Math Grade 3 C

Grade Level Standard(s):

KY.3.NF.1

Materials:

- Math 3 C Wagon Wheel Farm Map
  Math 3 C Attainment Task Questions for Student Use

Response Code:

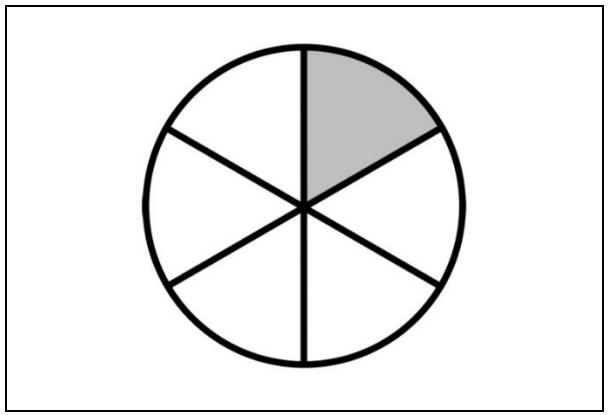
- Indicate the answer provided by the student.

Text Coding:

- "Quotation marks" indicate the script that the teacher should read to the student.
- *Italicized text* provides further direction for the test administrator.
- Words in parenthesis ( ) are optional; they may replace or be read in addition to the word(s) immediately preceding.

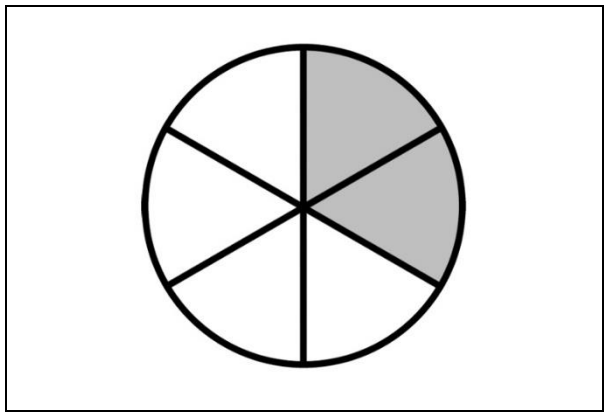
a.

$\frac{1}{6}$



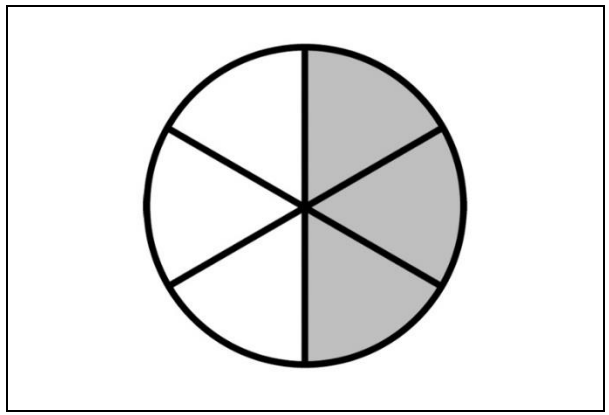
b.

$\frac{2}{6}$



c.

$\frac{3}{6}$



Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 10 of the Administration Guide Overview and Attainment Task Administration) have been met. Inform the student that the task is about to start by saying, "We are about to start the task, and I am going to ask you some questions."

All questions from this task are available for presentation to the student in the supplemental material Math 3 C Attainment Task Questions for Student Use.

Present the student with Math 3 C Wagon Wheel Farm Map.

"Mr. Mills' class is going to the farm. Nasser looks at the farm map that shows where each animal is raised on the farm. The map gets Nasser thinking about the fractions he is studying in math class."

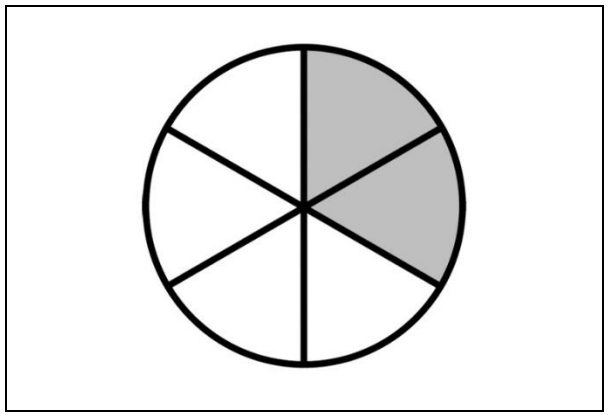
"Mr. Mills explains to the class that the farmer uses horses to get around the farm."

