

7

# Science Activity Sheet

## Quarter 4 - MELC 1

### Week 1

#### Locating Places on Earth



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**Science 7**  
**Activity Sheet No. 1: Locating Places on Earth**  
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**Development Team of Science 7 Activity Sheet**

<b>Writer:</b>	Celia P. Ledesma
<b>Illustrator:</b>	Anthony M. Cordilla
<b>Editor:</b>	Belen A. Cañete
<b>Lay-Out Artist:</b>	Annamor M. Eleccion, Llaine Grace B. Coronel
<b>Schools Division Quality Assurance Team:</b>	Kent Charles G. Arnibal Juvy E. Lemos Anile T. Ciriaco Anilee P. Jamandre Mary Sonia M. Pangantihon Kristian Jay L. Nanta Belen A. Cañete
<b>Schools Division of Sipalay City Division Team:</b>	Renato T. Ballesteros Ma. Teresa P. Geroso Regie B. Sama Ronie T. Tababa Annamor M. Eleccion Belen A. Cañete
<b>Regional Management Team:</b>	Ramir B. Uytico Pedro T. Escobarte Jr. Elena P. Gonzaga Donald T. Genine Rovel R. Salcedo Moonyeen C. Rivera Anita S. Gubalane Minda L. Lopez Daisy L. Lopez Joseph M. Pagalaran

# Introductory Message

Welcome to **Science Grade 7!**

The **Learning Activity Sheet** is a product of the collaborative efforts of the Schools Division of Sipalay City and DepEd Regional Office VI - Western Visayas through the Curriculum and Learning Management Division (CLMD). This is developed to guide the learning facilitators (teachers, parents and responsible adults) in helping the learners meet the standards set by the K to 12 Basic Education Curriculum.

The **Learning Activity Sheet** is self-directed instructional materials aimed to guide the learners in accomplishing activities at their own pace and time using the contextualized resources in the community. This will also assist the learners in acquiring lifelong learning skills, knowledge and attitudes for productivity and employment.

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## For learning facilitator:

The **Science Activity Sheet** will help you facilitate the teaching-learning activities specified in each Most Essential Learning Competency (MELC) with minimal or no face-to-face encounter between you and the learner. This will be made available to the learners with references/links to ease the independent learning.

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## For the learner:

The **Science Activity Sheet** is developed to help you continue learning even if you are not in school. This learning material provides you with meaningful and engaging activities for independent learning. Being an active learner, carefully read and understand the instructions then perform the activities and answer the assessments. This will be returned to your facilitator on the agreed schedule.

Name of Learner: \_\_\_\_\_  
Grade and Section: \_\_\_\_\_ Date: \_\_\_\_\_

## SCIENCE 7 ACTIVITY SHEET No. 1

### Locating Places on Earth

#### I. Learning Competency with Code

Demonstrate how places on Earth may be located using a coordinate system.  
(S7ES-IVa-1)

#### II. Background Information for Learners

Imagine that you are a traveler during ancient times. How can you find places located far away from your country? Places that travelers discovered and visited in ancient times were marked according to their positions in relation to the stars and the sun and the length of time it took to reach the destination. Overtime, maps were drawn accurately as more places were visited. A map is the representation of the earth's surface. To locate a certain place, you can use the coordinate system of latitude and longitude expressed in degrees.

