

Ohio Achievement Tests – 4th Grade Math

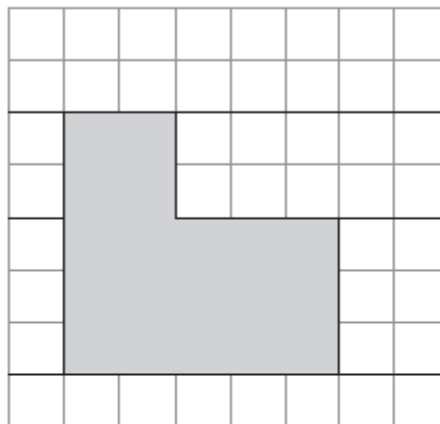
Measurement Standard

1. Paco is filling his fish tank with water.

Which container should Paco use to make the fewest trips to the faucet?

- ☐ A. one-cup container
- ☐ B. one-gallon container
- ☐ C. one-pint container
- ☐ D. one-quart container

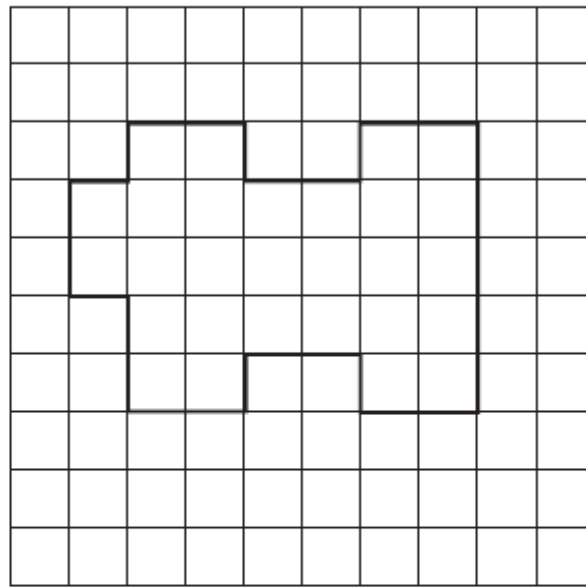
2. A figure is shown on the grid.



What is the area of the figure?

- ☐ A. 16 square units
- ☐ B. 19 square units
- ☐ C. 20 square units
- ☐ D. 25 square units

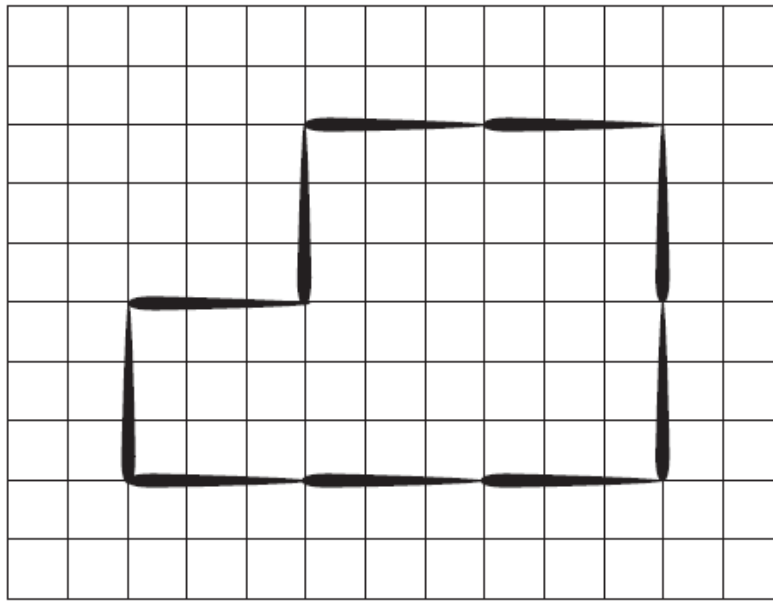
3. Abdul counted the number of units around the outside of the shape shown.



Which measurement did Abdul find?

- ☐ A. area
- ☐ B. height
- ☐ C. perimeter
- ☐ D. volume

4. Randy made this shape with toothpicks.

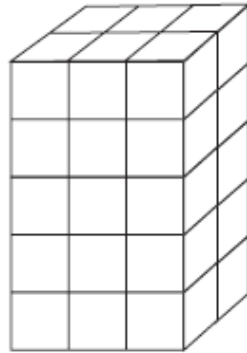


Each  = 1 Toothpick = 3 inches

What is the perimeter of the shape in inches? _____

Describe how you found the length of the perimeter.

5. Torrance made a tower that is three cubes long, five cubes high and two cubes wide.



How many cubes in all did he use to make the tower?

- ☐ A. 10
 - ☐ B. 22
 - ☐ C. 30
 - ☐ D. 31
6. Sheila bought a new hamster cage.

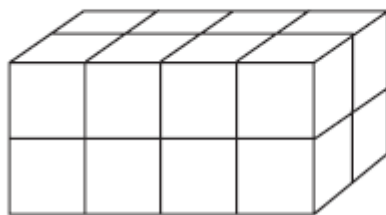
Which unit of measure would be used to describe the volume of the hamster cage?

- ☐ A. cubic inches
- ☐ B. yards
- ☐ C. square inches
- ☐ D. square feet

7. Rachel's father is filling a small swimming pool. He has a one-cup container and a one-gallon container.

Tell which container is more reasonable to use to fill the pool and explain why.

8. Becky stacked blocks as shown. Each block has a volume of one cubic inch.



What is the volume of Becky's stack of blocks?

- ☐ A. 12 cubic inches
 - ☐ B. 13 cubic inches
 - ☐ C. 16 cubic inches
 - ☐ D. 20 cubic inches
9. What unit of measurement is likely to be used to find the length of a border around a bulletin board?
- ☐ A. inches
 - ☐ B. square feet
 - ☐ C. cubic yards
 - ☐ D. miles

10. Which unit is appropriate for measuring the area of the bottom of a pan?

- ☐ A. inch
- ☐ B. foot
- ☐ C. square inch
- ☐ D. cubic foot

11. Robin measured the length of a piece of rope and found it to be 12 feet long.

What would happen to the number of units if Robin measured the length of the rope in yards instead of feet?

- ☐ A. There would be no units.
- ☐ B. There would be more units.
- ☐ C. There would be fewer units.
- ☐ D. There would be the same number of units.