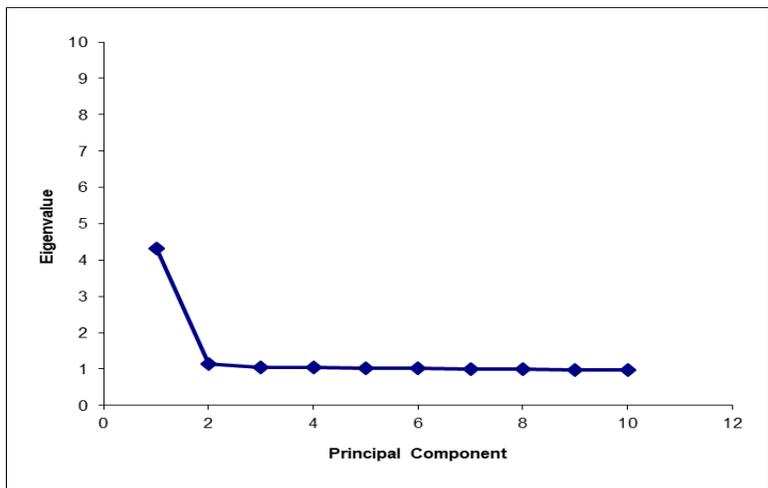
**Figure 11.** Mathematics Grade 7 Principal Components Scree Plot



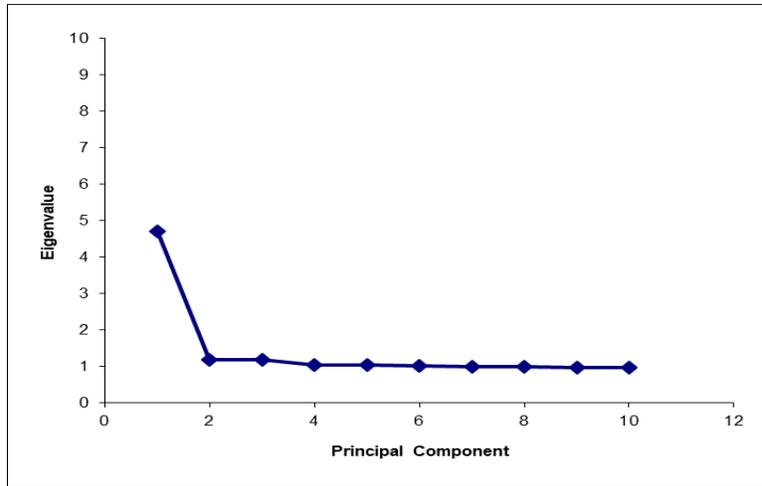
**Figure 12.** Mathematics Grade 8 Principal Components Scree Plot



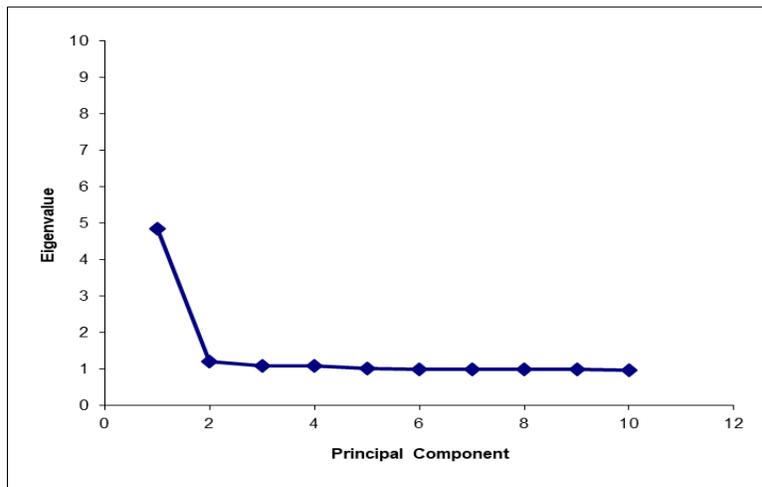
**Figure 13.** Science Grade 4, Operational Set #1 Principal Components Scree Plot



