

## Real-Life Mathematics 2

### Quarter 4

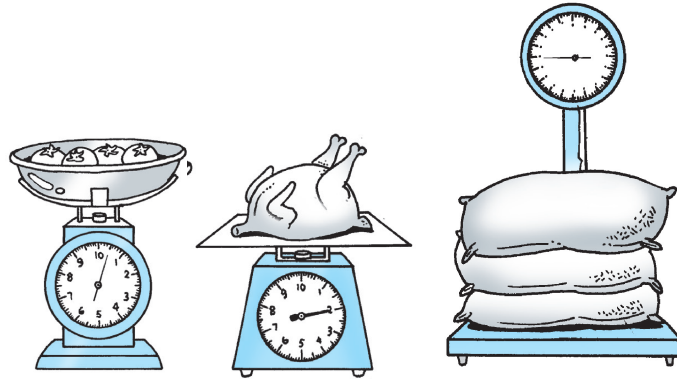
<i>Most Essential Learning Competency (MELC)</i>	<i>Code</i>
measure objects using appropriate measuring tools and unit of length in m or cm	Week 3; uncoded MELC

*Note:* MELC has corresponding lessons in the book and, thus, would be met and developed in the learners. Please refer to C8 L5 (pp. 418–423) and L7 (pp. 430–435).

<i>Most Essential Learning Competency (MELC)</i>	<i>Code</i>
measure objects using appropriate measuring tools and measuring units in g or kg	Week 5; uncoded MELC

## Chapter 9 Mass, Capacity, and Area

### Lesson 1 The Kilogram and the Gram

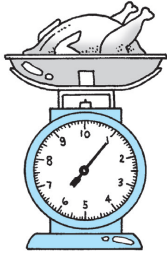


The **weight** of an object tells how heavy it is. It is measured by using a weighing scale. Have you ever been to market with your parents? What kinds of weighing scales do you see in the marketplace and other stores?

#### Let Us Discover

The amount of material in an object is called its **mass**. It is measured in terms of the weight of an object. The **kilogram** is a unit of mass that is used to measure the weight of an object. It can be written in short form as **kg**.

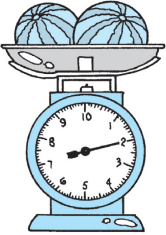
A weighing scale is used to measure the weight of objects. It has a pointer that shows how heavy an object is. Look at the examples below.



The whole chicken weighs 1 kg. It balances the 1 kg weight in the

balance scale.

Each of the watermelons weighs 1 kg.  
The two watermelons weigh 2 kg.



The **gram** is another unit of mass. It is used to measure light materials. It is written in short form as **g**.

Below are examples of objects that can be measured using the unit gram.



Can you name other light objects that can be measured in grams?

Note that a gram is a part of a kilogram. How many grams are there in a kilogram? There are 1000 grams in a kilogram. In symbols, it can be written this way

$$1000 \text{ g} = 1 \text{ kg.}$$

Look at how some common things are bought and measured in grams and kilograms.

Measured in grams	Measured in kilograms
 <p data-bbox="391 600 654 636">pieces of camote</p>	 <p data-bbox="987 600 1252 636">whole watermelon</p>
 <p data-bbox="428 999 621 1035">slice of meat</p>	 <p data-bbox="1057 999 1187 1035">2 big fish</p>
 <p data-bbox="386 1398 660 1434">piece of cabbage</p>	 <p data-bbox="1045 1398 1192 1434">mangoes</p>
 <p data-bbox="472 1797 574 1833">onions</p>	 <p data-bbox="1029 1797 1211 1833">slice of ham</p>

### Let Us Talk About It

- What is mass?
- What are the common units of measure for mass?
- When weighing objects, when do you use kilogram? When do you use gram?
- How many grams are there in a kilogram?

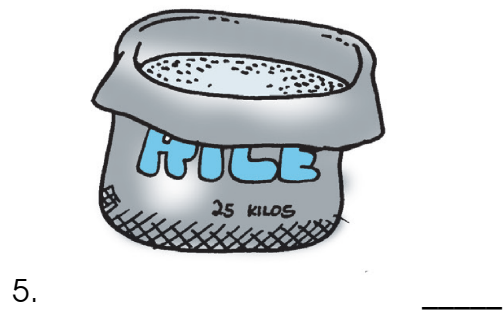
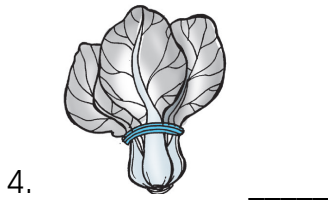
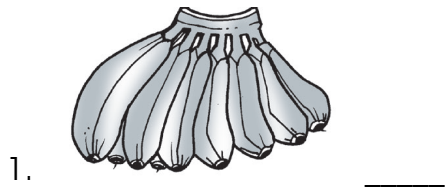
### Let Us Remember

- **Mass** is the amount of material in an object. You measure mass in terms of the weight of an object using a weighing scale.
- The common units of measure for mass are the **kilogram (kg)** and the **gram (g)**.
- The kilogram is used for weighing heavy objects. The gram is used for light objects.
- There are 1000 grams in 1 kilogram.

