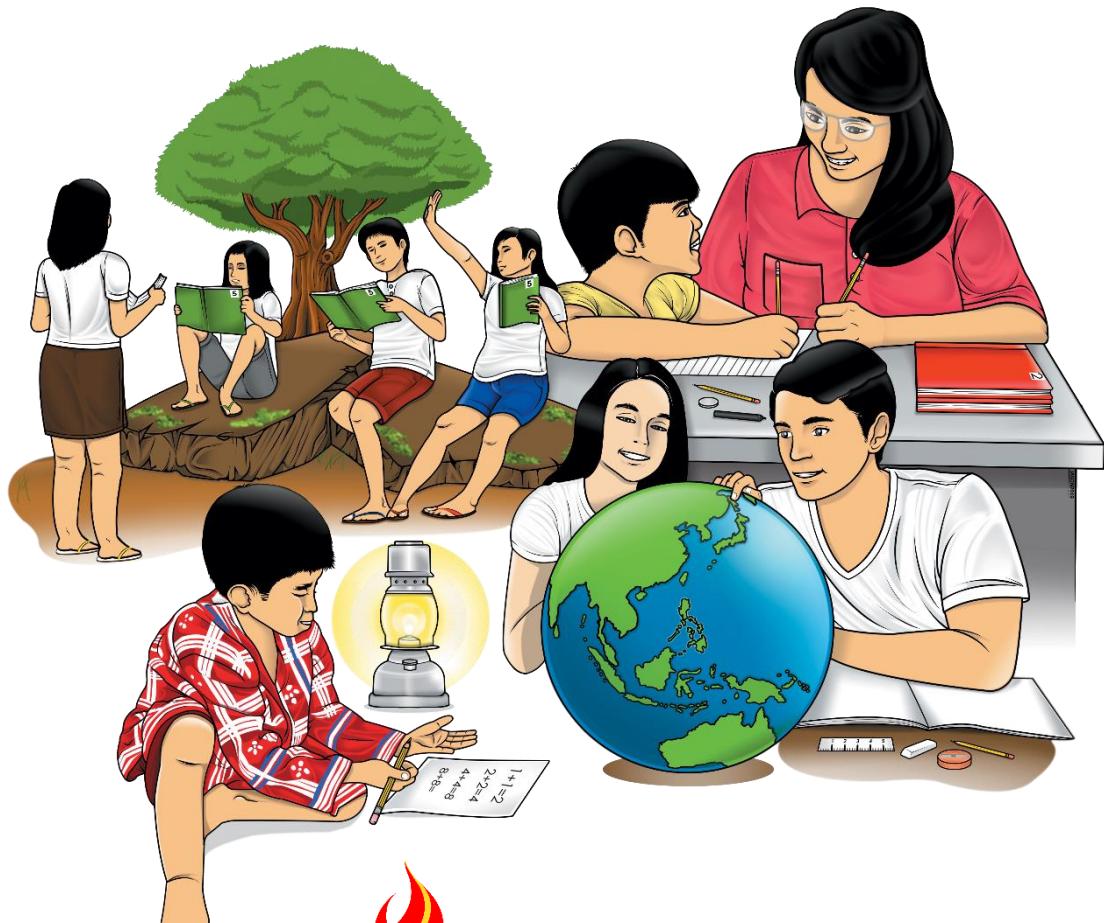


# Mathematics

## Quarter 4 – Module 66 (B): Visualizing, Representing, and Converting Common Units of Measure



**Mathematics– Grade 3**  
**Alternative Delivery Mode**  
**Quarter 1 – Module 1: Visualizing Whole Number**  
**First Edition, 2019**

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# Mathematics

## Quarter 4 – Module 66 (B): Visualizing, Representing and Converting Common Units of Measure

This instructional material was collaboratively developed and reviewed by educators from public and private schools, colleges, and or/universities. We encourage teachers and other education stakeholders to email their feedback, comments, and recommendations to the Department of Education at [action@deped.gov.ph](mailto:action@deped.gov.ph).