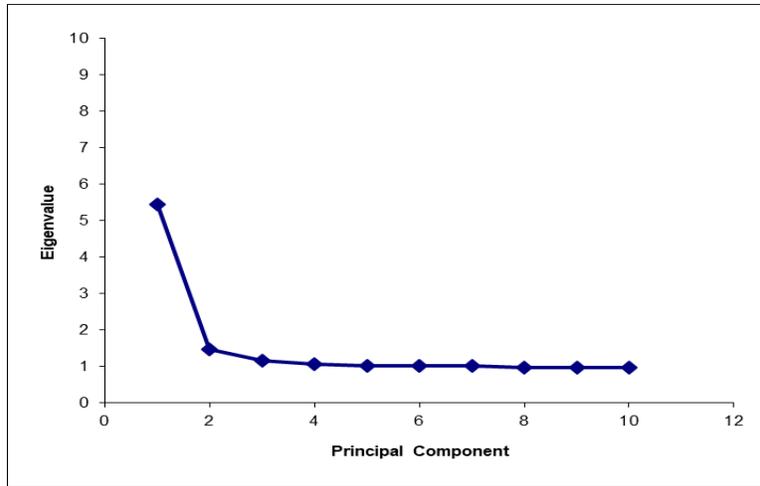
**Figure 14.** Science Grade 4, Operational Set #2 Principal Components Scree Plot



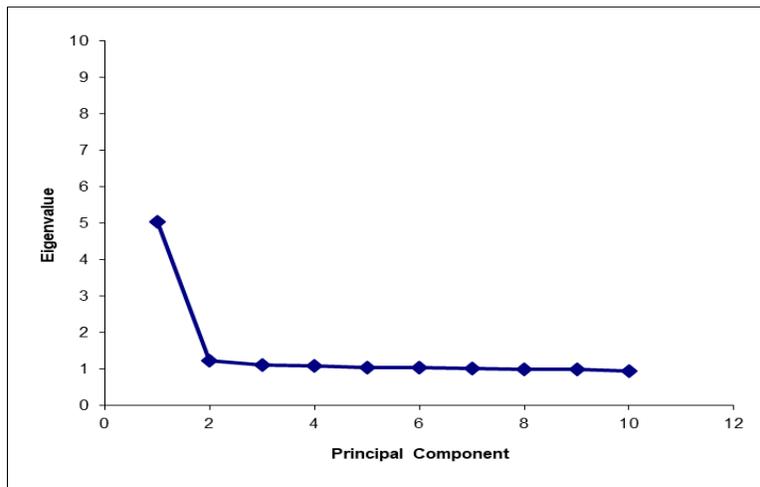
**Figure 15.** Science Grade 7, Operational Set #1 Principal Components Scree Plot



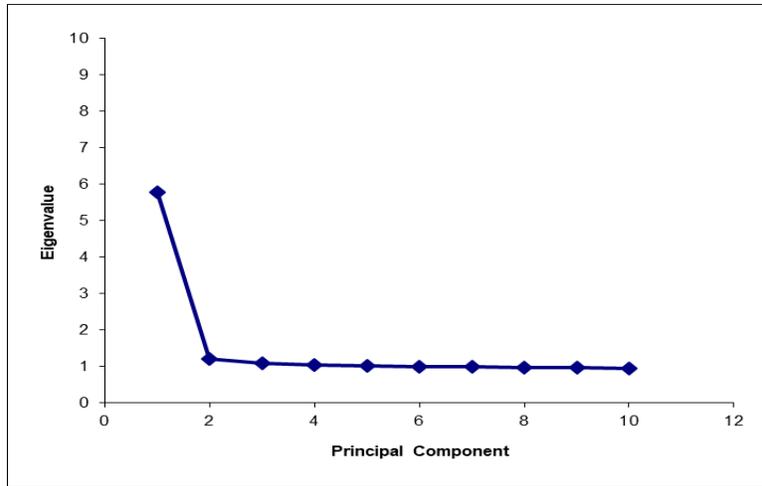
**Figure 16.** Science Grade 7, Operational Set #2 Principal Components Scree Plot