3. "Using the farm map, what fraction of land at Wagon Wheel Farm is used to raise horses?"

Response Option	***Response Rationale***
a. $\frac{1}{6}$ **(Correct)**	*The student uses the wagon wheel map to identify the fraction that represents the how much of the farm is used to raise horses.*
b. $\frac{2}{6}$	*The student uses the wagon wheel map but identifies the fraction that represents the how much of the farm is used to raise cows.*
c. $\frac{3}{6}$	*The student uses the wagon wheel map but identifies the fraction that represents the how much of the farm is used to raise pigs.*
Depth of Knowledge (DOK) 1	

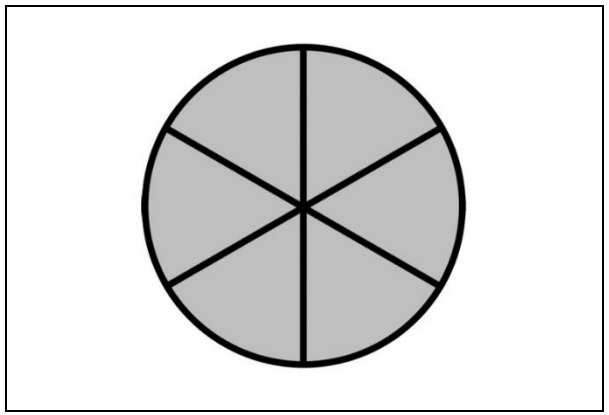
a.

$\frac{2}{6}$



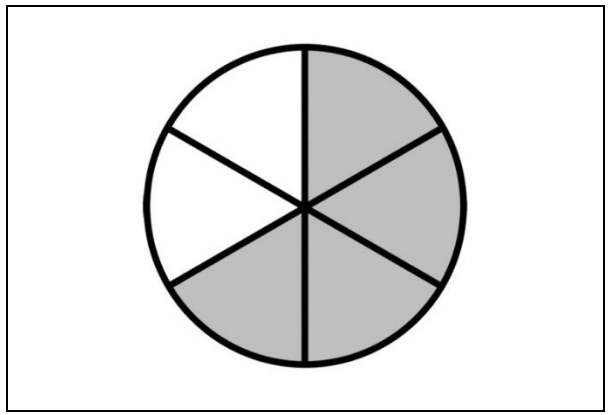
b.

$\frac{6}{6}$



c.

$\frac{4}{6}$



If needed, remind the student about the task scenario by rereading, "Mr. Mills' class is learning about farm animals. Nasser looks at the diagram showing the farm animals and starts thinking about the fractions he studies in math class."