### Let Us Practice

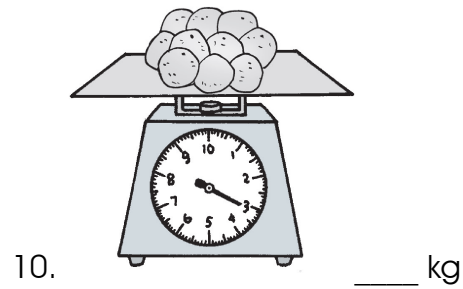
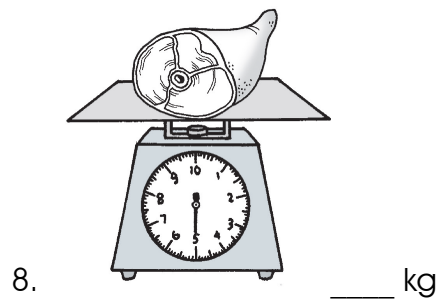
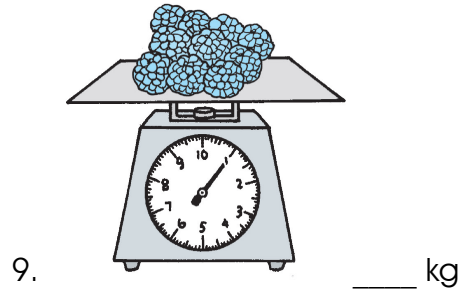
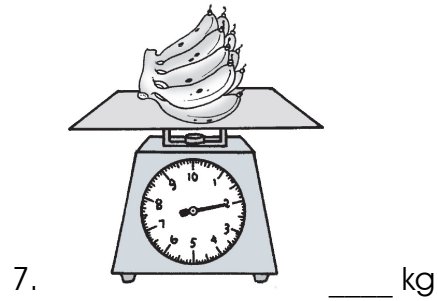
#### Get Ready

Tell the appropriate unit of mass for measuring the weight of each object. Write **kg** or **g** on the line.



**Work Together**

Write the weight in kilograms.



Circle the letter of the more reasonable mass for each object.

- |                             |          |           |
|-----------------------------|----------|-----------|
| 11. a table lamp            | a. 2 g   | b. 2 kg   |
| 12. a rocking chair         | a. 19 g  | b. 12 kg  |
| 13. a picture frame         | a. 120 g | b. 150 kg |
| 14. a basket full of fruits | a. 4 g   | b. 4 kg   |
| 15. a ripe mango            | a. 35 g  | b. 35 kg  |

**Work Alone**

Find each of the following objects at home. Use a weighing scale to measure the weight of each object in grams.

16. four eggs \_\_\_\_\_ g

17. two tomatoes \_\_\_\_\_ g

18. a pack of chips \_\_\_\_\_ g

19. a pair of rubber shoes \_\_\_\_\_ g

20. a wall clock \_\_\_\_\_ g

Look for each object at home. Use a weighing scale to measure the weight of each object in kilograms.

21. a large bag of rice \_\_\_\_\_ kg

22. a bundle of eggplants \_\_\_\_\_ kg

23. a big bottle of alcohol \_\_\_\_\_ kg

24. a puppy \_\_\_\_\_ kg

25. a hardbound book \_\_\_\_\_ kg

**Let Us Answer**

Read and solve each problem. Write the complete answer on the line.

1. Nena needs 3 kg of chicken for the adobo she will cook. She also wants to buy 2 kg of beef for the beefsteak. How many kilograms of meat does Nena need in all?

\_\_\_\_\_

2. Lita weighs 40 kg. Her sister is 15 kg heavier. What is her sister's weight?

\_\_\_\_\_



3. Mary bought 300 g of grapes and 275 g of oranges. What was the total mass of the fruits she bought?

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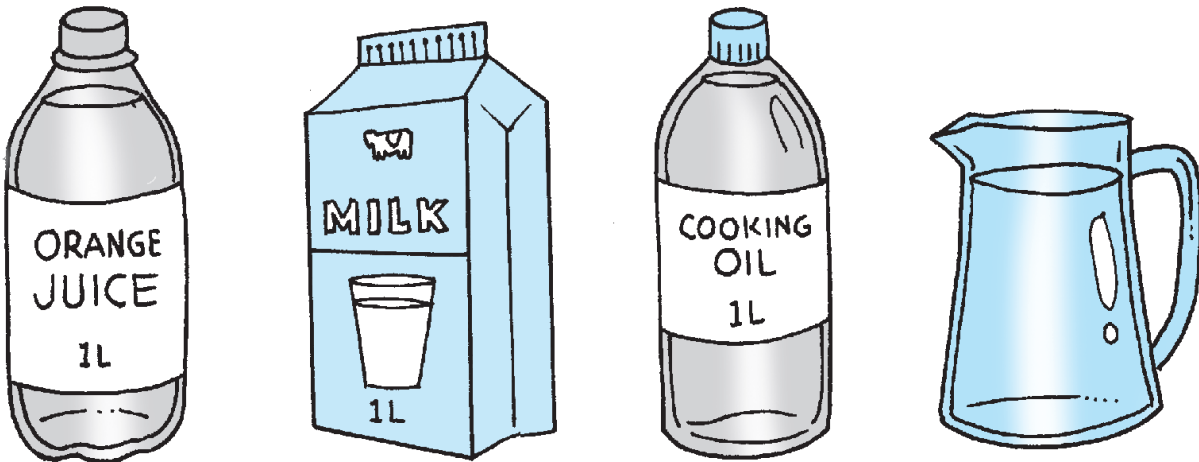
4. Mr. Austria bought 500 g of apples for his children. The next day, he used 250 g of the apples to make apple shake. How many grams of apples did he have left?

