

Teacher Guide

**End-of-Year Test (pp. 1–9)
Questions 1–20**

Part 1

Strategies may vary.

1. $38 \text{ seeds per packet} \times 4 \text{ packets} = 152 \text{ seeds total}$

2. A. Possible estimate:
 $\$1.00 \times 4 \text{ packets} = \4.00

B.

$$\begin{array}{r} 92 \\ \times 4 \\ \hline 360 \\ + 8 \\ \hline \$3.68 \end{array}$$

C. Possible response: My answer of \$3.68 was a little less than my estimate of \$4.00 so I know my answer is reasonable.

D.

$$\begin{array}{r} \$5.00 \\ - \$3.68 \\ \hline \$1.32 \end{array}$$

3. A.

20	8
$20 \times 7 = 140$	$8 \times 7 = 56$
7	8

$28 \times 7 = 140 \text{ ft.} + 56 \text{ ft.} = 196 \text{ sq. ft.}$

B. $28 \text{ ft.} + 28 \text{ ft.} + 7 \text{ ft.} + 7 \text{ ft.} = 70 \text{ ft.}$

4. A. $32 \text{ ounces} \div 6 \text{ ounces per cup} = 5 \text{ cups with } 2 \text{ ounces left over}$

B. Possible solution:
 $6 \text{ oz.} + 6 \text{ oz.} + 6 \text{ oz.} + 6 \text{ oz.} + 6 \text{ oz.} = 30 \text{ oz.} + 2 \text{ leftover oz.} = 32 \text{ oz.}$

Copyright © Kendall Hunt Publishing Company

Name _____ Date _____

End-of-Year Test

Part 1

Solve the following problems. You may use the tools you used in class including the *Student Guide Reference* section.

- Professor Peabody is planting a garden. He buys packets of seeds. There are 38 seeds in each packet. How many seeds are in 4 packets? Show or tell how you know.
- A. Each packet of seeds costs 92 cents. Show how you estimate the cost of 4 packets.

B. Find the exact amount. Show your work.

C. How do you know your answer is reasonable?

D. Professor Peabody pays with a \$5 bill. How much change will he receive?

Copyright © Kendall Hunt Publishing Company

Assessment Master TG • Grade 3 • Unit 13 • Lesson 10 |

Teacher Guide - Page 1

Name _____ Date _____

- A. The garden is shaped like a rectangle. It is 7 feet wide and 28 feet long. Show how to find the area of the garden.

- The professor wants to put a fence around the garden. Show how to find the perimeter of the garden.
- A. Professor Peabody gets thirsty when he works in the garden. He has a 32-ounce jug of water. How many 6-ounce cups of water can he fill? _____ How much is left over?

B. Check for reasonableness by solving the problem another way.

Copyright © Kendall Hunt Publishing Company

2 TG • Grade 3 • Unit 13 • Lesson 10 Assessment Master

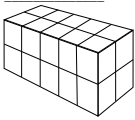
Teacher Guide - Page 2

Name _____ Date _____

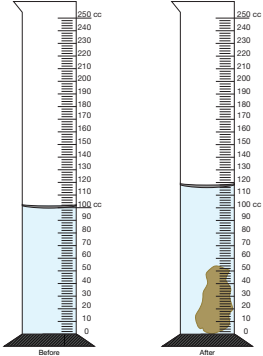
Part 2

Solve the following problems. You may use the tools you used in class such as a ruler, fraction circle pieces, individual clocks, centimeter connecting cubes, and the *Student Guide* Reference section.

5. A. Darius built a model of a rock with centimeter connecting cubes so he could estimate the rock's volume.
What is the volume of the cube model?



B. Darius used a graduated cylinder and the displacement method to find the rock's actual volume. He started by filling the cylinder with 100 cc of water. Then he slid the rock into the cylinder. Use the pictures to find the volume of the rock.



Copyright © Kendall Hunt Publishing Company

Assessment Master TG • Grade 3 • Unit 13 • Lesson 10 3

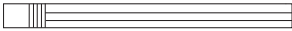
Part 2

5. A. 20 cc
B. 16 cc

Teacher Guide - Page 3

Name _____ Date _____

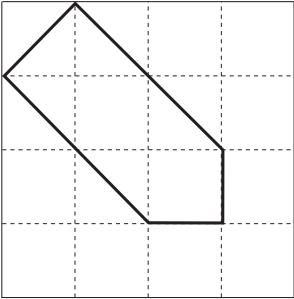
6. Use a ruler to measure the length of the pencil to the nearest centimeter. Include units. _____



7. The shape below is drawn on a square-inch grid. Measure lengths to the nearest half inch.

A. What is its area? _____

B. What is its perimeter? _____



C. How many sides does the shape have? _____

D. How many vertices does it have? _____

E. How many right angles does it have? _____

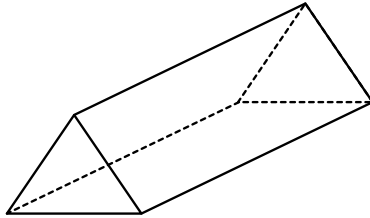
Copyright © Kendall Hunt Publishing Company

