

Measure It Out

Use mass and liquid volume to solve one-step problems.

GRADE 3 • NY-3.MD.2.b

NY-3.MD.2.b "Add, subtract, multiply, or divide to solve one-step word problems involving masses or liquid volumes that are given in the same units."

NAME _____

DATE _____

CHOOSE AN OPERATION

When all measurements use the same unit, use the action in the story. Put amounts together to add, take away to subtract, use equal groups to multiply or divide. Write the unit in your answer.

WORKED EXAMPLE

A jug holds 48 L of water. The water is poured equally into 6 pails. How many liters of water are in each pail?

1. Equal sharing means divide.
2. $48 \div 6 = 8$.
3. Each pail has 8 L.

Answer: 8 L

PRACTICE 6 problems

- 1** A parcel has a 275 g book and a 125 g puzzle. What is the total mass of the parcel?

ANSWER _____

- 2** A container has 900 mL of paint. Then 365 mL spills out. How much paint is left?

ANSWER _____

- 3** Seven juice boxes each hold 300 mL. How much juice do the boxes hold altogether?

ANSWER _____

- 4** A 960 g lump of clay is split equally into 3 bags. What is the mass of clay in each bag?

ANSWER _____

- 5** Six jars each hold 150 g of sand. What is the total mass of sand?

ANSWER _____

- 6** A pitcher holds 1,050 mL of lemonade. It is poured equally into 5 cups. How much lemonade is in each cup?

ANSWER _____

APPLY IT Show your work

- 1** The school garden club fills 4 bird water dishes with 375 mL of water each. How much water do the dishes hold altogether?

WORK SPACE

ANSWER _____

- 2** Maya has 1,250 g of modeling dough. She uses 480 g to build a creature. How much modeling dough does she have left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A science class has 2,400 mL of colored water. The class pours it equally into 8 containers. How much water goes into each container? Explain how you chose your operation.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A parcel has a 275 g book and a 125 g puzzle. What is the total mass of the parcel?	400 g
2	A container has 900 mL of paint. Then 365 mL spills out. How much paint is left?	535 mL
3	Seven juice boxes each hold 300 mL. How much juice do the boxes hold altogether?	2,100 mL
4	A 960 g lump of clay is split equally into 3 bags. What is the mass of clay in each bag?	320 g
5	Six jars each hold 150 g of sand. What is the total mass of sand?	900 g
6	A pitcher holds 1,050 mL of lemonade. It is poured equally into 5 cups. How much lemonade is in each cup?	210 mL

PART 2 • APPLY IT

1. **1,500 mL** Multiply because there are 4 equal groups. $4 \times 375 = 1,500$ mL.
2. **770 g** Subtract the mass used from the starting mass. $1,250 - 480 = 770$ g.

CHALLENGE

300 mL. I divided 2,400 by 8 because the water is shared equally.

Accept correct answers with the stated unit. For the challenge, accept an explanation that identifies equal sharing and uses division, with $2,400 \div 8 = 300$.