LESSON MAKER PRO

Length Switch

Convert lengths to solve everyday problems.

GRADE 6 · 6.GM.4.2

6.GM.4.2 "Solve problems that require the conversion of lengths within the same measurement systems using appropriate units."

NAME _____ DATE _____

USE THE UNIT RELATIONSHIP

To change to a smaller unit, multiply by the number of smaller units in one larger unit. To change to a larger unit, divide. Use these relationships: 1 yard = 3 feet, 1 foot = 12 inches, 1 kilometer = 1,000 meters, and 1 meter = 100 centimeters.

WORKED EXAMPLE

Convert 8 yards to feet.

1. Each yard has 3 feet.
2. Multiply: 8 × 3 = 24.

Answer: 24 feet

PRACTICE 6 problems

1 Convert 5 yards to feet.

ANSWER _____

2 Convert 48 inches to feet.

ANSWER _____

3 Convert 6 feet to inches.

ANSWER _____

4 Convert 250 centimeters to meters.

ANSWER _____

5 Convert 9 kilometers to meters.

ANSWER _____

6 Convert 1.5 meters to centimeters.

ANSWER _____

APPLY IT Show your work

1 A strip of lights needs to run 2 meters 35 centimeters along a desk. You have a strip that is 260 centimeters long. How many centimeters will be left after you cut the piece you need?

WORK SPACE

ANSWER _____

2 You set a goal to ride your scooter 2 kilometers. You ride 850 meters before lunch and 700 meters after lunch. How many more meters do you need to ride?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A cord is 210 inches long. You need 5 yards 2 feet of cord for a project. Will you have enough? Explain using inches, and find how much cord will be left or how much more you need.

WORK SPACE AND ANSWER

ANSWER KEY

Length Switch

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Convert 5 yards to feet.	**15 feet**
2	Convert 48 inches to feet.	**4 feet**
3	Convert 6 feet to inches.	**72 inches**
4	Convert 250 centimeters to meters.	**2.5 meters**
5	Convert 9 kilometers to meters.	**9,000 meters**
6	Convert 1.5 meters to centimeters.	**150 centimeters**

PART 2 · APPLY IT

1. **25 centimeters** Convert 2 meters 35 centimeters to 235 centimeters. Subtract 235 from 260 to get 25 centimeters.
2. **450 meters** Convert 2 kilometers to 2,000 meters and add the distances ridden to get 1,550 meters. Subtract 1,550 from 2,000 to get 450 meters.

CHALLENGE

Yes. 5 yards is 15 feet, so 5 yards 2 feet is 17 feet, or 204 inches. The cord is long enough, and 6 inches will be left.

Accept equivalent exact forms, such as 2 1/2 meters for 2.5 meters. In the challenge, accept any correct conversion path that shows 6 inches left.