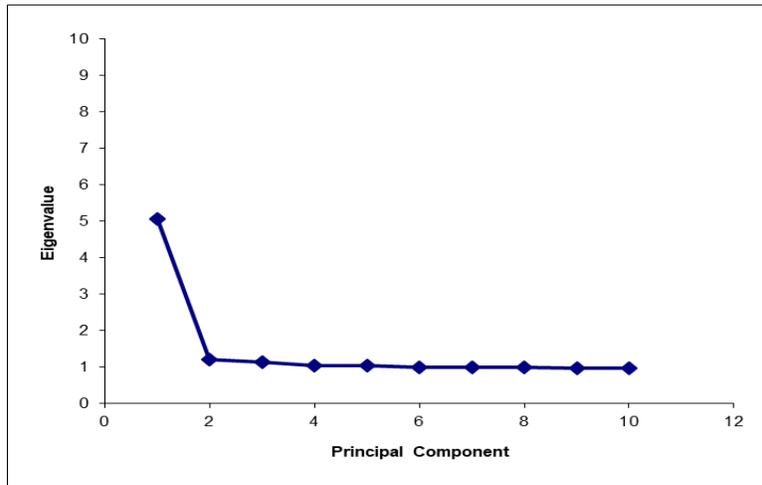
**Figure 17.** Science Grade 11, Operational Set #1 Principal Components Scree Plot



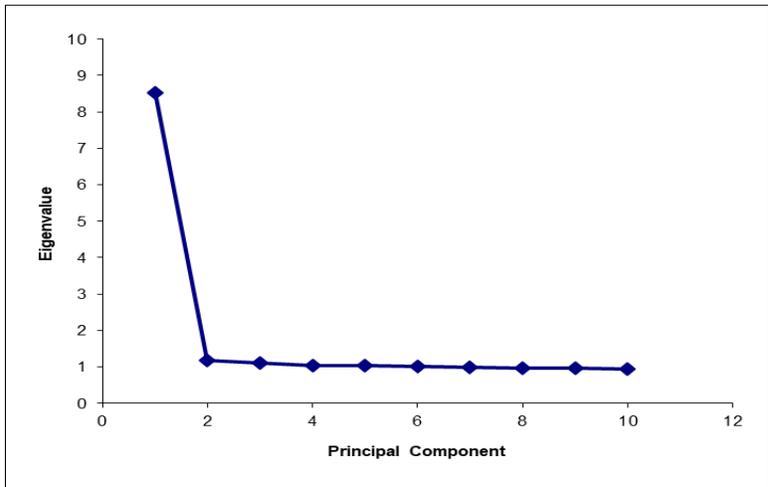
**Figure 18.** Science Grade 11, Operational Set #2 Principal Components Scree Plot



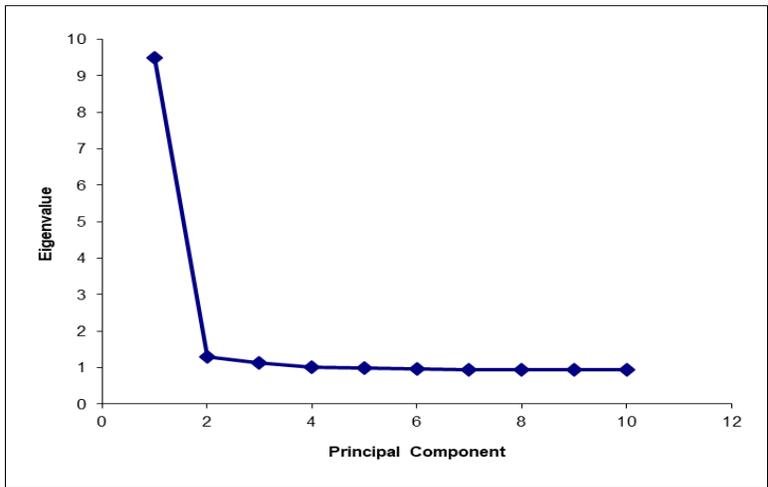
**Figure 19.** Science Grade 11, Operational Set #3 Principal Components Scree Plot



