

4



# Science 4

## Microlearning Module

QUARTER 3 – Module 2

*Measuring Distance and Time*



REGION XII - DIVISION OF SULTAN KUDARAT

GOVERNMENT PROPERTY  
NOT FOR SALE

**Science 4**  
**Microlearning Module (MLM)**  
**Quarter 3 – Module 2: Measuring Distance and Time**  
**First Edition, 2024**

Republic Act 8293, Section 176 states that “No copyright shall subsist in any work of the Government of the Philippines.” However, obtaining prior approval from the government agency or office where the work originated is required for the commercial use of such work. This agency or office may, among other things, impose as a condition the payment of royalties.

Materials borrowed for this module (e.g., songs, stories, poems, images, brand names, trademarks, etc.) are the property of their respective copyright owners. The publisher and authors do not assert ownership or representation over them.

**Published by the Department of Education- RO XII, Division of Sultan Kudarat**

**Development Team**

Writer : Marivic M. Celis  
Editors : Cherry B. Escoto  
          Agnes S. Morante  
          Mary Gayle L. España  
          Dominador B. Rebugio, Jr.  
Evaluator : Ma. Joyce E. Vagilidad  
Illustrator : Orlie L. Antenorio  
Cover Art Designer: Jann Mark P. Oriel  
Management Team: Crispin A. Soliven Jr., CESE – Schools Division Superintendent  
                          Meilrose B. Peralta, EdD – Asst. Schools Division Superintendent  
                          Ismael M. Ambalgan – Chief, CID  
                          Sheryl L. Osano – EPS, LRMS  
                          Eric R. Balancio– EPS, Science  
                          Cherry B. Escoto – Principal-III

**Printed in the Philippines by**

**Department of Education – Region XII, Division of Sultan Kudarat**

Office Address: Kenram, Isulan, Sultan Kudarat  
Telefax: 064-471-1007  
E-mail Address: depedsk.r12@deped.gov.ph

## MICROLEARNING MODULE

Name: \_\_\_\_\_ Grade & Sec: \_\_\_\_\_ Score: \_\_\_\_\_  
Subject: Science 4 Quarter: 3 MLM No. 2  
Teacher: \_\_\_\_\_

Learning Competency: **The learners measure accurately the distance and time when things move using simple equipment.**

---

### Measuring Distance and Time

#### A. Look Back!

**Directions:** Put a heart shape (♥) before the number if the condition can move/change the shape of an object. Write your answer on a separate sheet of paper.

- \_\_\_\_ 1. twisting
- \_\_\_\_ 2. pushing
- \_\_\_\_ 3. pounding
- \_\_\_\_ 4. observing
- \_\_\_\_ 5. stretching

#### B. What's New?

Children love to play. Name some traditional Filipino games that you want to play with. Do you move from one place to another when you play, run, jump, walk, or roll?

##### Activity 1: Arrange Me!

**Directions:** Arrange the jumbled letters to reveal the words related to motion and distance. Write your answer on a separate sheet of paper.

1. TNOMIO – it is defined as change of an object's position with respect to a reference point
2. SADNCEIT – it is the measure of how far or near two points are from one another
3. EMIT – it is the amount it takes an object to travel to a certain distance.
4. RETME – it is the standard unit for distance

#### C. What Is It?

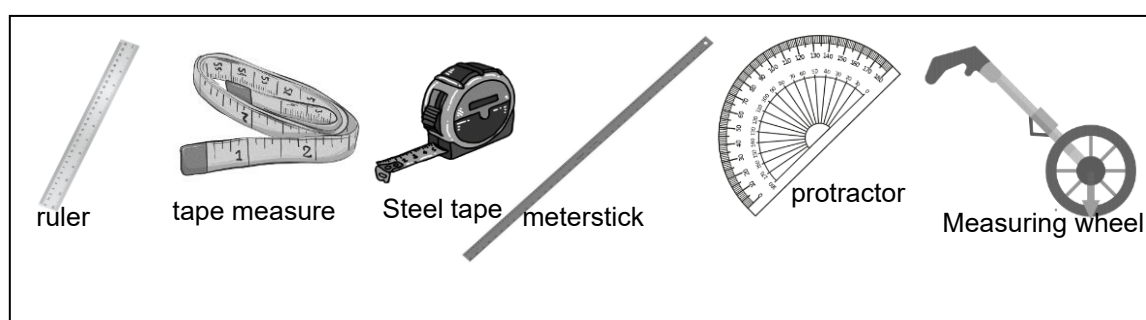
When we play, run, hop, jog and climb, there is motion. **Motion** is defined as change of an object's position with respect to a reference point. A **reference point** is a fixed place or an object used to determine the

position of an object. When there is movement, there is motion. There can be no motion without a force.

