LESSON MAKER PRO

Unit Switch Challenge

Use ratios to move between metric and customary units.

GRADE 6 · 6.NR.4.7

6.NR.4.7 "Use ratios to convert within measurement systems (customary and metric) to solve authentic problems that exist in everyday life."

NAME _____ DATE _____

CONVERT WITH RATIOS

To convert, use a ratio that compares equal amounts, such as a conversion fact. Multiply when changing to a smaller unit, and divide when changing to a larger unit. Check whether your answer should have more or fewer units.

WORKED EXAMPLE

Convert 7 quarts to cups.

1. 1 quart = 4 cups.
2. 7 quarts x 4 cups per quart = 28 cups.
3. The quarts cancel, leaving cups.

Answer: 28 cups

PRACTICE 6 problems

1 Convert 36 inches to feet.

ANSWER _____

2 Convert 2 pounds to ounces.

ANSWER _____

3 Convert 1,500 milliliters to liters.

ANSWER _____

4 Convert 6 kilometers to meters.

ANSWER _____

5 Convert 3 yards to inches.

ANSWER _____

6 Convert 72 fluid ounces to cups.

ANSWER _____

APPLY IT Show your work

1 The drama club needs 2 liters of paint for a set. Paint comes in 250-milliliter jars. How many jars does the club need?

WORK SPACE

ANSWER _____

2 A skateboard club has 72 inches of reflective tape. Each skateboard needs 2 feet of tape. How many skateboards can the club decorate?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A fitness app combines two walking routes. One route is 2 kilometers 350 meters, and the other is 1 kilometer 650 meters. The app counts one lap as 500 meters. How many laps is the combined distance?

WORK SPACE AND ANSWER

ANSWER KEY

Unit Switch Challenge

GRADE 6 · 6.NR.4.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Convert 36 inches to feet.	**3 feet**
2	Convert 2 pounds to ounces.	**32 ounces**
3	Convert 1,500 milliliters to liters.	**1.5 liters**
4	Convert 6 kilometers to meters.	**6,000 meters**
5	Convert 3 yards to inches.	**108 inches**
6	Convert 72 fluid ounces to cups.	**9 cups**

PART 2 · APPLY IT

1. **8 jars** Convert 2 liters to 2,000 milliliters. Then divide 2,000 by 250 to get 8 jars.
2. **3 skateboards** Convert 72 inches to 6 feet. Then divide 6 feet by 2 feet per skateboard to get 3 skateboards.

CHALLENGE

8 laps

Accept equivalent forms such as 1 1/2 liters for 1.5 liters. Require correct units in each response.