

Measure Match Mission

Choose the measurement that fits each job.

GRADE 5 • 5.MG.2.f

5.MG.2.f "Identify whether the application of the concept of perimeter, area, or volume is appropriate for a given situation."

NAME _____

DATE _____

PICK THE RIGHT MEASURE

Use perimeter when you need the distance around the outside of a flat shape. Use area when you need to cover a flat surface, and use volume when you need to fill a solid object or find how much it holds. Check whether the situation is about around, covering, or filling.

WORKED EXAMPLE

A rectangular bulletin board is 11 feet long and 6 feet wide. How much border is needed to go all the way around it?

1. Border goes around the outside, so use perimeter.
2. Add all four sides: $11 + 6 + 11 + 6$.
3. 34 feet of border are needed.

Answer: Perimeter, 34 feet

PRACTICE 6 problems

- 1** A rectangular stage floor is 9 feet long and 5 feet wide. Which measurement tells how much carpet is needed to cover the floor?

ANSWER _____

- 2** A lunch container is 8 inches long, 3 inches wide, and 2 inches high. Which measurement tells how much food it can hold?

ANSWER _____

- 3** A poster is 12 inches long and 7 inches wide. Which measurement tells how much ribbon is needed around its edge?

ANSWER _____

- 4** A dog run is 10 yards long and 4 yards wide. Which measurement tells how much fencing is needed around it?

ANSWER _____

- 5** The top of a desk is 13 inches long and 3 inches wide. Which measurement tells how much contact paper is needed to cover the top?

ANSWER _____

- 6** A fish tank is 5 feet long, 4 feet wide, and 3 feet high. Which measurement tells how much water the tank can hold?

ANSWER _____

APPLY IT Show your work

- 1** The robotics club is building a rectangular storage bin for team supplies. The bin is 9 feet long, 4 feet wide, and 2 feet high. Which measurement should you use to find how much space is inside the bin? Find the amount of space.

WORK SPACE

ANSWER _____

- 2** A student council is making a rectangular banner that is 14 feet long and 8 feet wide. They want to put trim around the outside edge. Which measurement should you use? Find how much trim they need.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A rectangular school garden is 16 feet long and 7 feet wide. The class needs fencing around the garden and mulch to cover the soil. Find the amount of fencing and mulch needed. Explain why you used a different measurement for each job.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A rectangular stage floor is 9 feet long and 5 feet wide. Which measurement tells how much carpet is needed to cover the floor?	Area
2	A lunch container is 8 inches long, 3 inches wide, and 2 inches high. Which measurement tells how much food it can hold?	Volume
3	A poster is 12 inches long and 7 inches wide. Which measurement tells how much ribbon is needed around its edge?	Perimeter
4	A dog run is 10 yards long and 4 yards wide. Which measurement tells how much fencing is needed around it?	Perimeter
5	The top of a desk is 13 inches long and 3 inches wide. Which measurement tells how much contact paper is needed to cover the top?	Area
6	A fish tank is 5 feet long, 4 feet wide, and 3 feet high. Which measurement tells how much water the tank can hold?	Volume

PART 2 • APPLY IT

1. **Volume, 72 cubic feet** Use volume because the question asks for space inside a solid bin. Multiply $9 \times 4 \times 2 = 72$ cubic feet.
2. **Perimeter, 44 feet** Use perimeter because trim goes around the outside edge. Add $14 + 8 + 14 + 8 = 44$ feet.

CHALLENGE

Fencing: perimeter = 46 feet. Mulch: area = 112 square feet. Perimeter measures the distance around the garden, and area measures the surface to cover.

Accept the concept names perimeter, area, and volume in any order when paired with the correct result. Accept correct unit wording such as square feet for area and cubic feet for volume.