Inside or Around?

Sort figures by the measurement they show.

3.GM.2 "Understand measurable attributes of real-world and mathematical objects using various tools. Find the perimeter of a polygon, given whole number lengths of the sides, using a variety of models..."

NAME _____ DATE _____

AREA

A figure filled with unit squares helps you find area. Count the squares to find the area in square units.

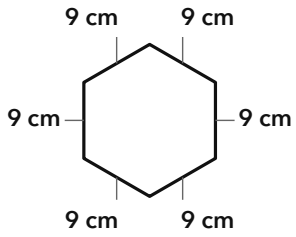
This figure has 14 unit squares, so its area is 14 square units.



PERIMETER

A figure with labeled side lengths helps you find perimeter. Add the side lengths to find the distance around it.

This figure has six sides of 9 cm. Its perimeter is 54 cm.



1 SORT

8 items

Circle AREA or PERIMETER for each figure, then choose two figures and explain how you knew where they belong.

1.

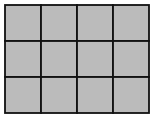


Figure 1

AREA PERIMETER

2.

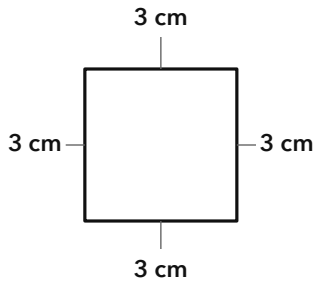


Figure 2

AREA PERIMETER

3.

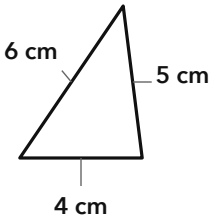


Figure 3

AREA PERIMETER

4.

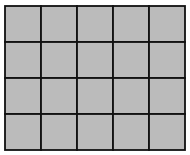


Figure 4

AREA PERIMETER

5.

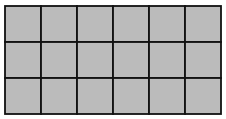


Figure 5

AREA PERIMETER

6.

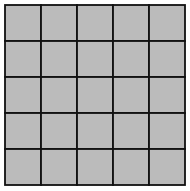


Figure 6

AREA PERIMETER

7.

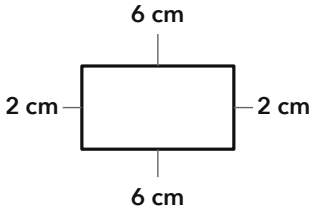


Figure 7

AREA PERIMETER

8.

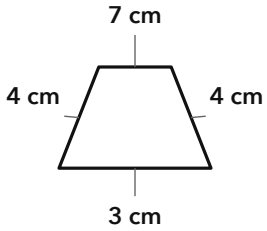


Figure 8

AREA PERIMETER

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write one new AREA example using unit squares and one new PERIMETER example using labeled side lengths. Tell what you would draw.

AREA

PERIMETER

CHALLENGE

Imagine a rectangle made of 2 rows of 6 unit squares. Find its area and perimeter, and tell how you found each.

ANSWER KEY

Inside or Around?

GRADE 3 · 3.GM.2

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	Figure 1 (array)	**AREA**	The 12 unit squares can be counted to find area.
2	Figure 2 (square)	**PERIMETER**	The labeled side lengths add to a perimeter of 12 cm.
3	Figure 3 (triangle)	**PERIMETER**	The labeled side lengths add to a perimeter of 15 cm.
4	Figure 4 (array)	**AREA**	The 20 unit squares can be counted to find area.
5	Figure 5 (array)	**AREA**	The 18 unit squares can be counted to find area.
6	Figure 6 (array)	**AREA**	The 25 unit squares can be counted to find area.
7	Figure 7 (rectangle)	**PERIMETER**	The labeled side lengths add to a perimeter of 16 cm.
8	Figure 8 (trapezoid)	**PERIMETER**	The labeled side lengths add to a perimeter of 18 cm.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **AREA**: Draw 3 rows of 7 unit squares.
- **PERIMETER**: Draw a triangle with sides labeled 2 cm, 3 cm, and 4 cm.

Challenge: The area is 12 square units because there are 2 rows of 6 squares. The perimeter is 16 units because the side lengths add to 6 + 2 + 6 + 2.

For Part 2, accept two explanations that identify the useful information in the chosen figures. For example, Figure 1 shows 12 unit squares to count for area, and Figure 2 has side lengths to add for perimeter.