Name_____ Date_____ Period_____

LESSON 3-6 · SESSION 2 · PREREQUISITE PRACTICE A · SKILL 1 OF 2

Multiply by Powers of Ten

Builds on Grade 5 · 5.NBT.A.2

TODAY'S LESSON	You will change 12.75 kg to grams: 12.75 × 1,000.
YOU NEED TO	Multiply by 10, 100 or 1,000, like 3.4 × 100 = 340. **You will use it in Practice Form A, problems 1 and 7.**

STEPS TO FOLLOW

use these same steps on every problem

1 **Count** the zeros in 10, 100 or 1,000.

2 Each digit takes a place worth 10 times as much per step.

3 Fill empty places with **zeros**.

WATCH ME

the steps in action

Find 3.75 × 100.

Step 1 100 has 2 zeros.

Step 2 Move the point 2 places right: 375.

Step 3 No empty places. 3.75 × 100 = 375.

Answer **375**

TRY IT WITH HELP

fill in each step

1. Find 2.5 × 1,000.

Step 1 1,000 has _____ zeros.

Step 2 Move the point _____ places right.

Step 3 Fill with zeros: 2.5 × 1,000 = _____.

2. Find 0.6 × 100.

Step 1 100 has _____ zeros.

Step 2 Move the point _____ places right.

Step 3 Fill with a zero: 0.6 × 100 = _____.

YOUR TURN

use the steps on your own

3. Multiply.

a. 6 × 100 = _____

b. 4.5 × 10 = _____

c. 8 × 1,000 = _____

d. 3.4 × 100 = _____

e. 1.25 × 1,000 = _____

f. 0.08 × 1,000 = _____

Know Metric Unit Facts

Builds on Grade 4 · 4.MD.A.1

TODAY'S LESSON	You will convert measures like 7 km = ___ m with no fact given.
YOU NEED TO	Know facts like 1 km = 1,000 m and 1 m = 100 cm. **You will use it in Practice Form A, problem 1.**

STEPS TO FOLLOW

use these same steps on every problem

1. Name the **two units**.
2. Recall the **fact** that links them, like 1 km = 1,000 m.
3. **Multiply** the count by the fact.

WATCH ME

the steps in action

How many centimeters are in 6 meters?

Step 1 Meters and centimeters.

Step 2 1 m = 100 cm.

Step 3 6 × 100 = 600.

Answer **600 cm**

TRY IT WITH HELP

fill in each step

4. How many grams are in 3 kilograms?

Step 1 Kilograms and _____.

Step 2 1 kg = _____ g.

Step 3 3 × 1,000 = _____ g.

5. How many milliliters are in 2 liters?

Step 1 Liters and _____.

Step 2 1 L = _____ mL.

Step 3 2 × 1,000 = _____ mL.

YOUR TURN

use the steps on your own

6. Convert.

a. 4 km = ___ m **b.** 5 m = ___ cm **c.** 3 cm = ___ mm

d. 2 kg = ___ g **e.** 6 L = ___ mL **f.** 8 m = ___ mm

READY CHECK

a problem like the one in today's lesson

7. How many grams are in 4 kilograms?

A 40 **B** 400 **C** 4,000 **D** 40,000

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____