LESSON MAKER PRO

Unit Switch Challenge

Multiply or divide to change measurement units.

GRADE 6 · 6.RP.A.3d

CCSS.Math.Content.6.RP.A.3d "Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities."

NAME _____ DATE _____

CHANGE THE UNIT

To change from a larger unit to a smaller unit, multiply by the number of smaller units in one larger unit. To change from a smaller unit to a larger unit, divide by that same number and label your answer with the new unit.

WORKED EXAMPLE

Convert 5 weeks to days.

1. 1 week = 7 days.
2. 5 weeks × 7 days per week = 35 days.
3. The weeks cancel, so days is the unit left.

Answer: 35 days

PRACTICE 6 problems

1 Convert 8 feet to inches.

ANSWER _____

2 Convert 144 ounces to pounds.

ANSWER _____

3 Convert 3.6 kilometers to meters.

ANSWER _____

4 Convert 4,500 milliliters to liters.

ANSWER _____

5 A ribbon is 72 inches long. How many yards long is it?

ANSWER _____

6 Convert 3/8 pound to ounces.

ANSWER _____

APPLY IT Show your work

1 During a bike ride, Sam completes 3/4 mile. How many feet is that?

WORK SPACE

ANSWER _____

2 A student is editing a gaming video with 4 clips. Each clip lasts 45 seconds. What is the total length in minutes?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A refill station has 3.2 liters of water. It fills 8 equal bottles. How many milliliters of water go in each bottle?

WORK SPACE AND ANSWER

ANSWER KEY

Unit Switch Challenge

GRADE 6 · 6.RP.A.3d

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Convert 8 feet to inches.	**96 inches**
2	Convert 144 ounces to pounds.	**9 pounds**
3	Convert 3.6 kilometers to meters.	**3,600 meters**
4	Convert 4,500 milliliters to liters.	**4.5 liters**
5	A ribbon is 72 inches long. How many yards long is it?	**2 yards**
6	Convert 3/8 pound to ounces.	**6 ounces**

PART 2 · APPLY IT

1. **3,960 feet** Multiply 5,280 feet per mile by 3/4 mile. 5,280 × 3/4 = 3,960.
2. **3 minutes** First multiply 4 × 45 = 180 seconds. Then divide 180 by 60 seconds per minute to get 3 minutes.

CHALLENGE

400 milliliters

Accept equivalent number forms, such as 3600 for 3,600 and 4 1/2 liters for 4.5 liters. Require the correct unit in every answer.