**Distance** is the measure of how far or near two points are from one another. It can be measured in various ways such as time, landmarks, or body parts. But there are appropriate tools or equipment to measure distance so that you can accurately tell whether an object is far or near.

Distance should always be exact, measured accurately, and based on a standard unit of measurement. Scientifically, distance should be measured by using measuring tools such as ruler, meterstick, tape measure, measuring wheel, and ultrasonic distance measurer.

### Tools Used in Measuring Distance



The metric system is the world standard for measurement. It is used by scientist throughout the world. **Meter** is the standard unit for distance. Some units of measurement used in distance are centimeters(cm), kilometers(km), feet(ft), and so on

#### Metric System Conversion:

1 kilometer (km) = 1000 meters(m)

1 meter(m) = 100 centimeters (cm)

1 meter(m) = 1000 millimeters(mm)

Example: A bus travels from terminal A to terminal B with a distance of 20 kilometers. How many meters does the bus travel?

1 kilometer = 1000 meters

20 kilometers = 20,000 meters

**Time** is the amount it takes an object to travel to a certain distance. Second (s) is the basic unit of time. Minutes (min) or hour (h) may be used for longer distances.

**Time Conversion:**

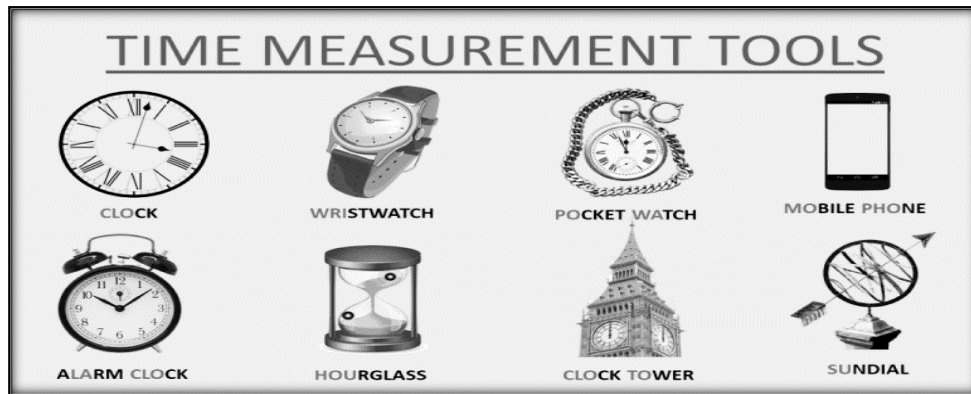
1 minute (min) = 60 seconds (s)

1 hour (h) = 60 minutes (min)

Example: The carabao travels from point A to point B in 2 hours. How many minutes does the carabao travel?

1 hour = 60 minutes

2 hours = 120 minutes



**D. Let's try!**

**Activity 1: List Me!**

**Directions:** List down 5 tools used in measuring distance and 5 tools in measuring time. Write your answer on a separate sheet of paper.

<b>Tools in Measuring Distance</b>	<b>Tools in Measuring Time</b>
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

**Activity 2: Push Me Gently!**

**Materials:** toy car, ball, marble, (or any available round objects)  
stopwatch, meter stick or ruler

**Procedure:**

1. Find a flat surface on the floor.
2. Mark a starting point on the floor.
3. Put the toy car on the starting line.
4. Gently push the toy car with your hand.
5. Record the time it travels using your stopwatch and the distance using the meterstick or ruler.
6. Repeat steps 1-3 using the same force.
7. Record your observation in the table.

Objects	Distance (cm)	Time (s)
1.		
2.		
3.		

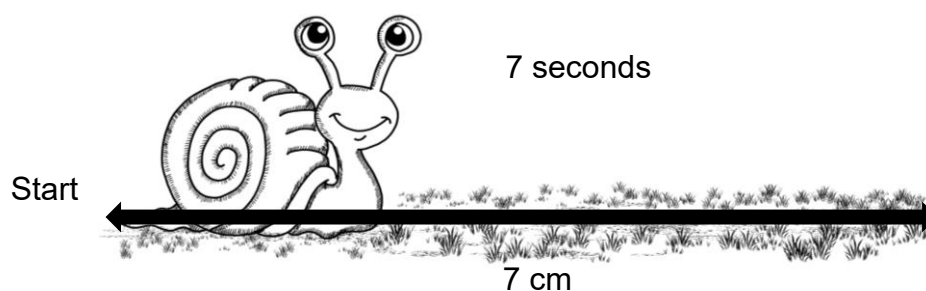
**Guide questions:**

1. What makes the objects move?
2. Which object travels the shortest distance?
3. Which object travels the longest distance?