The **equator** is an imaginary line drawn horizontally from east to west or vice versa that divides the globe into northern and southern hemisphere at  $0^\circ$  latitude. On the other hand, **prime meridian** is the line drawn north to south at  $0^\circ$  longitude. Longitude is a geographic coordinate that measures distance east and west of the prime meridian. Latitude is a geographic coordinate that measures distance north and south of the equator. (Refer to Figure 1 below)

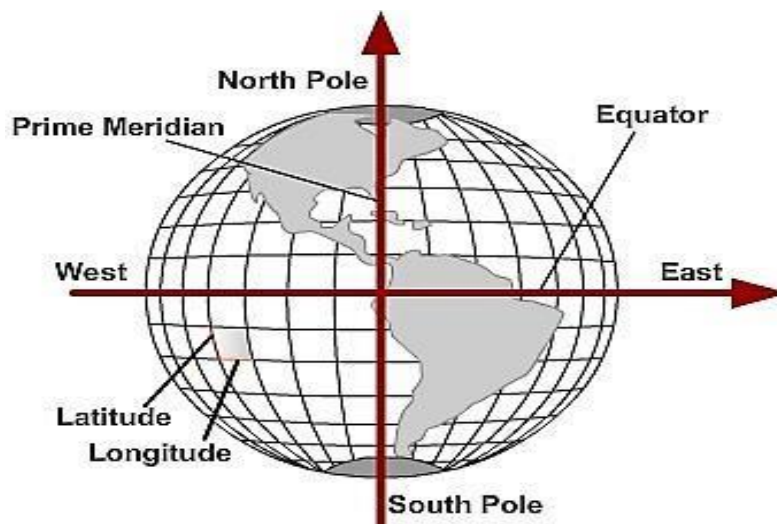


Figure 1. Globe

[https://images.research.net/figure/Latitude-and-Longitude-representation\\_fig5\\_288530122/amp](https://images.research.net/figure/Latitude-and-Longitude-representation_fig5_288530122/amp)

Here are some things to remember in this learning activity.

1. Latitude is written first and must always include N (north) or S (south) of the equator.
2. Longitude is written next and must always include E (east) or W (west) of the prime meridian.
3. Each degree of latitude or longitude can be divided into 60 minutes.
4. A minute, as used here, is a unit of distance on the earth's surface. It is not a unit of time.

In the succeeding activities, you will locate places on earth using the coordinate system.

### III. Accompanying DepEd Textbook and Educational Sites /Links / References

Department of Education. *Science 7 Learner's Material* First Edition. (p280-282), Pasig City, Philippines. 2017

### IV. Activity Proper

The horizontal lines on the map and circle on the globe parallel to the equator are called latitude. They are used to determine the latitude of places and the distances are measured in degrees. The equator is the reference line, and it is marked in 0°

The vertical lines on the map and half circle in the globe are used to describe the longitude of places. The distances are determined from angle (in degrees). The prime meridian is the reference line, and it is marked in 0°

#### Activity 1. Latitude and longitude

**Directions:** Using the illustration in Figure 2 below, fill in the Table with the correct latitude and longitude of the given points capital A-E. Answer the given questions provided below. Write the answer in your answer sheet.

