

Volume Switch

Move between liters and milliliters.

GRADE 5 • 5.MG.1.c.iii

5.MG.1.c.iii "Given the equivalent metric measure of one unit, in a contextual problem, determine the equivalent measurement within the metric system: liquid volume (milliliters and liters)."

NAME _____

DATE _____

THE BIG IDEA

One liter equals 1,000 milliliters. To change liters to milliliters, multiply by 1,000. To change milliliters to liters, divide by 1,000.

WORKED EXAMPLE

Change 4 L to milliliters.

1. Start with 4 L.
2. Multiply 4 by 1,000.
3. $4 \times 1,000 = 4,000$.

Answer: 4 L = 4,000 mL

PRACTICE 6 problems

1 Change 3,600 mL to liters.

ANSWER _____

2 Change 9 L to milliliters.

ANSWER _____

3 Change 12 L to milliliters.

ANSWER _____

4 Change 2,450 mL to liters.

ANSWER _____

5 Change 800 mL to liters.

ANSWER _____

6 Change 6 L to milliliters.

ANSWER _____

APPLY IT Show your work

- 1** The school science club fills a water container with 13 L of water for its plant experiment. How many milliliters of water are in the container?

WORK SPACE

ANSWER _____

- 2** A student makes 5,250 mL of fruit punch for a class celebration. How many liters of fruit punch is that?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A drink cooler holds 3,000 mL. It already has 1.6 L of lemonade inside. Then 350 mL more lemonade is added. How many milliliters of space are left in the cooler?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Change 3,600 mL to liters.	3.6 L
2	Change 9 L to milliliters.	9,000 mL
3	Change 12 L to milliliters.	12,000 mL
4	Change 2,450 mL to liters.	2.45 L
5	Change 800 mL to liters.	0.8 L
6	Change 6 L to milliliters.	6,000 mL

PART 2 • APPLY IT

1. **13,000 mL** Multiply 13 liters by 1,000 milliliters per liter. $13 \times 1,000 = 13,000$ mL.
2. **5.25 L** Divide 5,250 milliliters by 1,000. $5,250 \div 1,000 = 5.25$ L.

CHALLENGE**1,050 mL**

Accept equivalent decimal forms with needed trailing zeros, such as 3.60 L for 3.6 L. Students should include the correct unit in each answer.