**E. Let's Evaluate!**

**Directions:** Read the questions carefully and choose the letter of the correct answers. Write your answers on a separate sheet of paper.

1. Which of the following is a change in an object's position with respect to a reference point?
  - A. distance
  - B. motion
  - C. reference point
  - D. time
2. It is the measure of how far or near two points are from one another.
  - A. distance
  - B. motion
  - C. reference point
  - D. time
3. The following are the tools used in measuring distance **EXCEPT**.
  - A. meterstick
  - B. ruler
  - C. tape measure
  - D. stopwatch
4. Which of the following demonstrates motion?
  - A. an athlete running
  - B. a dog sleeping on a mat
  - C. a child lying on the floor
  - D. a learner sitting in front of the television
5. What is the distance travelled by a snail?



- A. 3 cm
  - B. 5 cm
  - C. 7 cm
  - D. 9 cm
6. Using the same illustration, how long does it take the snail to arrive at 7-cm distance?
    - A. 5 seconds
    - B. 6 seconds
    - C. 7 seconds
    - D. 8 seconds

7. Which of the following demonstrates motion, with the other object as the point of reference?
- A. a boy jogging in place
  - B. a dog barking at the garage
  - C. a boy running on a treadmill device
  - D. a girl running from the gate towards his father
8. Some of the devices used in measuring distance and time are ruler, meterstick, tape measure, clock and wristwatch. Why do we need measuring devices to measure length, distance, and time?
- A. to have an accurate data
  - B. to be familiar with the use of each tools
  - C. to acquire more tools and devices at home
  - D. to have experience using tools like ruler, meter stick, tape measure
9. How can a biker travel a great distance in a specified time?
- A. Pedal faster to increase the speed of the bike.
  - B. Pedal slowly to decrease the speed of the bike.
  - C. Decrease the distance it will cover in the same time allotment.
  - D. Pedal faster to increase the time it will take in a specified time.
10. Why do we need to use the metric system of measurement?
- A. because it is important to describe motion
  - B. because it is necessary to describe movement
  - C. because it is easier to understand each other's data
  - D. because it is used by scientists throughout the world

## E. References

Sarte, Evelyn T., Ednaliza R. Garcia, Eliza A. Lopez, Mary Jean G. dela Cruz, Harold A. Arradaza, *Science Beyond Borders 5* Davao City, Vibal Group, Inc., 2016

Gabitanan, Margarita R. *Alternative Delivery Mode*, Department of Education, 2020

(No date) Google image result for [https://i0.wp.com/learnenglishwithafrica.com/wp-content/uploads/2021/07/Time-Measurement-Tools\\_Learn-English-With-Africa-1024x576.png?resize=768%2C432&ssl=1](https://i0.wp.com/learnenglishwithafrica.com/wp-content/uploads/2021/07/Time-Measurement-Tools_Learn-English-With-Africa-1024x576.png?resize=768%2C432&ssl=1). Available at: <https://images.app.goo.gl/c1NKksmasYqM9hjA9> (Accessed: 26 April 2024).

( No date) Units of time conversion formulas/list of units of time conversion formulas you should know-BYJUS. Available at: <https://byjus.com/us/math/units-of-time-conversion-formulas/> (Accessed: 28 April 2024)

**ANSWER KEY**



Grade 4 Science  
Quarter 3 Module 2

**A. Look Back!**

1. ♡
2. ♡
3. ♡
- 4.
5. ♡

**B. What's New?**

- Answers may vary (ex. patintero, luksong-tinik, etc)
- Yes

Activity 1: Arrange Me

1. motion
2. distance
3. time
4. meter

**D. Let's Try**

Activity 1. List Me! Answer may vary

Tools in measuring distance	Tools in measuring time
ruler	clock
meterstick	cellphone
Tape measure	wristwatch
Protractor	hourglass

Activity 2. Push Me Gently

Answers in the objects used, distance and time may vary

- Guide Questions:
1. Force
  2. Answer may vary
  3. Answer may vary

**E. Let's Evaluate**

1. B
2. A
3. D
4. A
5. C
6. C
7. D
8. A
9. A
10. D

### **DISCLAIMER**

This Microlearning Module has been developed by DepEd - Division of Sultan Kudarat for educational purposes only. It is designed to supplement classroom instruction and should not be used as the sole source of information. Teachers are encouraged to exercise their professional discretion and tailor the content to suit their students' individual needs.

This resource is the exclusive property of DepEd-Division of Sultan Kudarat and is accessible to enrolled learners solely for academic purposes, at no cost. Any reproduction or conversion of this material in any form is strictly prohibited.

**REGION XII - DIVISION OF SULTAN KUDARAT**