4 TG • Grade 3 • Unit 13 • Lesson 10 Assessment Master

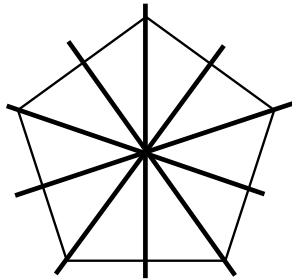
6. 10 cm
7. A. $4\frac{1}{2}$ sq. in.
B. $9\frac{1}{2}$ inches
C. 5 sides
D. 5 vertices
E. 3 right angles

Teacher Guide - Page 4

8. A. 4 vertices
 B. 4 faces
 C. 6 edges
 9. triangular prism



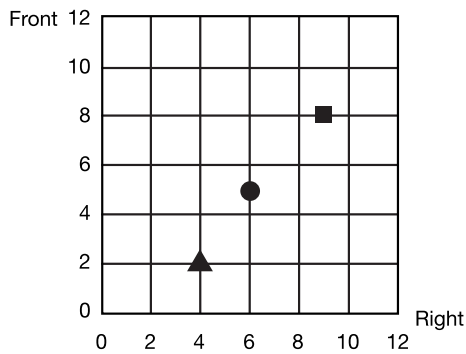
10.



11. A. 26 minutes
 B. 12:40 PM

12.

Object	Right	Front
■	9	8
▲	4	2
●	6	5

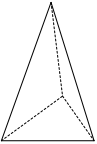


13. 67g; 10
- | | | |
|------------|------------|----------|
| 5 | 1 | 30 |
| $\times 7$ | $\times 2$ | 35 |
| 35 | 2 | + 2 |
| + 10 | | 67 grams |
| 30 | | |


Name _____ Date _____

8. Look at this shape:

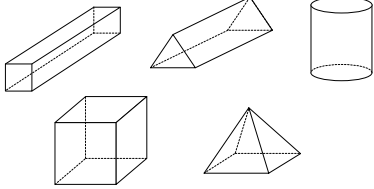
A. How many vertices does it have? _____
 B. How many faces does it have? _____
 C. How many edges does it have? _____



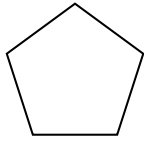
9. Josh traced the faces of a three-dimensional shape.



Which 3-D shape does Josh have? Circle the shape.



10. Draw two or more lines of symmetry.



Assessment Master TG • Grade 3 • Unit 13 • Lesson 10 5

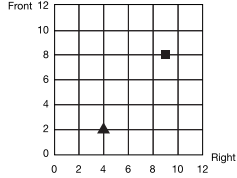
Teacher Guide - Page 5

Name _____ Date _____


11. A. At 8:18 AM, Josh started walking his dog, Buddy. He finished at 8:44 AM. How long was the walk?
 B. Later in the day, Buddy took a nap. He fell asleep at 11:55 AM and slept for 45 minutes. What time did Buddy wake up? Was it AM or PM?

12. A. Write the coordinates of the triangle and square on the data table.
 B. Draw the circle at the correct point on the map.

Object	Right	Front
■		
▲		
●	6	5



13. Mara put some marbles in one pan of a two-pan balance. She balanced the pans with three 10-gram masses, seven 5-gram masses, and two 1-gram masses. What is the marbles' mass? Show or tell how you found your answer.



Assessment Master 6 TG • Grade 3 • Unit 13 • Lesson 10

Teacher Guide - Page 6

Name _____ Date _____

For Questions 14–15 you will use the following symbols:
 < less than = equal to > greater than

14. Write T next to the true number sentences and F next to the false number sentences.

A. $(3 \times 10g) + (2 \times 5g) = (8 \times 5g)$ _____

B. $(3 \times 5g) > (4 \times 10g)$ _____

C. $(2 \times 20g) < (7 \times 5g) + (2 \times 10g)$ _____

15. A. Compare these fractions to $\frac{1}{2}$ and sort them on the table.

$\frac{2}{3}$ $\frac{2}{4}$ $\frac{1}{8}$ $\frac{3}{4}$ $\frac{5}{6}$ $\frac{4}{8}$ $\frac{6}{8}$ $\frac{1}{4}$

Fractions < $\frac{1}{2}$	Fractions = $\frac{1}{2}$	Fractions > $\frac{1}{2}$

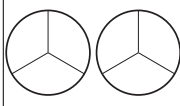
B. How did you know where to place $\frac{2}{3}$?

