

### Third Grade Test Measurement & Data

Name \_\_\_\_\_ Teacher \_\_\_\_\_ Date \_\_\_\_\_

**3.MD.A.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes.**

Choose the time on the clocks. Circle your answers.

1.



a. 9:18      b. 4:15      c. 3:47

2.



a. 1:35      b. 7:07      c. 2:36

3. Erica started working on her homework at 5:15. If she worked for one and one-half hours, what time did she finish?



a. 7:45      b. 7:15      c. 6:45      d. 6:15

4. Manuel left his house at 5:15 to go to his friend's party. If he arrived at the party at 6:00, how long did it take him to get to the party?

a. 45 minutes      b. 30 minutes      c. 15 minutes      d. one hour

5. How many minutes are in one- and one-half hours?

a. 60 minutes      b. 90 minutes      c. 120 minutes

**3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.**

6. The weight of a paper clip is measured in which unit?

- a. kilogram      b. pound      c. gram



7. Choose an estimate for the capacity of this soda bottle.

- a. two liters      b. one liter      c. three liters



8. Morgan had a 1-liter container of water. She drank one-half of the water in the container. How many ml of water did she have left?

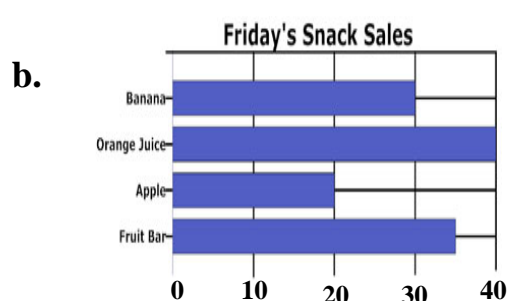
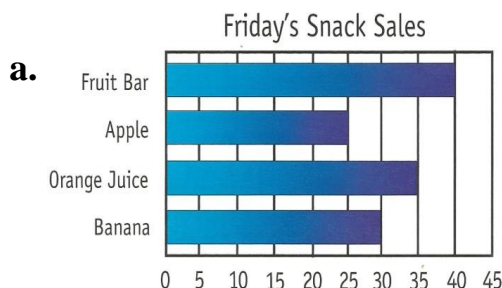
- a. 1000 mL      b. 500 mL      c. 100 mL

9. Mario and his mother went fishing. Mario caught a fish with a mass of 500 grams. His mother caught a fish with a mass of 185 grams. What is the difference in the mass of Mario's fish and the mass of his mother's fish?

- a. 315 g      b. 415 g      c. 485 g

**3.MD.B.3 Draw a scaled pictograph and a scaled bar graph to represent a data set with several categories. Solve one-and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.**

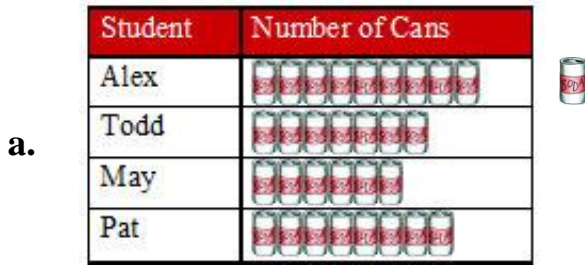
10. Choose the bar graph that displays the following data: Friday's Snack Sales, Fruit Bar: 40, Apple: 25, Orange Juice: 35, Banana: 30.




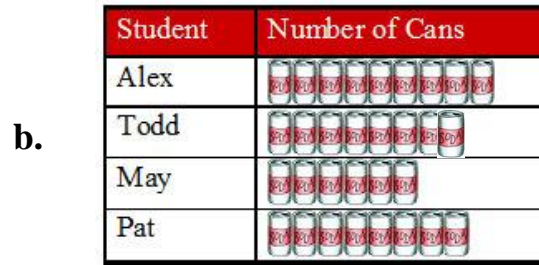
11. How many more orange juice snacks were sold than apple snacks? Circle your answer.

- a. 5      b. 10      c. 15

12. Choose the picture graph that displays the following data: Recycling Project- Alex: 100 cans, Todd: 80 cans, May: 60 cans, and Pat: 80 cans.