**Table1. Latitude and Longitude**

POINTS	LATITUDE	LONGITUDE
A		
B		
C		
D		
E		

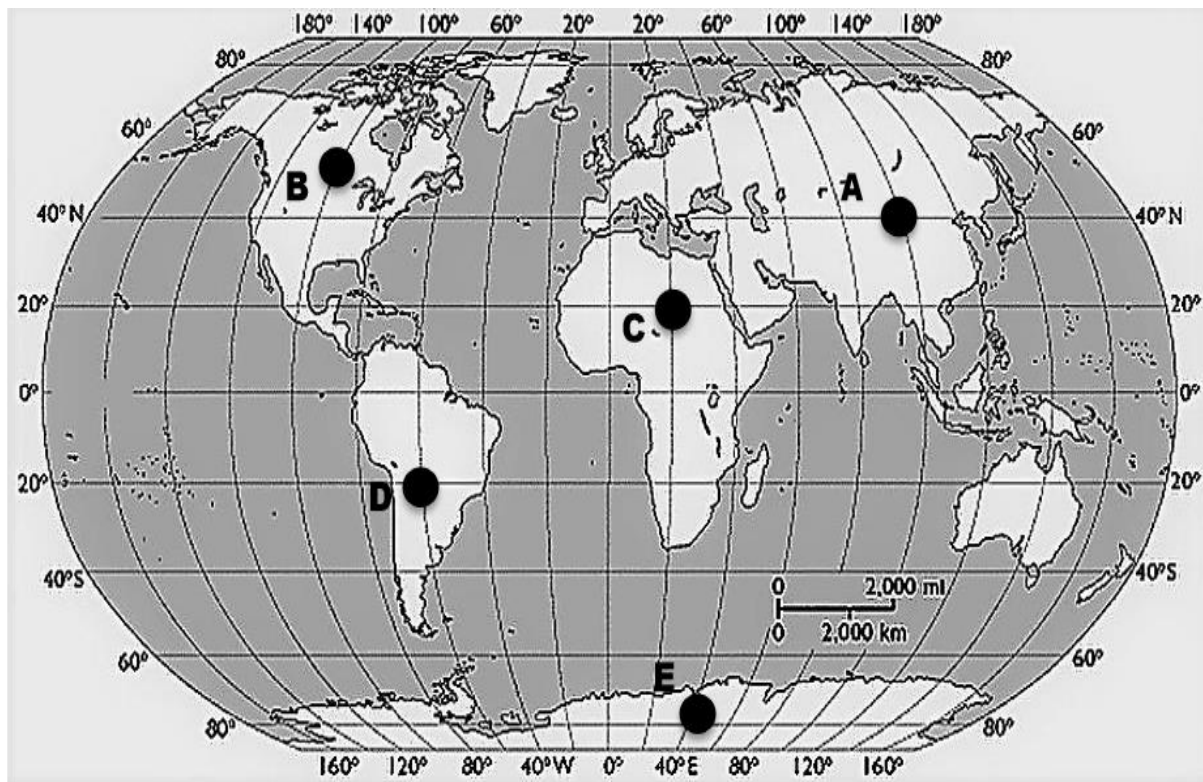


Figure 2. Globe

<https://images.app.goo.gl/L1gcfVrePnjm74Wk7>

### Guide Questions:

1. What is the latitude of point A, B, C, D, E respectively?

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2. What is longitude of point A, B, C, D, E respectively?

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3. What are the directions that represent the latitude in the globe?

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4. What are the directions that represent the longitude in the globe?

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## Activity 2. Locate Places on Earth

**Directions:** Based on your answer in A, determine the continents where the points are located using Figure 3.. Answer the given questions provided below. Write your answer in your answer sheet.

