

Length Detectives

Choose the unit that makes the most sense.

GRADE 3 • 3.MG.1.b.i

3.MG.1.b.i "Estimate and measure: length of an object to the nearest U.S. Customary unit (12 inch, inch, foot, yard) and metric unit (centimeter, meter);"

NAME _____

DATE _____

PICK A HELPFUL UNIT

Estimate first. Use inches or centimeters for small lengths, feet or meters for larger lengths, and yards for very long lengths. A foot is 12 inches and a meter is 100 centimeters, so you can compare lengths when needed.

WORKED EXAMPLE

A poster is 97 centimeters tall.
Estimate its height to the nearest meter.

- 1 meter = 100 centimeters.
- 97 centimeters is close to 100 centimeters.
- So the poster is about 1 meter tall.

Answer: 1 meter

PRACTICE 6 problems

- 1** A board is 34 inches long. Is it closer to 2 feet (24 inches) or 3 feet (36 inches)?

ANSWER _____

- 2** A bug is 8 centimeters long. Which unit names its length best: centimeters or meters?

ANSWER _____

- 3** A classroom rug is 11 feet long. Is it closer to 3 yards (9 feet) or 4 yards (12 feet)?

ANSWER _____

- 4** A juice box straw is 7 inches long. Which unit names its length best: inches or yards?

ANSWER _____

- 5** A hallway is 26 meters long. Which unit names its length best: centimeters or meters?

ANSWER _____

- 6** A banner is 164 centimeters long. Is it closer to 2 meters (200 centimeters) or 3 meters (300 centimeters)?

ANSWER _____

APPLY IT Show your work

- 1** At a skate park, a ramp is 68 inches long. Estimate the ramp's length to the nearest foot.

WORK SPACE

ANSWER _____

- 2** The student council is choosing a length for a ribbon to hang near a school flagpole. Which is a reasonable estimate for the flagpole's height: 20 feet or 20 yards?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A ribbon is 75 inches long. Sam says it is about 5 feet long. Jo says it is about 7 feet long. Is either student correct? Explain your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A board is 34 inches long. Is it closer to 2 feet (24 inches) or 3 feet (36 inches)?	3 feet
2	A bug is 8 centimeters long. Which unit names its length best: centimeters or meters?	centimeters
3	A classroom rug is 11 feet long. Is it closer to 3 yards (9 feet) or 4 yards (12 feet)?	4 yards
4	A juice box straw is 7 inches long. Which unit names its length best: inches or yards?	inches
5	A hallway is 26 meters long. Which unit names its length best: centimeters or meters?	meters
6	A banner is 164 centimeters long. Is it closer to 2 meters (200 centimeters) or 3 meters (300 centimeters)?	2 meters

PART 2 • APPLY IT

1. **6 feet** Five feet is 60 inches and 6 feet is 72 inches. Since 68 is closer to 72, the ramp is about 6 feet long.
2. **20 feet** Twenty yards equals 60 feet, which is much taller than a typical school flagpole. A reasonable estimate is 20 feet.

CHALLENGE

Neither student is correct. The ribbon is about 6 feet long because 6 feet is 72 inches, and 75 is closer to 72 than to 84 inches, which is 7 feet.

Accept unit abbreviations such as cm, m, ft, and yd. For the challenge, accept an explanation that identifies 6 feet and compares 75 inches to 72 inches and 84 inches.