Each  = 10 Cans



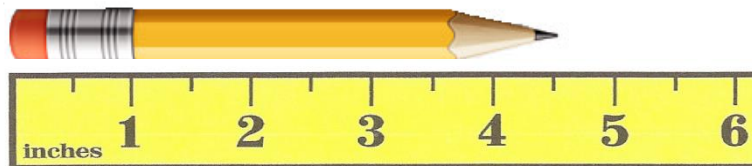
Each  = 10 Cans

13. How many less cans did May collect than Alex? Circle your answer.

a. 40      b. 20      c. 30

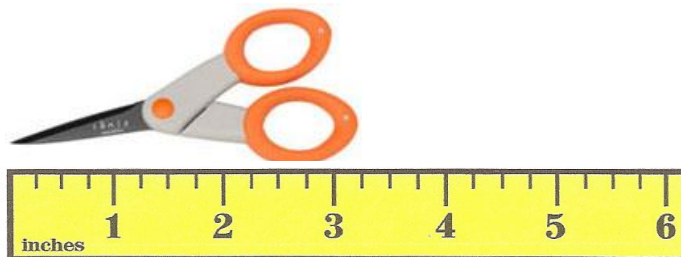
3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units-whole numbers, halves, or quarters.

14. Choose the measurement for the pencil. Circle your answer.



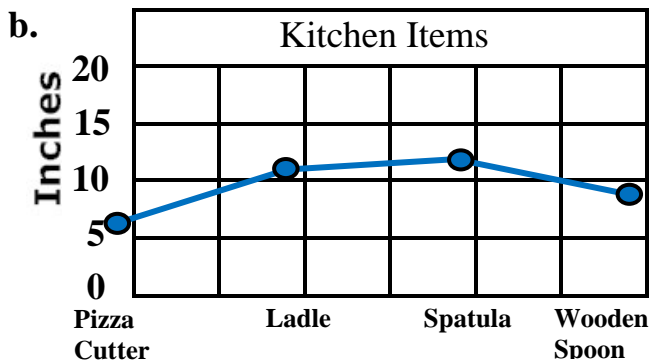
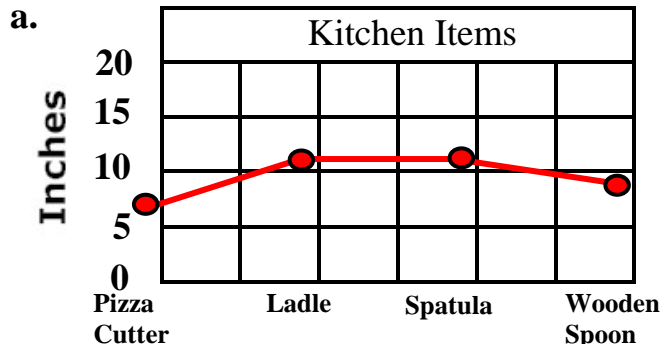
a. four inches      b.  $4\frac{1}{2}$  inches      c. five inches

15. Choose the measurement for the scissors. Circle your answer.



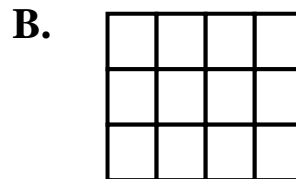
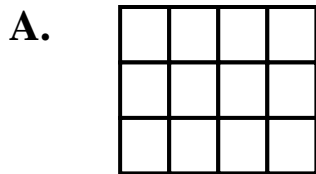
a. 3 inches      b.  $3\frac{1}{4}$  inches      c.  $3\frac{1}{2}$  inches

16. Choose the bar graph that represents the following length of kitchen items data. Pizza Cutter:  $7\frac{1}{4}$  inches, Ladle:  $11\frac{1}{2}$  inches, Spatula:  $12\frac{1}{4}$  inches and Wooden Spoon:  $9\frac{1}{2}$  inches.



3.MD.C.5a A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.

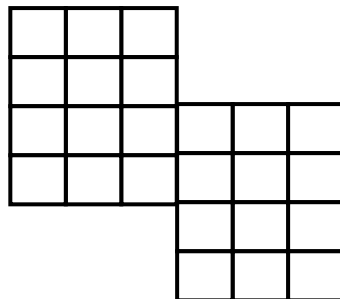
17. Which quadrilateral has the greater area?



- a. They have the same area.      b. A      c. B

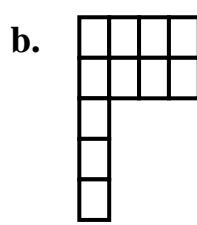
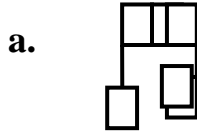
3.MD.C.5b A plane figure which can be covered without gaps or overlaps by  $n$  unit squares is said to have an area of  $n$  square units.

