LESSON MAKER PRO

Mass and Volume Math

Use grams, kilograms, and liters to solve one-step problems.

GRADE 3 · 3.MD.A.2

CCSS.Math.Content.3.MD.A.2 "Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). 1 Add, subtract, multiply..."

NAME _____ DATE _____

CHOOSE THE OPERATION

Use the same unit when you add, subtract, multiply, or divide masses and liquid volumes. Add to find a total, subtract to find how much more or less, multiply equal groups, and divide equal shares.

WORKED EXAMPLE

A bag of rice has a mass of 325 g. A bag of beans has a mass of 140 g. What is their total mass?

1. Both masses are measured in grams.
2. Add: 325 + 140 = 465.
3. Write the unit: 465 g.

Answer: 465 g

PRACTICE 6 problems

1 650 g + 230 g = ?

ANSWER _____

2 900 g - 275 g = ?

ANSWER _____

3 Four bottles hold 2 l each. How many liters do the bottles hold altogether?

ANSWER _____

4 18 l of water is shared equally among 3 buckets. How many liters are in each bucket?

ANSWER _____

5 7 kg + 5 kg = ?

ANSWER _____

6 36 kg of pet food is packed equally into 6 boxes. How many kilograms are in each box?

ANSWER _____

APPLY IT Show your work

1 At a school carnival, Maya fills a lemonade cooler with 12 l of lemonade. She pours in 7 l more. How many liters of lemonade are in the cooler now?

WORK SPACE

ANSWER _____

2 A video game club packs 4 prize bags. Each bag has 250 g of trading cards. What is the total mass of the trading cards?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A cooler has 15 l of juice shared equally among 3 pitchers. Sam says each pitcher gets 4 l. Is Sam correct? Explain using a multiplication fact.

WORK SPACE AND ANSWER

ANSWER KEY

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	650 g + 230 g = ?	**880 g**
2	900 g - 275 g = ?	**625 g**
3	Four bottles hold 2 l each. How many liters do the bottles hold altogether?	**8 l**
4	18 l of water is shared equally among 3 buckets. How many liters are in each bucket?	**6 l**
5	7 kg + 5 kg = ?	**12 kg**
6	36 kg of pet food is packed equally into 6 boxes. How many kilograms are in each box?	**6 kg**

PART 2 · APPLY IT

1. **19 l** Add the liters in the cooler: 12 + 7 = 19. The cooler now has 19 l.
2. **1,000 g** Multiply the mass in each equal bag: 4 x 250 = 1,000. The trading cards have a total mass of 1,000 g.

CHALLENGE

No. Each pitcher gets 5 l because 3 x 5 = 15.

Accept answers that include the correct unit, g, kg, or l. For the challenge, accept any explanation showing that 3 x 5 = 15, so 5 l is the equal share.