**Figure 20.** Science Grade 11, Operational Set #4 Principal Components Scree Plot



**Figure 21.** Social Studies Grade 5 Principal Components Scree Plot



**Figure 22.** Social Studies Grade 8 Principal Components Scree Plot

## Appendix R. Model Fit Indices for Confirmatory Factor Analysis

| Subject               | Grade | SRMR   | RMSEA  | RMSEA 90% Lower CL | RMSEA 90% Upper CL |
|-----------------------|-------|--------|--------|--------------------|--------------------|
| Reading               | 3     | 0.0178 | 0.0209 | 0.0206             | 0.0212             |
|                       | 4     | 0.0177 | 0.0200 | 0.0198             | 0.0203             |
|                       | 5     | 0.0182 | 0.0206 | 0.0203             | 0.0208             |
|                       | 6     | 0.0149 | 0.0177 | 0.0175             | 0.0180             |
|                       | 7     | 0.0167 | 0.0192 | 0.0189             | 0.0194             |
|                       | 8     | 0.0208 | 0.0228 | 0.0226             | 0.0231             |
| Mathematics           | 3     | 0.0239 | 0.0275 | 0.0273             | 0.0278             |
|                       | 4     | 0.0219 | 0.0244 | 0.0242             | 0.0246             |
|                       | 5     | 0.0272 | 0.0308 | 0.0305             | 0.0310             |
|                       | 6     | 0.0238 | 0.0274 | 0.0271             | 0.0276             |
|                       | 7     | 0.0215 | 0.0246 | 0.0243             | 0.0248             |
|                       | 8     | 0.0217 | 0.0247 | 0.0245             | 0.0249             |
| Science <sup>16</sup> | 4(a)  | 0.0168 | 0.0195 | 0.0190             | 0.0200             |
|                       | 4(b)  | 0.0137 | 0.0153 | 0.0148             | 0.0158             |
|                       | 7(a)  | 0.0189 | 0.0228 | 0.0223             | 0.0233             |
|                       | 7(b)  | 0.0150 | 0.0173 | 0.0168             | 0.0178             |
|                       | 11(a) | 0.0249 | 0.0280 | 0.0272             | 0.0287             |
|                       | 11(b) | 0.0184 | 0.0198 | 0.0190             | 0.0207             |
|                       | 11(c) | 0.0184 | 0.0214 | 0.0206             | 0.0222             |
|                       | 11(d) | 0.0170 | 0.0184 | 0.0176             | 0.0193             |
| Social Studies        | 5     | 0.0160 | 0.0195 | 0.0193             | 0.0197             |
|                       | 8     | 0.0175 | 0.0214 | 0.0212             | 0.0217             |

<sup>16</sup> *a, b, c, and d* represent the multiple operational sets administered.