**We value your feedback and recommendations.**

## Introductory Message

For the facilitator:

*(This gives an instruction to the facilitator to orient the learners and support the parents, elder sibling etc. of the learners on how to use the module. Furthermore, this also instructs the facilitator to remind the learners to use separate sheets in answering the pre-test, self-check exercises, and post-test.)*

For the learner:

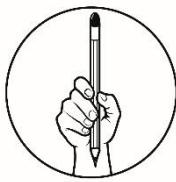
*(This communicates directly to the learners and hence, must be interactive. This contains instructions on how to use the module. The structure and the procedure of working through the module are explained here. This also gives an overview of the content of the module. If standard symbols are used to represent some parts of the module such as the objectives, input, practice task and the like they are defined and explained in this portion.)*



## *What I Need to Know*

We encounter Mathematics in our daily living. Mathematical skills play a very important role in everyone's lives. This module helps you to learn the basic skills of multiplying, adding, and subtracting, dividing and converting numbers.

1. This where you will learn how to convert common units of measure from larger to smaller unit and vice versa (kilogram and gram).
2. You are expected to learn to multiply and divide by 1000.
3. Be able to weigh an object accurately.



## What I Know(*pre-test*)

Answer the following.

1.  $1000 \times 9$  a. 91 000 b. 90 000 c. 9 000 d. 900

2.  $1000 / 20 000$  a. 30 b. 10 c. 20 d. 32

3. 5000 grams = \_\_\_\_\_ kg .

a. 50 b. 5 c. 10 d. 20

4. 11 kilograms= \_\_\_\_\_ g.

a. 11 000 b. 10 000 c. 1000 d. 100

5. 1000 grams = \_\_\_\_\_ kg.

a. 20 b. 15 c. 7 d. 5

# Lesson

Visualizes, and represents, and converts common units of measure from larger to smaller unit and vice versa; kilogram to gram

*(Introduction to the lesson)*

Lesson Proper/ Setting Up the Phase

## Top Loading Scale



- A kilo of tomatoes and kilo of camote
- Which is heavier a kilo of tomatoes or 1000 grams of camote? How do you know?
- What instrument will you use to determine the mass of an object?



## *What's In*

*(Review)*

1. 5 meter= \_\_\_\_\_ centimeter
2. 300 centimeters= \_\_\_\_\_ meter
3.  $\frac{1}{2}$  meter \_\_\_\_\_ centimeter
4.  $\frac{1}{4}$  meter= \_\_\_\_\_ centimeter
5. 600 centimeter= \_\_\_\_\_ meter



*Notes to the Teacher*  
*(Instruction to the teacher/facilitator)*



## What's New

*(Solving the Problem)*

### Activity 1

**Solution 1:** Pay attention to the lines shown in the weighing scale.

The smaller lines represent grams (it can be 10g, 100g) depending upon the weighing scale used.

Skip count the smaller lines that represent the gram until you reach, kilogram

How many grams are there in one kilogram?

1000 grams is equal to 1 kilogram

What did you observe?

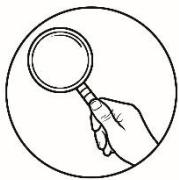
Kilogram\_\_\_\_\_gram

$1 \text{ by} = 1 \times 1000 = 1000 \text{ g.}$

**Solution 2:** What operation will you use to change gram to kilogram?

Gram\_\_\_\_\_kilogram

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

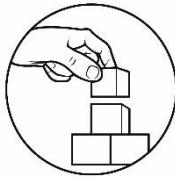


## *What is It*

*(Discussion of the Lesson)*

**In solution 1**, converting kilogram to gram, multiply the number of kilogram by 1000.

**In solution 2**, 20 convert gram to kilogram divide the number of gram by 1000.



## What's More *(Drill, Practice Test)*

### Activity 2

Try to answer the following problems.

