

Metric Mission

Convert metric units and solve real-world problems.

GRADE 5 • 5.MDR.7.3

5.MDR.7.3 "Convert among units within the metric system and then apply these conversions to solve multistep, practical problems."

NAME _____

DATE _____

MOVE BETWEEN UNITS

To change metric units, use place value. Multiply when you change to a smaller unit, and divide when you change to a larger unit. Use 10, 100, or 1,000 based on how far apart the units are.

WORKED EXAMPLE

Convert 3.6 L to mL.

1. $1 \text{ L} = 1,000 \text{ mL}$.

2. $6 \times 1,000 = 3,600$.

3. So $3.6 \text{ L} = 3,600 \text{ mL}$.

Answer: 3,600 mL

PRACTICE 6 problems

1 Convert 4.2 m to cm.

ANSWER _____

2 Convert 6,500 g to kg.

ANSWER _____

3 Convert 7.08 L to mL.

ANSWER _____

4 Convert 235 cm to m.

ANSWER _____

5 Convert 1.75 km to m.

ANSWER _____

6 Convert 4,800 mg to g.

ANSWER _____

APPLY IT Show your work

- 1** At robotics club, Maya fills 3 water bottles with 750 mL of water each. She also pours 1.4 L of water into the team jug. How many milliliters of water does the team have altogether?

WORK SPACE

ANSWER _____

- 2** The art club has 2.5 m of LED strip. It cuts off 65 cm for each of 3 signs. How many centimeters of LED strip remain?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A science club has 4.75 L of water. It fills 6 cups with 325 mL each and then uses 0.8 L to rinse equipment. How many milliliters of water remain? Show your steps.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Convert 4.2 m to cm.	420 cm
2	Convert 6,500 g to kg.	6.5 kg
3	Convert 7.08 L to mL.	7,080 mL
4	Convert 235 cm to m.	2.35 m
5	Convert 1.75 km to m.	1,750 m
6	Convert 4,800 mg to g.	4.8 g

PART 2 • APPLY IT

1. **3,650 mL** Multiply 3×750 mL to get 2,250 mL. Convert 1.4 L to 1,400 mL, then add to get 3,650 mL.
2. **55 cm** Convert 2.5 m to 250 cm. Subtract 3×65 cm, or 195 cm, from 250 cm.

CHALLENGE**2,000 mL**

Accept equivalent correctly labeled units, such as 3.65 L for the first word problem. Students should convert quantities to the same unit before adding or subtracting.