LESSON MAKER PRO

Unit Switch Lab

Change larger units into smaller units.

GRADE 4 · 4.MD.A.1

CCSS.Math.Content.4.MD.A.1 "Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit..."

NAME _____ DATE _____

MULTIPLY TO CONVERT

One larger unit is equal to a set number of smaller units. To change from a larger unit to a smaller unit, multiply by the number of smaller units in one larger unit. For example, 1 hour equals 60 minutes.

WORKED EXAMPLE

Express 6 L in mL.

LITERS AND MILLILITERS

L	mL
1	1,000
6	6,000

1. 1 L = 1,000 mL.
2. Multiply 6 by 1,000.
3. 6 × 1,000 = 6,000.

Answer: 6 L = 6,000 mL

PRACTICE 6 problems

1 Express 8 kg in g.

ANSWER _____

2 Express 9 m in cm.

ANSWER _____

3 Express 32 oz in lb.

ANSWER _____

4 Express 4 hr in min.

ANSWER _____

5 Express 5 km in m.

ANSWER _____

6 Complete the conversion table.

FEET AND INCHES

ft	in.
2	
3	

ANSWER _____

APPLY IT Show your work

1 The school garden has a water tank that holds 7 L. How many mL of water can the tank hold?

WORK SPACE

ANSWER _____

2 An esports club holds a game tournament for 5 hr. How many minutes does the tournament last?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A hiking trail is 2 km 350 m long. Express the whole trail length in meters. Explain how you combined the two measurements.

WORK SPACE AND ANSWER

ANSWER KEY

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Express 8 kg in g.	**8,000 g**
2	Express 9 m in cm.	**900 cm**
3	Express 32 oz in lb.	**2 lb**
4	Express 4 hr in min.	**240 min**
5	Express 5 km in m.	**5,000 m**
6	Complete the conversion table.	**2 ft = 24 in.; 3 ft = 36 in.**

PART 2 · APPLY IT

1. **7,000 mL** Since 1 L = 1,000 mL, multiply 7 × 1,000. The tank holds 7,000 mL.
2. **300 min** Since 1 hr = 60 min, multiply 5 × 60. The tournament lasts 300 min.

CHALLENGE

2,350 m. Since 2 km = 2,000 m, add 2,000 m + 350 m = 2,350 m.

Accept answers with or without commas in whole numbers. For the challenge, accept a correct explanation that converts kilometers to meters before adding the remaining meters.