

Unit Switch-Up

Convert measurement units and solve real-life problems.

GRADE 5 • 5.MD.A.1

CCSS.Math.Content.5.MD.A.1 "Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems."

NAME _____

DATE _____

CONVERT WITHIN A SYSTEM

Use a conversion fact to change from one unit to another in the same measurement system. When you change to a smaller unit, multiply. When you change to a larger unit, divide.

WORKED EXAMPLE

Convert 6.3 m to cm.

1. $1 \text{ m} = 100 \text{ cm}$.

2. $3 \times 100 = 630$.

3. So, $6.3 \text{ m} = 630 \text{ cm}$.

Answer: 630 cm

PRACTICE 6 problems

1 Convert 4.2 m to cm.

ANSWER _____

2 Convert 7,500 m to km.

ANSWER _____

3 Convert 3 qt to cups.

ANSWER _____

4 Convert 5 lb 8 oz to oz.

ANSWER _____

5 Convert 2.4 L to mL.

ANSWER _____

6 Convert 1 hour 45 minutes to minutes.

ANSWER _____

APPLY IT Show your work

- 1** A robotics club has 2.75 m of wire. The club uses 85 cm for one robot and 1.2 m for another robot. How many centimeters of wire are left?

WORK SPACE

ANSWER _____

- 2** A bike route has one section that is 2 mi long and another section that is 880 yd long. How many miles long is the whole route?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

An aquarium has 3 L 250 mL of water. A student removes 875 mL, then pours the remaining water equally into 5 containers. How many milliliters of water go into each container?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Convert 4.2 m to cm.	420 cm
2	Convert 7,500 m to km.	7.5 km
3	Convert 3 qt to cups.	12 cups
4	Convert 5 lb 8 oz to oz.	88 oz
5	Convert 2.4 L to mL.	2,400 mL
6	Convert 1 hour 45 minutes to minutes.	105 minutes

PART 2 • APPLY IT

1. **70 cm** Convert 2.75 m to 275 cm and 1.2 m to 120 cm. Then subtract: $275 - 85 - 120 = 70$.
2. **2.5 mi** Convert 2 mi to 3,520 yd, then add 880 yd to get 4,400 yd. Since $1 \text{ mi} = 1,760 \text{ yd}$, $4,400 \text{ yd} = 2.5 \text{ mi}$.

CHALLENGE**475 mL**

Accept equivalent unit forms when the value is correct, such as 7.5 km or 7 1/2 km. For multi-step problems, accept correct work that converts all measurements to one unit before calculating.