

Edge or Inside

Sort measurements for the outside edge or the inside space.

3.GSR.8 "Determine the perimeter of a polygon presented in real-life, mathematical problems."

NAME _____

DATE _____

AROUND THE EDGE

Perimeter tells the distance around the outside edge of a shape. Add the side lengths and use units such as centimeters or meters.

A picture frame is 8 cm long and 1 cm wide. $8 + 1 + 8 + 1 = 18$ cm.

COVER THE INSIDE

Area tells how much space is inside a shape. Use square units, such as square centimeters or square meters.

A tray has 3 rows of 7 spaces. $3 \times 7 = 21$ square spaces.

1 SORT

8 items

Part 1: Circle PERIMETER or AREA for each item; Part 2: Choose two items and explain how you knew.

1. A dog pen is 6 m by 4 m. $6 + 4 + 6 + 4 = 20$ m.

PERIMETER

AREA

2. A triangle has sides 3 cm, 5 cm, and 7 cm. $3 + 5 + 7 = 15$ cm.

PERIMETER

AREA

3. A poster is 8 cm by 2 cm. $8 \times 2 = 16$ square centimeters.

PERIMETER

AREA

4. A path has side lengths 9 ft, 2 ft, 9 ft, and 2 ft. It needs 22 ft of edging.

PERIMETER

AREA

5. A rug is 5 ft by 3 ft. $5 \times 3 = 15$ square feet.

PERIMETER

AREA

6. A square window is 4 m by 4 m. $4 \times 4 = 16$ square meters.

PERIMETER

AREA

7. A shape has sides 4 in, 6 in, 3 in, and 5 in. It measures 18 in around.

PERIMETER

AREA

8. A card is 7 cm by 2 cm. It covers 14 square centimeters.

PERIMETER

AREA

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 PERIMETER example and one new AREA example. Include a correct equation and units in each.

PERIMETER _____

AREA _____

CHALLENGE

A five-sided flower bed has side lengths 8 m, 4 m, 6 m, 3 m, and 7 m. Find the perimeter. Show an addition equation and use the correct unit.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	A dog pen is 6 m by 4 m. $6 + 4 + 6 + 4 = 20$ m.	PERIMETER	Adds all four outside side lengths.
2	A triangle has sides 3 cm, 5 cm, and 7 cm. $3 + 5 + 7 = 15$ cm.	PERIMETER	Adds the three side lengths.
3	A poster is 8 cm by 2 cm. $8 \times 2 = 16$ square centimeters.	AREA	Multiplies length and width and uses square units.
4	A path has side lengths 9 ft, 2 ft, 9 ft, and 2 ft. It needs 22 ft of edging.	PERIMETER	Edging goes around the outside, and the side lengths total 22 feet.
5	A rug is 5 ft by 3 ft. $5 \times 3 = 15$ square feet.	AREA	Finds the space inside the rug with square units.
6	A square window is 4 m by 4 m. $4 \times 4 = 16$ square meters.	AREA	Multiplies to find inside space in square meters.
7	A shape has sides 4 in, 6 in, 3 in, and 5 in. It measures 18 in around.	PERIMETER	Adds the outside side lengths, $4 + 6 + 3 + 5$.
8	A card is 7 cm by 2 cm. It covers 14 square centimeters.	AREA	Describes the inside space with square centimeters.

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)

- **PERIMETER:** A banner is 10 cm by 3 cm. $10 + 3 + 10 + 3 = 26$ cm.
- **AREA:** A placemat is 6 in by 4 in. $6 \times 4 = 24$ square inches.

Challenge: $8\text{ m} + 4\text{ m} + 6\text{ m} + 3\text{ m} + 7\text{ m} = 28\text{ m}$.

Accept explanations that identify adding outside side lengths for perimeter or finding inside space with square units for area. Part 3 answers may vary if the equation and units match the category.