

Lesson 3-6 • Group 2

Reinforce Understanding**3.6 Small Group • Group 2**

I can use ratio reasoning to convert between units within the same measurement system, explain why the method works, and use it on a problem I have not seen before.

Worked model

A bookshelf is 6 feet tall. How many inches is that? (1 foot = 12 inches)

1. Write the conversion factor. 1 ft = 12 in
2. Decide the direction. Feet → inches is LARGER to SMALLER, so multiply.
3. Multiply. $6 \times 12 = 72$
4. Check that it makes sense — inches are small, so the number got bigger. ✓

Answer: 6 feet = 72 inches.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. There are 1,000 milliliters in 1 liter. Complete the double number line as a table.

Complete the table. Show how you found each value.

Liters	Milliliters
1	1,000
2	
4	

Show your work

2. A 3-quart stockpot is filled using a 1-cup scoop. There are 4 cups in 1 quart. Use the bar model to show how many scoops fill the pot.

Use the model to solve. Show your work.

Show your work

Answer: _____

3. A tap fills 250 milliliters every 10 seconds. Will it fill a 3-liter jug in under 2 minutes?

Circle the letter of the best answer. Show how you know.

- A. No — 250 mL in 10 seconds is far too slow for 3 liters
- B. Yes — it delivers 3,000 mL in 120 seconds, exactly filling the jug at the 2-minute mark
- C. Yes — 3 liters is only 300 mL, so it takes 12 seconds
- D. There is not enough information to tell

Show your work
