Unit 6, Lesson 6

Multi-step Conversion Problems: Metric Liquid Volumes

Let's solve multi-step problems about metric liquid volume.

Warm-up

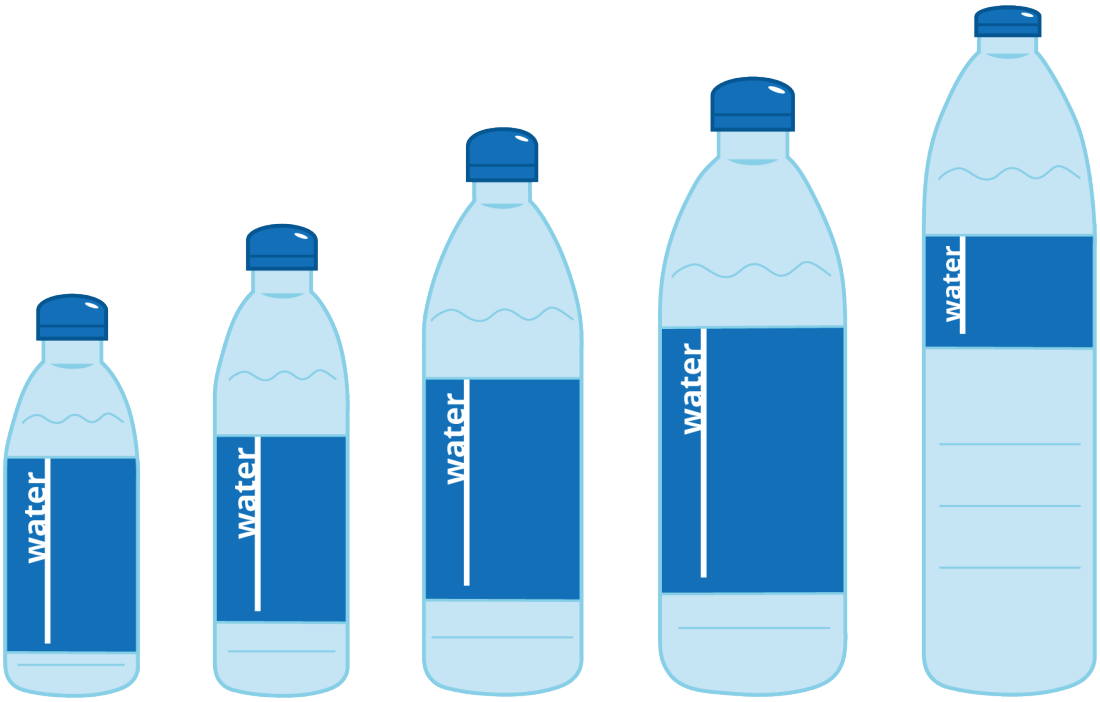
Number Talk: Divide by Powers of 10

Find the value of each expression mentally.

- $1{,}400 \div 10$
- $1{,}400 \div 100$
- $1{,}400 \div 1{,}000$
- $1{,}401 \div 1{,}000$

Activity 1

Liquid-Volume Conversions



1. Complete the table.

L	mL
5	
6.3	
0.95	
10^2	
	800,000
	10^6
	65

2. Decide if the two measurements are equal. If not, choose the measurement that is greater. Explain or show your reasoning.

   a. 15 mL and 0.15 L

   b. 2,500 mL and 2.5 L

   c. 200 mL and $\frac{1}{4}$ L

   d. 1 mL and $\frac{1}{1{,}000}$ L

   e. 15,600 mL and 15.5 L

Activity 2

Hydrating Dancers



There are 25 dancers in the performance group. During practice, each dancer drinks $1\frac{1}{2}$ bottles of water.

1. Each bottle holds 500 mL of water. How many liters of water do the dancers drink in total? Explain or show your reasoning.

2. Each cooler holds 15 L of water. How many coolers does the group need? How many liters of water are left after practice if all of the coolers are full at the start of practice? Explain or show your reasoning.

3. The dancers make a sports drink by dissolving 30 mL of drink mix into each 500 mL of water. How many liters of drink mix does the team need for their practice? Explain or show your reasoning.