LESSON MAKER PRO

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 L = 1,000 mL.
2. 3.6 x 1,000 = 3,600.
3. So 3.6 L = 3,600 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

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.

WORK SPACE AND ANSWER

ANSWER KEY

Metric Mission

GRADE 5 · 5.MDR.7.3

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 x 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 x 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.