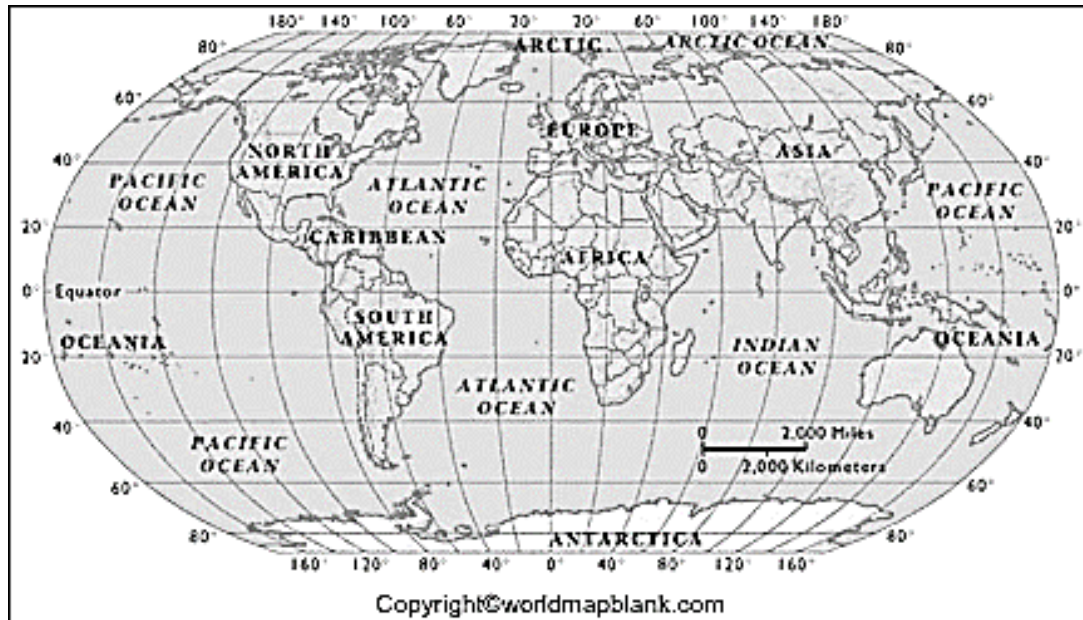


Figure 3. The Globe

Table 2. Location of Continents in the Globe

POINTS	CONTINENTS
A	
B	
C	
D	
E	

### Guide Questions:

- Using the globe in Figure 3, what is the latitude and longitude of Asia and South America?

Asia \_\_\_\_\_  
 South America \_\_\_\_\_

- What is the place located at 20° north and 20° west?

\_\_\_\_\_

\_\_\_\_\_

- How do you locate places on Earth using map or globe?

\_\_\_\_\_

\_\_\_\_\_

### Activity 3. Locate your Places in the Philippine Map

The Philippines lies between 4°23' and 21° North (N) latitude and between 116° and 127° East (E) longitude.

**Directions:** Looking at the map of the Philippines in Figure 4, fill in the missing data in the Table 3. Write your answers in your science notebook.

