

Measure It Out

Convert units and solve real measurement problems.

GRADE 5 • 5.MDR.7.1

5.MDR.7.1 "Explore realistic problems involving different units of measurement, including distance, mass, weight, volume, and time."

NAME _____

DATE _____

ONE UNIT AT A TIME

When two measurements use different units, change them to the same unit before you add, subtract, multiply, or divide. Choose a unit that makes the question easier, and write the unit with your final answer.

WORKED EXAMPLE

A movie lasts 2 hours 15 minutes.
How many minutes does it last?

1. 2 hours = 120 minutes.
2. Add the extra 15 minutes.
3. $120 + 15 = 135$ minutes.

Answer: 135 minutes

PRACTICE 6 problems

1 Convert 7 kg to grams.

ANSWER _____

2 Convert 9 L to milliliters.

ANSWER _____

3 A bus leaves at 8:20 a.m. and arrives at 9:05 a.m. How long is the ride?

ANSWER _____

4 A package weighs 5 lb 8 oz. What is its weight in ounces?

ANSWER _____

5 Convert 3 miles to yards.

ANSWER _____

6 A 3 L jug fills how many 750 mL bottles?

ANSWER _____

APPLY IT Show your work

- 1** A bike trail is 1 mile 660 yards long. You ride the whole trail 3 times. How many yards do you ride?

WORK SPACE

ANSWER _____

- 2** A pet shelter has 6 bags of dog food. Each bag weighs 4 kg 500 g. What is the total weight in grams?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Five pitchers each hold 1 L 250 mL of lemonade. The lemonade is poured into cups that hold 250 mL each. How many full cups can be filled?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Convert 7 kg to grams.	7,000 g
2	Convert 9 L to milliliters.	9,000 mL
3	A bus leaves at 8:20 a.m. and arrives at 9:05 a.m. How long is the ride?	45 minutes
4	A package weighs 5 lb 8 oz. What is its weight in ounces?	88 oz
5	Convert 3 miles to yards.	5,280 yd
6	A 3 L jug fills how many 750 mL bottles?	4 bottles

PART 2 • APPLY IT

1. **7,260 yd** Change 1 mile to 1,760 yards, then add 660 yards to get 2,420 yards for one ride. Multiply 2,420 by 3.
2. **27,000 g** Change 4 kg 500 g to 4,500 g. Multiply 4,500 by 6.

CHALLENGE**25 cups**

Accept equivalent unit wording, such as “7,000 grams” for “7,000 g.” For elapsed time, accept “45 min” as well as “45 minutes.”