Name_____ Date_____ Period_____

LESSON 3-7 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Convert Between Systems

Builds on Lesson 3-7 Session 1 · 6.RP.A.3d

TODAY'S LESSON	You will change a 66 lb dog to kilograms before you find the dose.
YOU NEED TO	Convert between systems, like 20 kg ≈ 44 lb. **You will use it in Practice Form A, problems 2 and 6.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Find** the fact, like 1 kg ≈ 2.2 lb.
2. New unit smaller? **Multiply**. New unit larger? Divide.
3. **Write** the answer with the new unit.

WATCH ME

the steps in action

A suitcase is 20 kg. About how many pounds is that?

Step 1 1 kg ≈ 2.2 lb.

Step 2 A pound is smaller, so multiply: 20 × 2.2 = 44.

Step 3 20 kg ≈ 44 lb.

Answer **about 44 lb**

TRY IT WITH HELP

fill in each step

1. About how many kilograms is 22 lb?

Step 1 Fact: 1 kg ≈ _____ lb.

Step 2 A kilogram is larger, so divide: 22 ÷ 2.2 = _____.

Step 3 22 lb ≈ _____ kg.

2. About how many kilometers is 5 miles?

Step 1 Fact: 1 mi ≈ _____ km.

Step 2 A kilometer is smaller, so multiply: 5 × 1.6 = _____.

Step 3 5 mi ≈ _____ km.

YOUR TURN

use the steps on your own

3. Convert. Use 1 kg ≈ 2.2 lb and 1 mi ≈ 1.6 km.

a. 5 kg ≈ ___ lb

b. 30 kg ≈ ___ lb

c. 55 lb ≈ ___ kg

d. 6.6 lb ≈ ___ kg

e. 10 mi ≈ ___ km

f. 48 km ≈ ___ mi

Use a Rate per Unit

Builds on Lesson 3-2 Session 1 · 6.RP.A.2

TODAY'S LESSON	You will find a dose of 4 mg per kg for a dog that weighs 30 kg.
YOU NEED TO	Use a rate per unit, like 5 mg per kg × 12 kg = 60 mg. **You will use it in Practice Form A, problems 1 and 6.**

STEPS TO FOLLOW

use these same steps on every problem

1. Find the **rate**: the amount for 1 unit.
2. Find the **number** of units.
3. **Multiply**: number × rate.

WATCH ME

the steps in action

Plant food uses 3 grams per liter. How much goes in 12 liters?

Step 1 Rate: 3 g per liter.

Step 2 Number of liters: 12.

Step 3 12 × 3 = 36 g.

Answer **36 grams**

TRY IT WITH HELP

fill in each step

4. A dose is 5 mg per kg. How much does a 16 kg dog need?

Step 1 Rate: _____ mg per kg.

Step 2 Number of kg: _____.

Step 3 16 × 5 = _____ mg.

5. Take 2 tablets per day. How many tablets in 14 days?

Step 1 Rate: _____ tablets per day.

Step 2 Number of days: _____.

Step 3 14 × 2 = _____ tablets.

YOUR TURN

use the steps on your own

6. Find each total.

a. 3 cups per batch, 7 batches: _____

b. $4 per pound, 9 pounds: _____

c. 8 g per liter, 2.5 liters: _____

d. 6 mg per kg, 20 kg: _____

READY CHECK

a problem like the one in today's lesson

7. At 5 mg per kg, how much medicine does a 9 kg cat need?

A 14 mg **B** 1.8 mg **C** 4 mg **D** 45 mg

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