18. Choose the correct area measurement for the following figure.



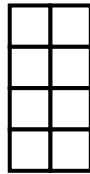
- a. 20 square units      b. 24 square units      c. 19 square units

19. Which of the following figures exhibits an area measurement?



**3.MD.C.6 Measure areas by counting unit squares (square cm, square m, square in., square ft, and improvised units).**

20. Which is the correct way to find the area of the figure?



a.  $4 \times 2 = 8$  square units

b.  $2 + 2 + 2 + 2 = 8$  square units

c. both a and b

**3.MD.7(b) Relate area to the operations of multiplication and addition. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.**

21. What is the area of their garden?

a. 120 square feet

b. 46 square feet

22. A rug measures 15 feet by 12 feet. What is the area of the rug?

a.  $17 \times 8 = 120$  sq ft

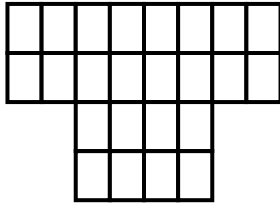
b.  $15 + 12 + = 27$  sq ft

c.  $15 \times 12 = 180$  sq ft

d.  $15 + 12 + 15 + 12 = 54$  sq ft

**3.MD.C.7(c) Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths  $a$  and  $b + c$  is the sum of  $a \times b$  and  $a \times c$ . Use area models to represent the distributive property in mathematical reasoning.**

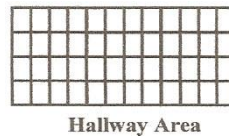
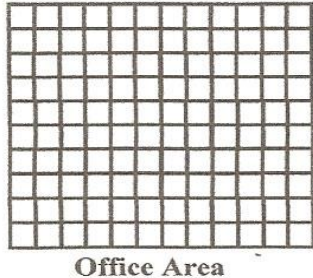
23. Choose the correct area measurement for the figure.



- a.  $(8 + 8) + (2 \times 4) = 24$  sq units
- b.  $(2 \times 8) + (2 \times 4) = 24$  sq units
- c. both a and b
- d. answer not here

**3.MD.C.7d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts applying this technique to solve real world problems.**

24. Mr. Winkler wants to carpet his office and the hallway. The office has measurements of 10 feet by 12 feet, and the hallway measures 4 feet by 10 feet. What is the area measurement for both the office area and the hallway area?



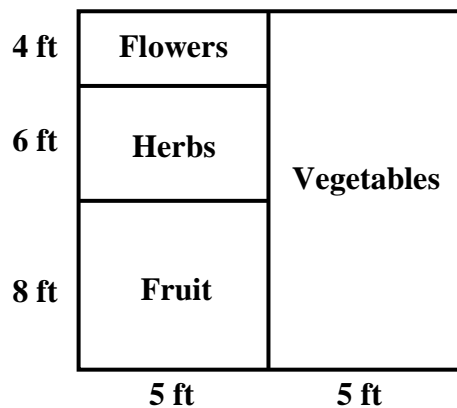
- a.  $120 + 48 = 168$  sq ft
- b.  $10 + 12 + 4 + 10 = 36$  sq ft

**3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.**

25. Jennifer wants to build a fish pond near her garden. The pond will be in the shape of an equilateral triangle where all sides are the same length. The perimeter will be 12 feet. What will be the length of each side of the fish pond?

- a. 12 feet
- b. 36 feet
- c. 4 feet

**26.** What is the perimeter of the vegetable section of Jodi's herb garden?



a. 46 sq ft

b. 22 sq ft

c. 90 sq ft

**Answer Key for Third Grade Test**  
**Measurement & Data**

<b>Standard</b>	<b>Answer</b>
<b>3.MD.A.1</b>	<b>1. a</b>
	<b>2. b</b>
	<b>3. c</b>
	<b>4. a</b>
	<b>5. b</b>
<b>3.MD.A.2</b>	<b>6. c</b>
	<b>7. a</b>
	<b>8. b</b>
	<b>9. a</b>
<b>3.MD.B.3</b>	<b>10. a</b>
	<b>11. b</b>
	<b>12. b</b>
	<b>13. a</b>
<b>3.MD.B.4</b>	<b>14. b</b>
	<b>15. b</b>
	<b>16. a</b>
<b>3.MD.C.5(a)</b>	<b>17. a</b>
<b>3.MD.C.5(b)</b>	<b>18. b</b>
<b>3.MD.C.6</b>	<b>19. b</b>
<b>3.MD.C.7(a)</b>	<b>20. c</b>
<b>3.MD.C.7(b)</b>	<b>21. a</b>
	<b>22. c</b>
<b>3.MD.C.7(c)</b>	<b>23. b</b>
<b>3.MD.C.7(d)</b>	<b>24. a</b>
<b>3.MD.D.8</b>	<b>25. c</b>
	<b>26. a</b>