16. Show the fraction on the number line in four more ways.

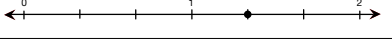
number _____

words _____

one whole fraction strip _____

drawing 

one whole fraction strip _____

drawing 

Copyright © Kendall Hunt Publishing Company

Assessment Master **TG • Grade 3 • Unit 13 • Lesson 10** 7

Teacher Guide - Page 7

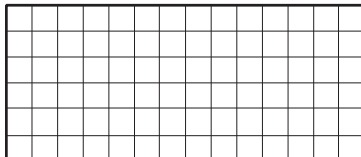
Name _____ Date _____

17. If this is $\frac{1}{3}$, then draw one whole.

18. Joe and Moe Smart are making punch. The recipe calls for $\frac{1}{4}$ cup sugar and $\frac{1}{4}$ gallon lime soda. Joe thinks the recipe says that they should put more lime soda into the punch bowl than sugar, but Moe disagrees. Moe says, "The recipe says that we should put the same amount of lime soda into the bowl as sugar. $\frac{1}{4}$ is the same as $\frac{1}{4}$." Who do you agree with and why?

19. A. Divide the rectangle into two smaller rectangles. Choose a way that will make it easy for you to find the product of 6×14 .

B. Write number sentences on your rectangles.



C. Complete the number sentences.

$6 \times 14 = \underline{\quad} \times \underline{\quad} + \underline{\quad} \times \underline{\quad}$
 $= \underline{\quad} + \underline{\quad}$
 $= \underline{\quad}$

Copyright © Kendall Hunt Publishing Company

8 TG • Grade 3 • Unit 13 • Lesson 10 **Assessment Master**

Teacher Guide - Page 8

14. A. T
 B. F
 C. T
15. A.

Fractions < $\frac{1}{2}$	Fractions = $\frac{1}{2}$	Fractions > $\frac{1}{2}$
$\frac{1}{8}, \frac{1}{4}$	$\frac{2}{4}, \frac{4}{8}$	$\frac{2}{3}, \frac{3}{4}, \frac{5}{6}, \frac{6}{8}$

B. Possible response: I used the *Fraction Chart*. I know that $\frac{2}{3}$ is the same as $\frac{4}{6}$. $\frac{1}{2}$ is $\frac{3}{6}$ so $\frac{4}{6}$ is greater than $\frac{3}{6}$.

16.

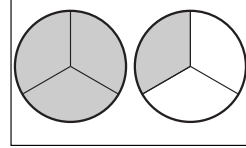
$1 \frac{1}{3}$

number _____

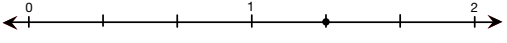
One and one third

words _____

one whole fraction strip _____

drawing 

one whole fraction strip _____

drawing 

17. Possible solution:



18. Joe is correct. $\frac{1}{4}$ of a cup is much less than $\frac{1}{4}$ of a gallon. Moe is not thinking about how big the whole is.

19. A. Possible division of rectangle and number sentences:

$6 \times 10 = 60$	$6 \times 4 = 24$
--------------------	-------------------

B. See drawing above.

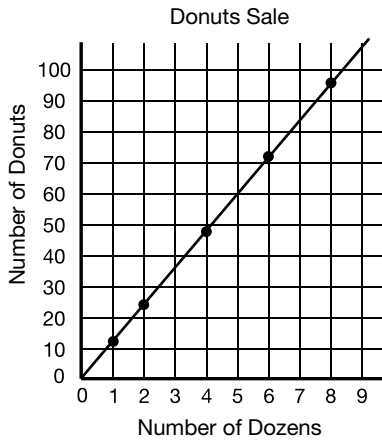
C. $6 \times 14 = 6 \times 10 + 6 \times 4$
 $= 60 + 24$
 $= 84$

Part 3

20. A.

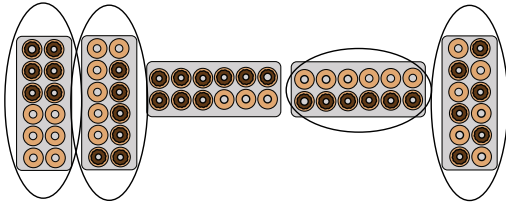
Number of Dozens	Number of Donuts
1	12
2	24
4	48
6	72
8	96

B.



- C. 120 donuts; Possible explanation: I used the graph. I found that 5 dozen is 60 donuts. I doubled that for 10 dozen.
 $60 \text{ donuts} + 60 \text{ donuts} = 120 \text{ donuts}.$
- D. 80 donuts is between 6 dozen and 7 dozen on my graph. He would need 7 boxes to fit all of the donuts because 6 boxes would only hold 72 of the donuts.

E.



Name _____ Date _____

Part 3

20. Ms. Alfonso's class is selling donuts for the school fundraiser.

A. Complete the table.

Dozens of Donuts	
Number of Dozens	Number of Donuts
1	12
2	24
4	
6	
	96

B. Make a graph using data from the table. Draw a best-fit line.

C. How many donuts are in 10 dozen? Show or tell how you know.

D. Mr. Martinez bought 80 donuts for the teachers. One dozen donuts fit into one box. How many boxes are needed so that he can carry them all to the teachers' lunchroom? Explain how you decided.

E. Circle the boxes of donuts in which $\frac{1}{2}$ of them are chocolate.

Copyright © Kendall Hunt Publishing Company

Assessment Master TG • Grade 3 • Unit 13 • Lesson 10 9

Teacher Guide - Page 9