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Most Essential Learning Competency (MELC)	Code
measure objects using appropriate measuring tools in mL or L	Week 6; M2ME-IVf-33

## Chapter 9 Mass, Capacity, and Area

### Lesson 5 The Liter and the Milliliter



Look at the containers. Where do you usually see them? The containers have different shapes. But each of them holds the same amount of liquid.

The bottle holds a liter of juice while the carton contains a liter of milk. What do the other containers hold? Can you name other objects that hold a liter of liquids?

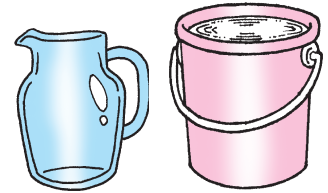
#### Let Us Discover

You have already learned about some of the standard units of measure. These include centimeter and meter for length and gram and kilogram for mass. These units of measure are accepted and used by people in many places.

The **liter** is another standard unit of measure. It can be written in short form as **L**. Liter is used to measure capacity.

**Capacity** is the amount of liquid or material that a container can hold. Different containers have different capacities. Some can hold more or less than the others.

The pitcher has a capacity of 1 L. The pail, on the other hand, can hold 2 L of water.



The **milliliter** is a measure of capacity smaller than the liter. It is written in short form as **mL**. What is the capacity of a milliliter?

Get a dropper. A dropper usually has 20 drops of water or about 1 mL. Note that there are 1000 mL in 1 L.



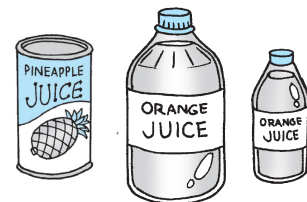
Look at other examples of objects that hold different kinds of liquid.

The containers of milk do not have the same capacity. A carton of milk usually holds 1 L of milk. The bottle and the glass can hold milk in milliliters.



Containers of milk

Fruit juices are sold in different sizes of containers. The containers have the capacity to hold the drinks in liters or milliliters.



Containers of fruit juice

Vinegar, soy sauce, cooking oil, various kinds of sauce, liquid cleansers, even bottled water are also sold in different sizes of containers. Can you tell the ones you can buy in liters and milliliters?

**Let Us Talk About It**

- What is capacity?
- What is the standard unit of measure for capacity?
- Which container hold more liquid, the one with greater capacity or less capacity?


**Let Us Remember**

- **Capacity** is the amount of liquid materials a container can hold.
- The standard units of measure for capacity is the **liter** (L) and the **milliliter** (mL).  
There are 1000 mL in 1 L.
- The bigger the container, the greater is its capacity. The smaller the container, the lesser is its capacity.

**Let Us Practice**


**Get Ready**

Compare each pair of objects below with the can that contains 1 L pineapple juice. Write **more** or **less** below each object. The first one has been done for you.




1.

more      less



**This can contains 1 L of Pineapple juice.**

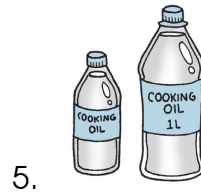


2.

\_\_\_\_\_



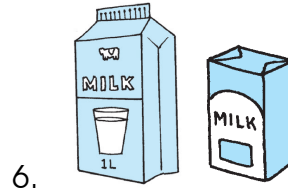
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

### Work Together

Ask your parents to help you list things at home that are measured in milliliters and liters. Write them down on each line below.

7. liter

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. milliliter

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Work Alone**

Complete each sentence. Write **mL** or **L** in  the box.

9. A large can of kerosene holds 4 .
10. A washing machine uses about 50 of water.
11. A glass holds about 150 of milk.
12. A ball point pen holds about 2 of ink.
13. A plant needs about 17 of liquid fertilizer.
14. A basin holds about 5 of water.
15. The aquarium holds about 20 of water.

**Let Us Answer**

Read and solve each problem. Write the complete answer on the line.

1. Pepito drinks one glass of milk each day. The glass holds 100 mL. How many milliliters of milk does he drink in 4 days?

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2. Mother mixed 500 mL each of orange juice and mango juice to make a fruit punch. How many milliliters of fruit punch did she make?

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