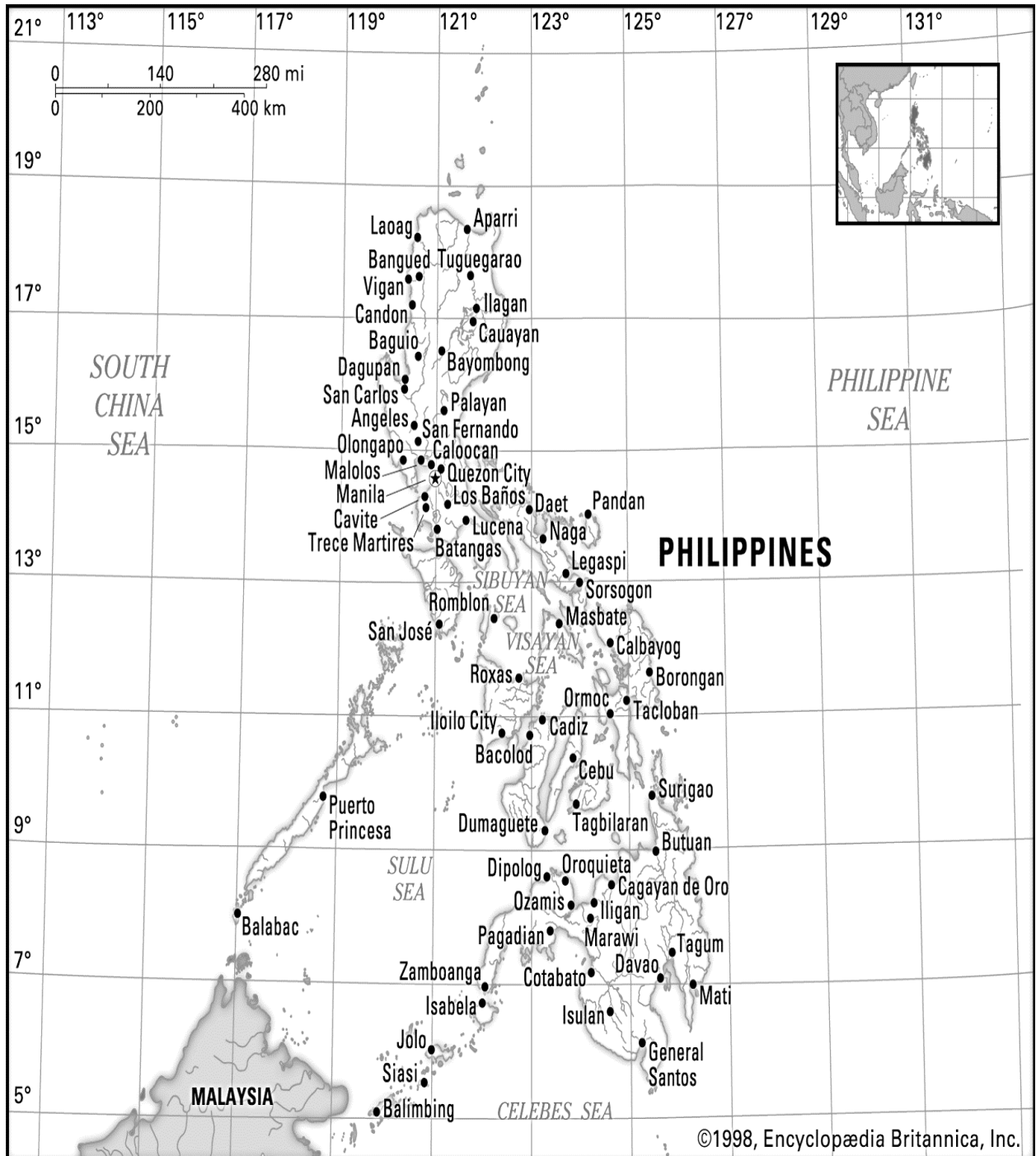


Figure 3. Map of the Philippines  
<https://www.britannica.com/place/Philippines>



**Table 3. Locate the Places in the Philippines**

Places	Latitude	Longitude
1. Manila City	14.3° N	121° E
2. Aparri City	18.3° N	
3. Iloilo City		122° E
4.	7° N	122° E
5.	8° N	117° E
6. Puerto Princesa	10° N	

**Guide Questions:**

1. Can you locate the places in the Philippines using the latitude alone? Why?  
\_\_\_\_\_  
\_\_\_\_\_
2. How can latitude and longitude help locate different places in the Philippines?  
\_\_\_\_\_  
\_\_\_\_\_
3. What is the approximate latitude and longitude of the city where you live or the nearest city where you are?  
\_\_\_\_\_  
\_\_\_\_\_

**V. Reflection**

Complete the statements below.

1. I understand that \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. I don't understand \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. I need more information \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## VI. Answer key

Activity 1	
Latitude	A. 40° N
Longitude	100° E
	B. 50° N
	100° W
	C. 20° N
	20° E
	D. 10° S
	60° W
	E. 80° S
	40° E
Guide Questions:	
1. The latitude of A=40° N, B=50° N, C=20° N, D=10° S, E=80°	
2. The longitude of A=100° E, B=100° W, C=20° E, D=60° W, E=40° E	
3. The latitude of the globe represent the north and south directions.	
4. The longitude of the globe represent the east and west directions.	
Activity 2	
A. Asia	
B. North America	
C. Africa	
D. South America	
E. Antarctica	
Guide Questions:	
1. Asia has a latitude of 40° N and longitude of 100° E, South America latitude 10° S,	
longitude 60° W.	
2. Africa	
3. Any places on Earth can be located by specifying its latitude and longitude.	
Activity 2	
2. Longitude 121° E	
3. Latitude 10° N	
4. Zamboanga City	
5. Balabac City	
6. Latitude 10° N	
Guide Questions:	
1. No, because places can be located by degrees of latitude and longitude.	
2. The latitude and longitude are used to pinpoint any location of different places in the	
Philippines.	
3. Answer may vary	

## VII. Other References

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