



## Additional Practice 12-5

### Convert Metric Units of Capacity

#### Another Look!

Remember:

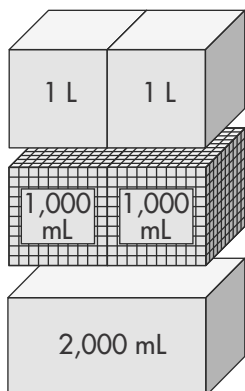
To change from liters to milliliters, multiply by  $10^3$ . To change from milliliters to liters, divide by  $10^3$ .



How to change from one metric unit of capacity to another:

Converting a capacity from a smaller to a larger metric unit:

2,000 milliliters = \_\_\_\_\_ liters

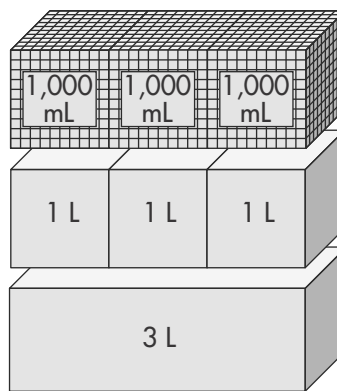


You know  $10^3 \text{ mL} = 1 \text{ L}$ , so divide.

Find  $2,000 \div 1,000$ ;  $2,000 \text{ mL} = 2 \text{ L}$ .

Converting a capacity from a larger to a smaller metric unit:

3 liters = \_\_\_\_\_ milliliters



You know  $1 \text{ L} = 10^3 \text{ mL}$ , so multiply.

Find  $3 \times 1,000$ ;  $3 \text{ L} = 3,000 \text{ mL}$ .

In **1–9**, convert each unit of capacity.

1.  $5 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

2.  $13,000 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

3.  $1.6 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

4.  $4,750 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

5.  $950 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

6.  $0.4 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

7.  $2.7 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

8.  $8,400 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

9.  $0.071 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$

In **10** and **11**, complete each table to show equivalent measures.

10.

liters	90	9	0.9
milliliters			

11.

milliliters	250	2,500	25,000
liters			

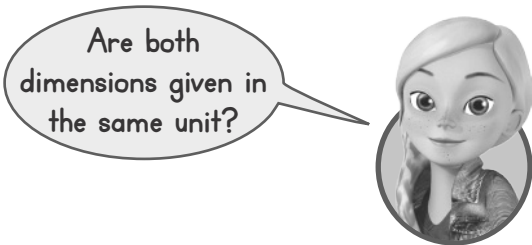


**12. Construct Arguments** Tell whether you would use multiplication or division to convert milliliters to liters. Explain your answer.

**13. Algebra** Complete the following table. Then write an equation that can be used to convert  $p$  pounds to  $o$  ounces.

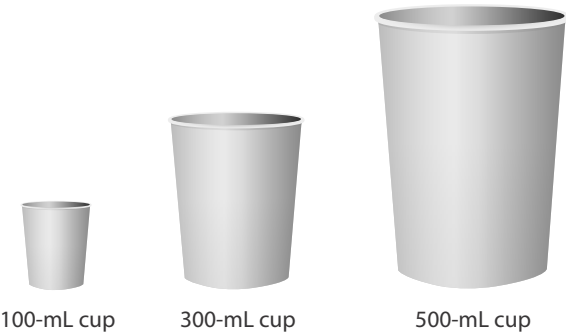
Pounds	3	4	5	6	7
Ounces	48				

**14.** The length of a rectangular garden is 10 yards and its width is 10 feet. What is the perimeter of the garden in feet?



**15.** You are preparing for a breakfast party and need enough milk for 20 people. Each person will drink about 200 milliliters of milk. Which is the better estimate of the amount of milk you should prepare: 400 milliliters or 4 liters? Why?

**16. Higher Order Thinking** Suppose you have the three cups shown at the right. List two different ways you can measure exactly 1 liter.



**Assessment Practice**

**17.** A community center has a swimming pool that holds 29,000,000 milliliters of water. How many liters of water can the pool hold?

- (A) 290,000,000 L
- (B) 2,900,000 L
- (C) 290,000 L
- (D) 29,000 L

**18.** There are 1.5 liters of punch in a pitcher. How many milliliters of punch are in the pitcher?

- (A) 100 mL
- (B) 1,500 mL
- (C) 1,000 mL
- (D) 15,000 mL