## Appendix S. Correlations of Total Test and Subdomain Scores

### Reading

| Grade | Subdomain                  | Reading Total | Key Ideas | Craft and Structure | Integration of Ideas | Vocabulary and Acquisition |
|-------|----------------------------|---------------|-----------|---------------------|----------------------|----------------------------|
| 3     | Reading Total              | 1.00          |           |                     |                      |                            |
|       | Key Ideas                  | 0.78          | 1.00      |                     |                      |                            |
|       | Craft and Structure        | 0.87          | 0.58      | 1.00                |                      |                            |
|       | Integration of Ideas       | 0.88          | 0.57      | 0.68                | 1.00                 |                            |
|       | Vocabulary and Acquisition | 0.82          | 0.55      | 0.62                | 0.62                 | 1.00                       |
| 4     | Reading Total              | 1.00          |           |                     |                      |                            |
|       | Key Ideas                  | 0.86          | 1.00      |                     |                      |                            |
|       | Craft and Structure        | 0.77          | 0.55      | 1.00                |                      |                            |
|       | Integration of Ideas       | 0.87          | 0.63      | 0.56                | 1.00                 |                            |
|       | Vocabulary and Acquisition | 0.78          | 0.57      | 0.52                | 0.56                 | 1.00                       |
| 5     | Reading Total              | 1.00          |           |                     |                      |                            |
|       | Key Ideas                  | 0.81          | 1.00      |                     |                      |                            |
|       | Craft and Structure        | 0.81          | 0.56      | 1.00                |                      |                            |
|       | Integration of Ideas       | 0.85          | 0.60      | 0.55                | 1.00                 |                            |
|       | Vocabulary and Acquisition | 0.83          | 0.58      | 0.59                | 0.59                 | 1.00                       |
| 6     | Reading Total              | 1.00          |           |                     |                      |                            |
|       | Key Ideas                  | 0.84          | 1.00      |                     |                      |                            |
|       | Craft and Structure        | 0.86          | 0.63      | 1.00                |                      |                            |
|       | Integration of Ideas       | 0.90          | 0.67      | 0.69                | 1.00                 |                            |
|       | Vocabulary and Acquisition | 0.80          | 0.61      | 0.59                | 0.61                 | 1.00                       |
| 7     | Reading Total              | 1.00          |           |                     |                      |                            |
|       | Key Ideas                  | 0.85          | 1.00      |                     |                      |                            |
|       | Craft and Structure        | 0.87          | 0.66      | 1.00                |                      |                            |
|       | Integration of Ideas       | 0.84          | 0.60      | 0.63                | 1.00                 |                            |
|       | Vocabulary and Acquisition | 0.84          | 0.63      | 0.65                | 0.58                 | 1.00                       |
| 8     | Reading Total              | 1.00          |           |                     |                      |                            |
|       | Key Ideas                  | 0.88          | 1.00      |                     |                      |                            |
|       | Craft and Structure        | 0.86          | 0.70      | 1.00                |                      |                            |
|       | Integration of Ideas       | 0.81          | 0.61      | 0.61                | 1.00                 |                            |
|       | Vocabulary and Acquisition | 0.85          | 0.65      | 0.64                | 0.59                 | 1.00                       |

## Mathematics (Grades 3-5)

| Grade | Subdomain                         | Mathematics Total | Operations and Algebraic Thinking | Number and Operations in Base Ten | Number and Operations - Fractions | Measurement and Data Geometry |
|-------|-----------------------------------|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------|
| 3     | Mathematics Total                 | 1.00              |                                   |                                   |                                   |                               |
|       | Operations and Algebraic Thinking | 0.86              | 1.00                              |                                   |                                   |                               |
|       | Number and Operations in Base Ten | 0.88              | 0.70                              | 1.00                              |                                   |                               |
|       | Number and Operations - Fractions | 0.86              | 0.67                              | 0.67                              | 1.00                              |                               |
|       | Measurement and Data/Geometry     | 0.89              | 0.68                              | 0.71                              | 0.69                              | 1.00                          |
| 4     | Mathematics Total                 | 1.00              |                                   |                                   |                                   |                               |
|       | Operations and Algebraic Thinking | 0.87              | 1.00                              |                                   |                                   |                               |
|       | Number and Operations in Base Ten | 0.85              | 0.66                              | 1.00                              |                                   |                               |
|       | Number and Operations - Fractions | 0.87              | 0.68                              | 0.67                              | 1.00                              |                               |
|       | Measurement and Data/Geometry     | 0.90              | 0.70                              | 0.68                              | 0.70                              | 1.00                          |
| 5     | Mathematics Total                 | 1.00              |                                   |                                   |                                   |                               |
|       | Operations and Algebraic Thinking | 0.87              | 1.00                              |                                   |                                   |                               |
|       | Number and Operations in Base Ten | 0.89              | 0.72                              | 1.00                              |                                   |                               |
|       | Number and Operations - Fractions | 0.87              | 0.67                              | 0.70                              | 1.00                              |                               |
|       | Measurement and Data/Geometry     | 0.89              | 0.70                              | 0.71                              | 0.70                              | 1.00                          |

