LESSON MAKER PRO

Unit Switch Quest

Convert customary and metric units to solve real problems.

GRADE 5 · MA.5.M.1.1

MA.5.M.1.1 "Solve multi-step real-world problems that involve converting measurement units to equivalent measurements within a single system of measurement."

NAME _____ DATE _____

CHOOSE ONE UNIT

First choose the unit you need for your answer. Rename each measurement in that unit before you add or subtract, using conversion facts from the same measurement system.

WORKED EXAMPLE

A camping rope is 7 yards 5 feet long. How many inches long is the rope?

1. Rename 7 yards as feet: 7 × 3 = 21 feet.
2. Add the extra feet: 21 + 5 = 26 feet.
3. Rename feet as inches: 26 × 12 = 312 inches.

Answer: 312 inches

PRACTICE 6 problems

1 A ribbon is 8 feet 11 inches long. How many inches long is the ribbon?

ANSWER _____

2 A pet shelter has 4 pounds 9 ounces of dog food and 2 pounds 14 ounces of cat food. How many ounces of food does it have altogether?

ANSWER _____

3 A jug has 6 quarts 1 cup of water. How many cups of water are in the jug?

ANSWER _____

4 A gardener uses 9 meters 45 centimeters of hose, then attaches 155 centimeters more hose. How many centimeters of hose are used altogether?

ANSWER _____

5 A hiking route is 1 mile 1,320 yards long. How many yards long is the route?

ANSWER _____

6 A cooler contains 11 pints of juice. After 4 cups are served, how many cups of juice remain?

ANSWER _____

APPLY IT Show your work

1 For a lemonade stand at a school game, Kai starts with 2 gallons 3 quarts of lemonade and adds 5 more quarts. How many cups of lemonade does Kai have now?

WORK SPACE

ANSWER _____

2 An activity tracker records 1 kilometer 750 meters on Saturday and 2 kilometers 250 meters on Sunday. How many meters were recorded altogether?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A video-game quest route is 2 miles 880 yards long. Mia says the route is 3 miles long. Is Mia correct? Explain how you know, and give the route length in miles.

WORK SPACE AND ANSWER

ANSWER KEY

Unit Switch Quest

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A ribbon is 8 feet 11 inches long. How many inches long is the ribbon?	**107 inches**
2	A pet shelter has 4 pounds 9 ounces of dog food and 2 pounds 14 ounces of cat food. How many ounces of food does it have altogether?	**119 ounces**
3	A jug has 6 quarts 1 cup of water. How many cups of water are in the jug?	**25 cups**
4	A gardener uses 9 meters 45 centimeters of hose, then attaches 155 centimeters more hose. How many centimeters of hose are used altogether?	**1,100 centimeters**
5	A hiking route is 1 mile 1,320 yards long. How many yards long is the route?	**3,080 yards**
6	A cooler contains 11 pints of juice. After 4 cups are served, how many cups of juice remain?	**18 cups**

PART 2 · APPLY IT

1. **64 cups** Rename 2 gallons as 8 quarts. Add 8 + 3 + 5 = 16 quarts, then multiply 16 × 4 cups per quart.
2. **4,000 meters** Rename the distances as 1,750 meters and 2,250 meters. Add the two distances.

CHALLENGE

No. Since 880 yards is 1/2 mile, the route is 2 1/2 miles.

Accept equivalent unit names and correctly written mixed-number forms. For the challenge, accept 2.5 miles if the student also explains that 880 yards is one-half of 1,760 yards.