Math Grade 4 C

Grade Level Standard(s):

KY.4.MD.1

Materials:

- Math 4 C Conversion Reference Sheet
- Math 4 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.

Yes, because $10 \times 60 = 600$ seconds.



b.

No, because $600 \div 60 = 10$ seconds.



C.

There is not enough information.



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 <u>Math 4 C Attainment Task</u> <u>Questions for Student Use</u>.

"Monica and DeShawn are at the local swimming pool. They have been working on measurement conversions in school and see that the pool depth is marked in feet around the outside of the pool."

Present student with <u>Math 4 C Conversion Reference Sheet</u>.

"Every hour there is a 10-minute swim break."

4. "DeShawn told Monica that the 10-minute swim break lasts 600 seconds. Is this correct?"

Response Option	Response Rationale	
a. Yes, because $10 \times 60 = 600$ seconds. (Correct)	The student uses the conversion chart to set up and correctly solve the problem.	
b. No, because $600 \div 60 = 10$ seconds.	The student uses the conversion chart and sets up the problem inversely but identifies the wrong unit in the solution.	
c. There is not enough information.	The student attempts to solve the problem but is unable to identify the needed information on the conversion chart.	
Depth of Knowledge (DOK) 2		

Math 4 C Conversion Reference Sheet

1 foot = 12 inches

1 minute = 60 seconds

1 hour = 60 minutes

Math 4 C Attainment Task Questions for Student Use

4. DeShawn told Monica that the 10-minute swim break lasts 600 seconds. Is this correct?

Kentucky Academic Standard: KY.4.MD.1 - Know relative size of measurement units (mass, weight, liquid volume, length, time) within one system of units (metric system, U.S. standard system and time). a. Understand the relationship of measurement units within any given measurement system. b. Within any given measurement system, express measurements in a larger unit in terms of a smaller unit. c. Record measurement equivalents in a two-column table. MP.5, MP.6

Alternate Assessment Target: Limit full standard to the U.S. Standard System, express measurements of length and time.

Student Group	Number of Students*	Percent Correct
All Students	594	50.67%
Gender		
Female	184	51.09%
Male	410	50.49%
Ethnicity		
African American	60	50.00%
American Indian or Alaska Native	<10	Not Reported
Asian	11	54.55%
Hispanic or Latino	<10	Not Reported
Native Hawaiian or Pacific Islander	<10	Not Reported
White (Non-Hispanic)	439	49.20%
Two or More Races	83	57.83%
English Learner	48	52.08%
Economically Disadvantaged	447	52.57%

*Number of students that attempted the item