## Mathematics (Grade 6 and 7)

| Grade | Subdomain                             | Mathematics Total | Ratios and Proportional Relationships | The Number System | Expressions and Equations | Geometry | Statistics and Probability |
|-------|---------------------------------------|-------------------|---------------------------------------|-------------------|---------------------------|----------|----------------------------|
| 6     | Mathematics Total                     | 1.00              |                                       |                   |                           |          |                            |
|       | Ratios and Proportional Relationships | 0.84              | 1.00                                  |                   |                           |          |                            |
|       | The Number System                     | 0.86              | 0.66                                  | 1.00              |                           |          |                            |
|       | Expressions and Equations             | 0.86              | 0.63                                  | 0.68              | 1.00                      |          |                            |
|       | Geometry                              | 0.86              | 0.64                                  | 0.66              | 0.67                      | 1.00     |                            |
|       | Statistics and Probability            | 0.81              | 0.61                                  | 0.63              | 0.60                      | 0.62     | 1.00                       |
| 7     | Mathematics Total                     | 1.00              |                                       |                   |                           |          |                            |
|       | Ratios and Proportional Relationships | 0.86              | 1.00                                  |                   |                           |          |                            |
|       | The Number System                     | 0.81              | 0.62                                  | 1.00              |                           |          |                            |
|       | Expressions and Equations             | 0.88              | 0.69                                  | 0.64              | 1.00                      |          |                            |
|       | Geometry                              | 0.84              | 0.66                                  | 0.60              | 0.68                      | 1.00     |                            |
|       | Statistics and Probability            | 0.84              | 0.65                                  | 0.58              | 0.67                      | 0.64     | 1.00                       |

## Mathematics (Grade 8)

| Grade | Subdomain                                   | Mathematics Total | The Number System Expressions and Equations | Functions | Geometry | Statistics and Probability |
|-------|---|-------------------|---|-----------|----------|----------------------------|
| 8     | Mathematics Total                           | 1.00              |   |           |          |                            |
|       | The Number System/Expressions and Equations | 0.90              | 1.00  |           |          |                            |
|       | Functions                                   | 0.87              | 0.71  | 1.00      |          |                            |
|       | Geometry                                    | 0.90              | 0.72  | 0.71      | 1.00     |                            |
|       | Statistics and Probability                  | 0.83              | 0.66  | 0.66      | 0.67     | 1.00                       |

## Science<sup>17</sup>

| Grade | Subdomain               | Science Total | Life Science | Physical Science | Earth and Space Science | Engineering Design |
|-------|-------------------------|---------------|--------------|------------------|-------------------------|--------------------|
| 4(a)  | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.81          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.82          | 0.52         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.89          | 0.60         | 0.59             | 1.00                    |                    |
|       | Engineering Design      | 0.34          | 0.19         | 0.20             | 0.19                    | 1.00               |
| 4(b)  | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.59          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.83          | 0.35         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.88          | 0.37         | 0.58             | 1.00                    |                    |
|       | Engineering Design      | 0.62          | 0.29         | 0.41             | 0.46                    | 1.00               |
| 7(a)  | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.82          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.84          | 0.56         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.78          | 0.53         | 0.49             | 1.00                    |                    |
|       | Engineering Design      | 0.62          | 0.38         | 0.39             | 0.39                    | 1.00               |
| 7(b)  | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.84          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.82          | 0.55         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.74          | 0.52         | 0.47             | 1.00                    |                    |
|       | Engineering Design      | 0.77          | 0.56         | 0.50             | 0.45                    | 1.00               |
| 11(a) | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.87          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.73          | 0.46         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.82          | 0.59         | 0.48             | 1.00                    |                    |
|       | Engineering Design      | 0.78          | 0.60         | 0.46             | 0.58                    | 1.00               |
| 11(b) | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.86          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.78          | 0.52         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.80          | 0.58         | 0.48             | 1.00                    |                    |
|       | Engineering Design      | 0.71          | 0.51         | 0.45             | 0.47                    | 1.00               |
| 11(c) | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.90          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.74          | 0.53         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.81          | 0.63         | 0.48             | 1.00                    |                    |
|       | Engineering Design      | 0.71          | 0.56         | 0.42             | 0.48                    | 1.00               |
| 11(d) | Science Total           | 1.00          |              |                  |                         |                    |
|       | Life Science            | 0.86          | 1.00         |                  |                         |                    |
|       | Physical Science        | 0.77          | 0.50         | 1.00             |                         |                    |
|       | Earth and Space Science | 0.79          | 0.56         | 0.46             | 1.00                    |                    |
|       | Engineering Design      | 0.77          | 0.57         | 0.46             | 0.54                    | 1.00               |

<sup>17</sup> *a, b, c, and d* represent the multiple operational sets administered.

