Unit 5, Lesson 9

Grams and Kilograms, Liters, and Milliliters

Let's explore measurements in grams, kilograms, liters, and milliliters.

Warm-up

Which Three Go Together: Meter, Meter on the Page

Which 3 go together?

A

2 m

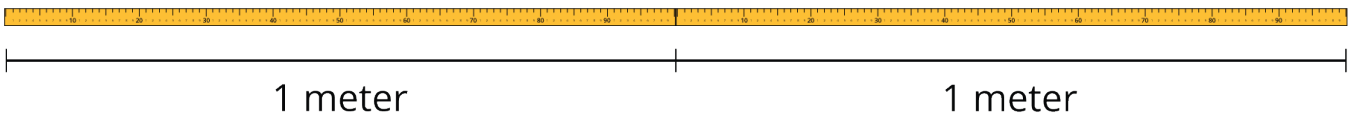
B

2,000 meters

C

200 centimeters

D



Activity 1

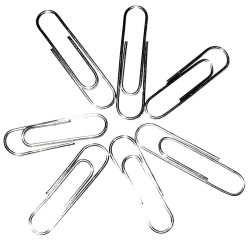
A Whole Lot of Paper Clips

One paper clip weighs 1 gram.



1. How many grams are the paper clips in each image?

a.



b.

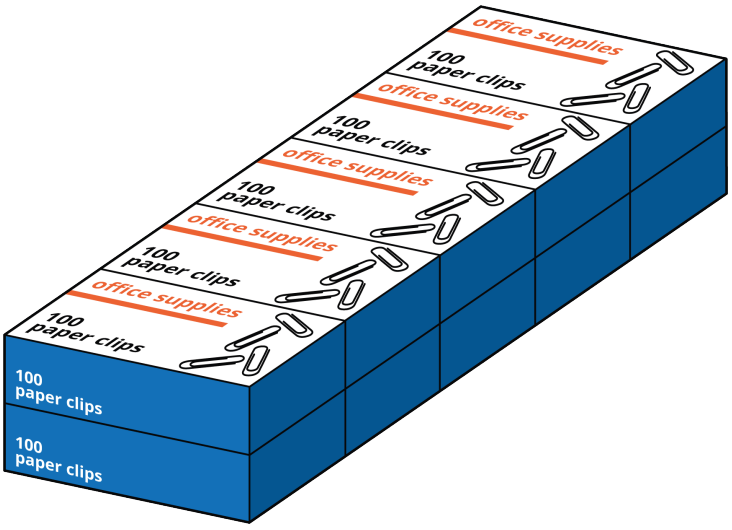


c.



2. The paper clips in this image weigh 1 kilogram.

   What is the relationship between kilograms and grams?



3. Complete the table, with the unknown amounts in grams.

kilograms (kg)	grams (g)
2	
7	
15	
$\frac{1}{2}$	
$9\frac{1}{2}$	

4. Which weighs more?

   a. 8 kilograms or 8 boxes, with 100 paper clips in each box

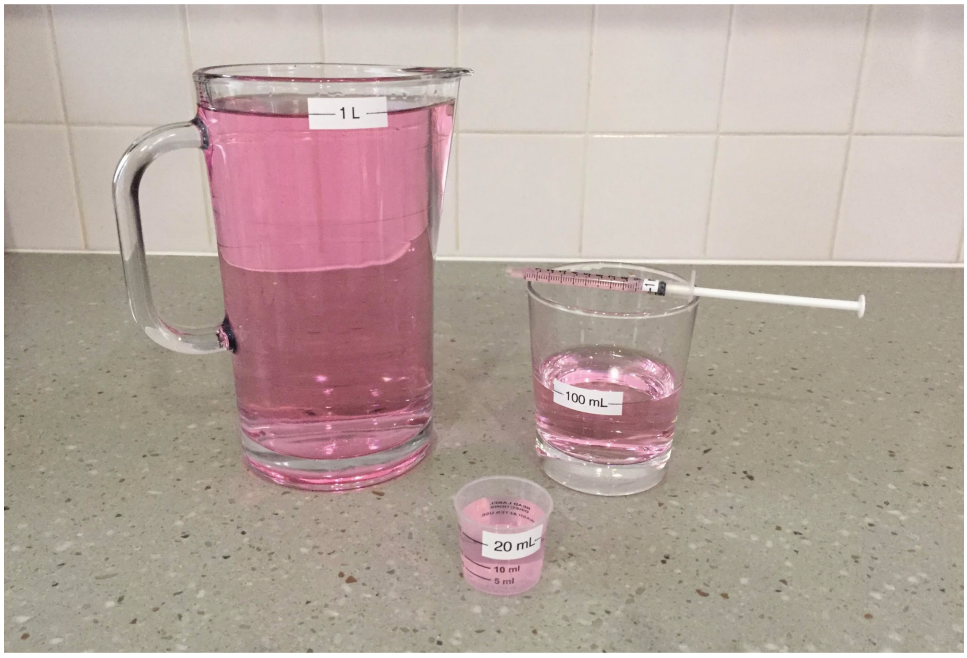
   b. 1,250 paper clips or 1 kilogram

   c. 500 grams or 2 boxes of 250 paper clips each

   d. $\frac{1}{2}$ kilogram or 500 paper clips

Activity 2

Liters and Milliliters



1. a. Estimate: How many times do we fill the 100-milliliter glass to get 1 liter of liquid? (Assume that each time the liquid is filled to the 100-milliliter line.)

   b. Write a sentence to describe the relationship between milliliters and liters.

2. How many times do we need to fill each of these containers to get 1 liter?

   a. A 1-milliliter medicine dropper

   b. A 250-milliliter measuring cup

   c. A 20-milliliter cup

3. Complete the table, with the unknown amounts in liters (L) or milliliters (mL).

liters (L)	milliliters (mL)
1	
4	
7	
16	
	500
	20,000