Lesson 6: Multi-step Conversion Problems: Metric Liquid Volume
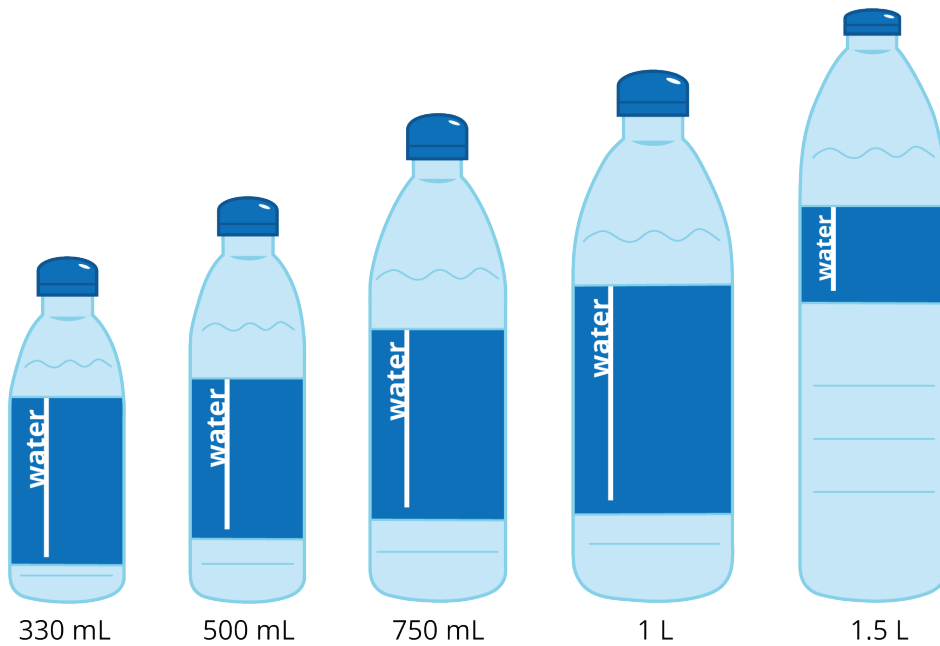
- Let's solve multi-step problems about metric liquid volume.

Warm-up: Number Talk: Divide by Powers of 10

Find the value of each expression mentally.

- $1,400 \div 10$

- $1,400 \div 100$

- $1,400 \div 1,000$

- $1,401 \div 1,000$

6.1: Liquid Volume Conversions

330 mL   500 mL   750 mL   1 L   1.5 L

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 which one 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

6.2: Rehydrating 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? Explain or show your reasoning.

2. Each cooler holds 15 L of water. How many coolers does the team need? How much water will they have left over after practice? Explain or show your reasoning.

500 mL   15 L

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