LESSON MAKER PRO

How Much, About?

Use familiar amounts to estimate weights and capacities.

GRADE 6 · 6.GM.4.1

6.GM.4.1 "Estimate weights and capacities using benchmarks in customary and metric measurement systems with appropriate units."

NAME _____ DATE _____

START WITH A BENCHMARK

To estimate across measurement systems, use 1 kg as about 2 lb and 1 L as about 1 qt. Within a system, 1,000 g = 1 kg, 1,000 mL = 1 L, and 4 qt = 1 gal. Multiply or divide the benchmark to fit the amount you have.

WORKED EXAMPLE

A bag of pet food weighs 9 kg. Estimate its weight in pounds.

1. Use the benchmark: 1 kg is about 2 lb.
2. Multiply: 9 × 2 = 18.

Answer: About 18 lb

PRACTICE 6 problems

1 A full backpack weighs 3 kg. Estimate its weight in pounds.

ANSWER _____

2 A jug holds 5 L. Estimate its capacity in quarts.

ANSWER _____

3 A dumbbell weighs 8 lb. Estimate its weight in kilograms.

ANSWER _____

4 A cooler holds 12 qt. Estimate its capacity in liters.

ANSWER _____

5 Three drink bottles each hold 650 mL. About how many liters do they hold together? Round to the nearest liter.

ANSWER _____

6 A box holds 11 snack packs that each weigh 90 g. About how many kilograms do the packs weigh together? Round to the nearest kilogram.

ANSWER _____

APPLY IT Show your work

1 Your group brings 4 water bottles to the skate park. Each holds 750 mL. About how many quarts of water did your group bring? Use the benchmarks.

WORK SPACE

ANSWER _____

2 Three teammates each bring a gear bag that weighs 4 kg. About how many pounds do the bags weigh altogether? Use the benchmark.

WORK SPACE

ANSWER _____

CHALLENGE One step up

At a game night, you have 2 jugs that each hold 3 L of juice and 3 cartons that each hold 1 qt. About how many gallons of juice do you have? Explain your estimate.

WORK SPACE AND ANSWER

ANSWER KEY

How Much, About?

GRADE 6 · 6.GM.4.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A full backpack weighs 3 kg. Estimate its weight in pounds.	**About 6 lb**
2	A jug holds 5 L. Estimate its capacity in quarts.	**About 5 qt**
3	A dumbbell weighs 8 lb. Estimate its weight in kilograms.	**About 4 kg**
4	A cooler holds 12 qt. Estimate its capacity in liters.	**About 12 L**
5	Three drink bottles each hold 650 mL. About how many liters do they hold together? Round to the nearest liter.	**About 2 L**
6	A box holds 11 snack packs that each weigh 90 g. About how many kilograms do the packs weigh together? Round to the nearest kilogram.	**About 1 kg**

PART 2 · APPLY IT

1. **About 3 qt** The bottles hold 3,000 mL, or 3 L, altogether. Since 1 L is about 1 qt, that is about 3 qt.
2. **About 24 lb** The bags weigh 12 kg altogether. At about 2 lb per kilogram, that is about 24 lb.

CHALLENGE

About 2 1/4 gal. The jugs hold about 6 qt together, and the cartons add 3 qt. That makes about 9 qt, or 2 1/4 gal.

Accept equivalent forms such as 2.25 gal for 2 1/4 gal. Cross-system answers are estimates based on the benchmarks, not exact conversions.