1. A pupil weighs 40 kilograms. How much is it in grams?
2. Teresa bought 5 dozen sachets of 50 grams of powder juice. What is the total weight in grams? In kilograms?
3. You can 1000 of fishes. How many kilograms of fishes do you have?

### Activity 3

Answer the following to complete 1 kilogram or 1000 grams.

1.  $125\text{g} + 250\text{ g} + 250\text{g} + \underline{\hspace{2cm}}\text{g} = 1000\text{ g (1kg)}$
2.  $50\text{ g} + 30\text{ g} + 240\text{ g} + 70\text{g} + 150\text{g} + \underline{\hspace{2cm}}\text{g} = 1000\text{g (1kg)}$
3.  $68\text{ g} + 240\text{g} + 232\text{g} + 134\text{ g} + \underline{\hspace{2cm}}\text{g} = 1000\text{g (1kg)}$
4.  $60\text{g} + 80\text{g} + 360\text{g} + \underline{\hspace{2cm}}\text{g} = 1000\text{g(1kg)}$
5.  $220\text{g} + 160\text{g} + 95\text{g} + 180\text{g} + \underline{\hspace{2cm}}\text{g} = 1000\text{g (1kg)}$



## What I Have Learned

How do you convert kilogram to gram? Gram to kilogram?

- To convert kilogram to gram, multiply the number of kilogram by 1000.
- To convert gram to kilogram, divide the number of gram by 1000.

## What I Can Do

### Activity 4

Answer the following.

1. 3000 grams = \_\_\_\_\_ kg

2. 11 kilograms = \_\_\_\_\_ grams

3. My weight is 33 kilograms, how many grams I need to make it 35 kilograms?

4. There are 500 grams of chicken, 1250 grams of beef, and 750 grams of fish inside the refrigerator. How many kilograms of chicken and beef? The fish?

5.) How many grams are there in 100 kg?





## ***Test Yourself***(assessment)

Answer the following.

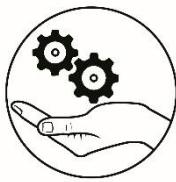
1. 3000 grams = \_\_\_\_\_ kilograms

2. 11 kilograms = \_\_\_\_\_ grams

3. 24 000 grams = \_\_\_\_\_ kilograms

4. 85 kilogram = \_\_\_\_\_ grams

5. 214 kilograms = \_\_\_\_\_ grams

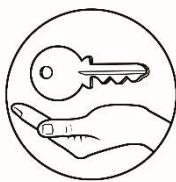


## *Additional Activities*

### *(Activity 5)*

Answer the following. Write your solution in a separate sheet of paper.

1. Mother bought  $\frac{3}{4}$  kilogram of onions. How many grams of onions does Mother bought?
2. Nora needs 2 kilograms of rice to cook rice cake. Each pack contains 250 grams of rice in the store. How many packs of rice will she buy? If each pack costs PHP 22, how much will she pay for 2 kilogram?
3. The allowed baggage that can be carried by Elsa in an airplane is only 10 kilograms. Her baggage is 11 500 grams. She has an excess baggage of \_\_\_\_\_?



## Answer Key

### Pre test

1. c
2. c
3. b
4. a
5. c

### Test Yourself

1. 3 kilograms
2. 11 000 grams
3. 24 kilograms
4. 85 000 grams
5. 44 000 grams

### Review

1. 500 cm
2. 3 m
3. 50 cm
4. 25cm
5. 6m

### Activity 2

1. 40 000 grams
2.  $5 \times 12 = 60$   $60 \times 50\text{g} = 3000$
3. 1 kg

### Activity 3

1. 375 g
2. 460 g
3. 326 g
4. 500 g
5. 345 g

### Activity 4

1. 3 kilogram
2. 11 000 grams
3. 24 kilogram
4. 85 000 grams
5. 44 000 grams



## ***References***

***Mathematics Teacher's Guide Grade 3 pages 291-294.***

***Mathematics Kagamitan ng Mag-aaral (Sinugbuang Binisaya) pages 275-278.***

