

Liquid Measure Quest

Estimate, convert, add, and subtract liters and milliliters.

GRADE 5 • 5.MG.1.b.iii

5.MG.1.b.iii "Estimate and measure to solve contextual problems that involve metric units: liquid volume (milliliters and liters)."

NAME _____

DATE _____

LITERS AND MILLILITERS

Use 1 L = 1,000 mL. Liters measure larger amounts, and milliliters measure smaller amounts. To add or subtract mixed amounts, change to the same unit first.

WORKED EXAMPLE

A jug holds 4 L 300 mL. How many milliliters does it hold?

1. Change liters to milliliters: $4 \text{ L} = 4,000 \text{ mL}$.
2. Add the remaining milliliters: $4,000 + 300 = 4,300 \text{ mL}$.

Answer: 4,300 mL

PRACTICE 6 problems

- 1** Which is a reasonable estimate for the amount of juice in a juice box: 250 mL or 250 L?

ANSWER _____

- 2** Write 3 L as milliliters.

ANSWER _____

- 3** Write 1,800 mL as liters and milliliters.

ANSWER _____

- 4** A pitcher has 2 L 125 mL of water. How many milliliters of water is that?

ANSWER _____

- 5** A soup pot has 950 mL of broth. Then 650 mL more broth is added. How much broth is in the pot?

ANSWER _____

- 6** A tank starts with 6 L of water. Then 2,400 mL is used. How many milliliters of water remain?

ANSWER _____

APPLY IT Show your work

- 1** For a gaming club event, Maya mixes 2 L 350 mL of fruit punch with 1 L 475 mL of sparkling water. How much drink does she make altogether?

WORK SPACE

ANSWER _____

- 2** A class aquarium has 9 L 600 mL of water. During a water change, students remove 3 L 50 mL. How much water remains?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A snack bar has a 12 L cooler. It puts 875 mL of water into each of 3 identical drink dispensers. How much water is left in the cooler? Show your reasoning.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Which is a reasonable estimate for the amount of juice in a juice box: 250 mL or 250 L?	250 mL
2	Write 3 L as milliliters.	3,000 mL
3	Write 1,800 mL as liters and milliliters.	1 L 800 mL
4	A pitcher has 2 L 125 mL of water. How many milliliters of water is that?	2,125 mL
5	A soup pot has 950 mL of broth. Then 650 mL more broth is added. How much broth is in the pot?	1,600 mL
6	A tank starts with 6 L of water. Then 2,400 mL is used. How many milliliters of water remain?	3,600 mL

PART 2 • APPLY IT

- 3 L 825 mL** Change both amounts to milliliters: $2,350 \text{ mL} + 1,475 \text{ mL} = 3,825 \text{ mL}$. Write 3,825 mL as 3 L 825 mL.
- 6 L 550 mL** Change both amounts to milliliters: $9,600 \text{ mL} - 3,050 \text{ mL} = 6,550 \text{ mL}$. Write 6,550 mL as 6 L 550 mL.

CHALLENGE**9 L 375 mL**

Accept equivalent answers in milliliters or in liters and milliliters when the amount is correct. For the challenge, students may show $3 \times 875 = 2,625 \text{ mL}$ and $12,000 - 2,625 = 9,375 \text{ mL}$.