## Social Studies

| Grade | Subdomain              | Social Studies Total | Government and Civics | Cultures and Societies | Economics | Geography | Historical Perspective |
|-------|------------------------|----------------------|-----------------------|------------------------|-----------|-----------|------------------------|
| 5     | Social Studies Total   | 1.00                 |                       |                        |           |           |                        |
|       | Government and Civics  | 0.86                 | 1.00                  |                        |           |           |                        |
|       | Cultures and Societies | 0.81                 | 0.62                  | 1.00                   |           |           |                        |
|       | Economics              | 0.84                 | 0.66                  | 0.64                   | 1.00      |           |                        |
|       | Geography              | 0.76                 | 0.57                  | 0.54                   | 0.57      | 1.00      |                        |
|       | Historical Perspective | 0.87                 | 0.66                  | 0.62                   | 0.64      | 0.58      | 1.00                   |
| 8     | Social Studies Total   | 1.00                 |                       |                        |           |           |                        |
|       | Government and Civics  | 0.86                 | 1.00                  |                        |           |           |                        |
|       | Cultures and Societies | 0.82                 | 0.63                  | 1.00                   |           |           |                        |
|       | Economics              | 0.84                 | 0.65                  | 0.65                   | 1.00      |           |                        |
|       | Geography              | 0.83                 | 0.63                  | 0.64                   | 0.65      | 1.00      |                        |
|       | Historical Perspective | 0.89                 | 0.70                  | 0.65                   | 0.65      | 0.66      | 1.00                   |

## Appendix T. Operational Constructed-Response Item Omit Rates

### Reading

| Grade | Item Type         | Omit Rate |
|-------|-------------------|-----------|
| 3     | Short Answer      | 1%        |
|       | Short Answer      | 5%        |
| 4     | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 2%        |
| 5     | Short Answer      | 0%        |
|       | Short Answer      | 0%        |
|       | Extended Response | 1%        |
| 6     | Short Answer      | 0%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 1%        |
| 7     | Short Answer      | 1%        |
|       | Short Answer      | 2%        |
|       | Extended Response | 0%        |
| 8     | Short Answer      | 1%        |
|       | Short Answer      | 0%        |
|       | Extended Response | 1%        |

## Mathematics

| Grade | Item Type         | Omit Rate |
|-------|-------------------|-----------|
| 3     | Short Answer      | 2%        |
|       | Short Answer      | 2%        |
|       | Short Answer      | 1%        |
| 4     | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 2%        |
| 5     | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 3%        |
| 6     | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 2%        |
| 7     | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 1%        |
| 8     | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Short Answer      | 1%        |
|       | Extended Response | 2%        |

## Science

| Grade | Item Type         | Omit Rate |
|-------|-------------------|-----------|
| 4     | Extended Response | 1%        |
|       | Extended Response | 1%        |
|       | Extended Response | 1%        |
|       | Extended Response | 2%        |
|       | Extended Response | 1%        |
|       | Extended Response | 1%        |
|       | Extended Response | 1%        |
| 7     | Extended Response | 1%        |
|       | Extended Response | 1%        |
|       | Extended Response | 2%        |
|       | Extended Response | 2%        |
|       | Extended Response | 1%        |
|       | Extended Response | 1%        |
|       | Extended Response | 1%        |
| 11    | Extended Response | 1%        |
|       | Extended Response | 2%        |
|       | Extended Response | 3%        |
|       | Extended Response | 3%        |
|       | Extended Response | 1%        |
|       | Extended Response | 2%        |
|       | Extended Response | 3%        |
|       | Extended Response | 1%        |
|       | Extended Response | 4%        |
|       | Extended Response | 4%        |

## Social Studies

| Grade | Item Type         | Omit Rate |
|-------|-------------------|-----------|
| 5     | Extended Response | 0%        |
|       | Extended Response | 1%        |
|       | Extended Response | 0%        |
| 8     | Extended Response | 0%        |
|       | Extended Response | 1%        |
|       | Extended Response | 1%        |