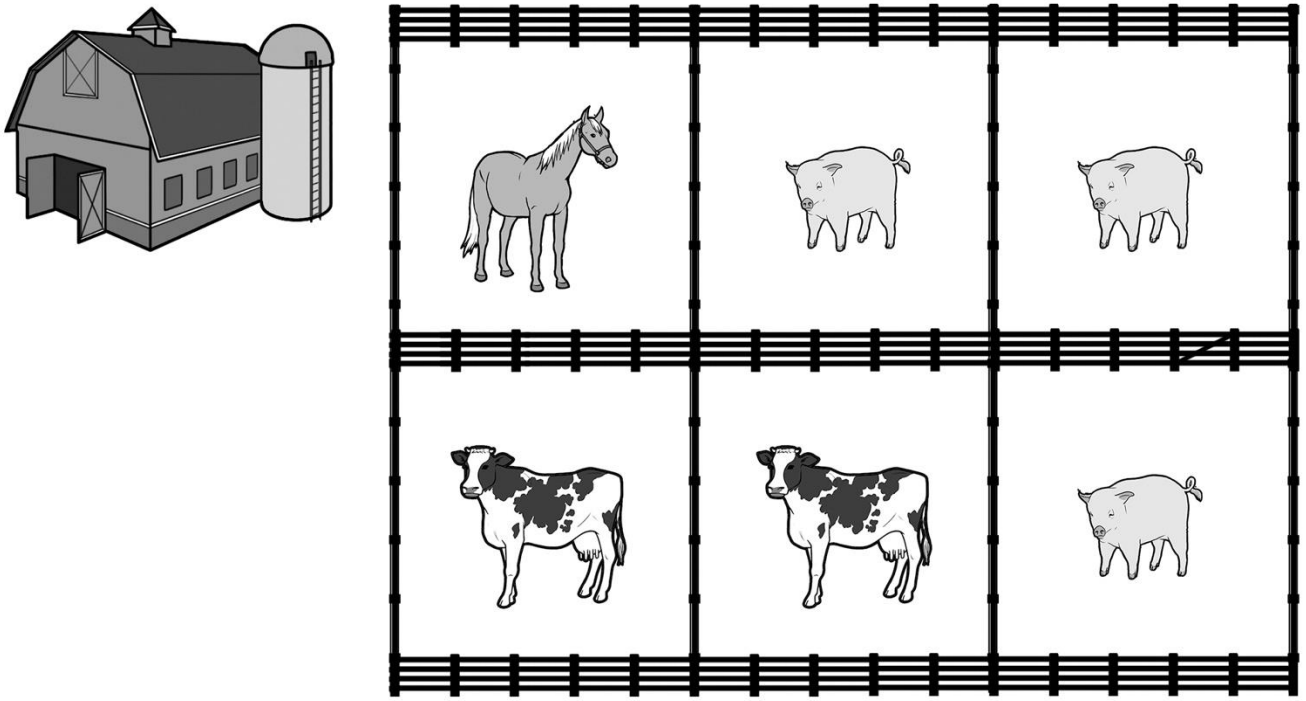
Remind the student to use Math 3 C Wagon Wheel Farm Map.

"Nasser knows that fractions are part of a whole."

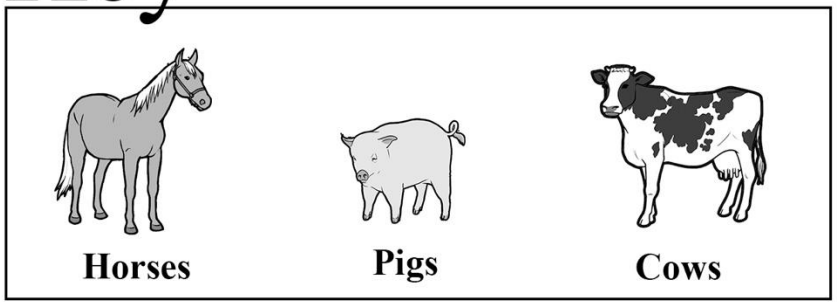
5. "Using the map, which fraction represents how much land is used to raise all of the different animals on the farm?"

Response Option	***Response Rationale***
a. $\frac{2}{6}$	*The student uses the wagon wheel map but identifies the fraction that represents what part of the farm the cows use.*
b. $\frac{6}{6}$ **(Correct)**	*The student uses the wagon wheel map to identify the fraction that represents the whole farm.*
c. $\frac{4}{6}$	*The student uses the wagon wheel map but does not identify a fraction that represents the whole farm.*
Depth of Knowledge (DOK) 1	

Math 3 C Wheel Farm Map



Key



Math 3 C Attainment Task Questions for Student Use

3. Using the farm map, what fraction of land at Wagon Wheel Farm is used to raise horses?

4. Using the map, which fraction represents how much land is used to raise all of the different animals on the farm?

Kentucky Academic Standard: KY.3.NF.1 - Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$as the quantity formed by a parts of size $\frac{1}{b}$. **MP.2, MP.7**

Alternate Assessment Target: *Limit denominator to 2, 3, 4 or 6.*

Student Group	Number of Students*	Percent Correct #3	Percent Correct #5
All Students	492	47.36%	46.75%
Gender			
Female	146	44.52%	49.32%
Male	346	48.55%	45.66%
Ethnicity			
African American	57	50.88%	35.09%
American Indian or Alaska Native	<10	Not Reported	Not Reported
Asian	16	56.25%	56.25%
Hispanic or Latino	<10	Not Reported	Not Reported
Native Hawaiian or Pacific Islander	<10	Not Reported	Not Reported
White (Non-Hispanic)	351	46.44%	49.00%
Two or More Races	68	45.59%	41.18%
English Learner	39	46.15%	43.59%
Economically Disadvantaged	373	45.84%	47.72%

*Number of students that attempted the item