



## What Is This Module About?

When you look around you, do you see mountains or valleys? Do you live near the sea? Do you know how to read maps or locate a country on a globe? If you had thought about the following questions, this module is for you!

All of us live in a planet called Earth. It is our home. Your environment is a reflection of the many features that the Earth has. Some people live in mountains. Some live near the seashore. Others live in an environment of snow or very dry land like a desert. How would you like to increase your knowledge about the planet we live in? How would you like to know what continents are, where countries and cities are located and what can be found in them?

In this module, you will learn **Geography**, the study of the physical features of the world. You will study the key geographical features of the world and the continents and countries in which they are found. You will also learn about the important physical features of our country.

This module is composed of three lessons.

Lesson 1 – *The Major Physical Features of the World*

Lesson 2 – *Equator, North and South Poles, Latitude and Longitude*

Lesson 3 – *Focus on the Philippines*



## What Can You Learn from This Module?

After studying this module, you should be able to:

- ◆ describe the continents and major physical features of the world;
- ◆ use latitude and longitude to locate the equator, the north and south poles,
- ◆ and other geographical features on the globe; and
- ◆ recognize key geographical features of the Philippines.



## Let's See What You Already Know

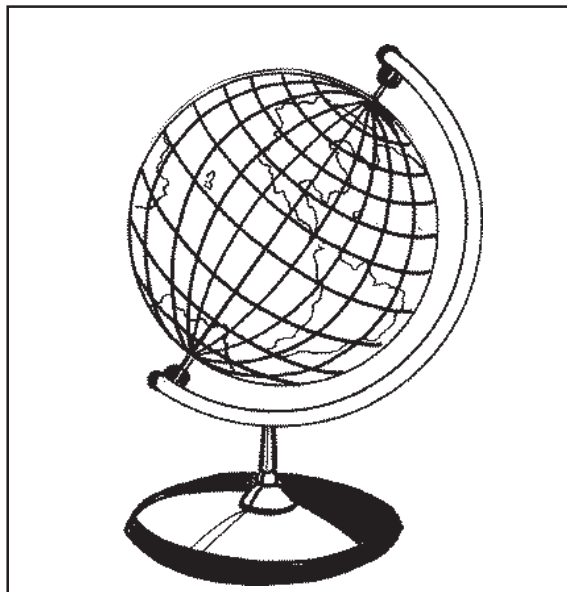
Before studying this module, take this simple test to determine what you already know about the topics covered.

A. List down the continents of the world.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

B. Locate the following on the drawing of the globe and label them:

1. Equator
2. Prime Meridian
3. South Pole
4. North Pole
5. Latitudes
6. Longitudes



C. Write the correct answer on the blanks:

1. To which continent does the Philippines belong?

---

2. Name the ocean nearest the Philippines.

---

4. The Philippines lies on which side of the equator – northern hemisphere or southern hemisphere?

---

5. On which hemisphere is the Philippines located relative to the prime meridian: eastern or western? \_\_\_\_\_

Well, how was it? Do you think you fared well? Compare your answers with those in the *Answer Key* on page 40 to find out.

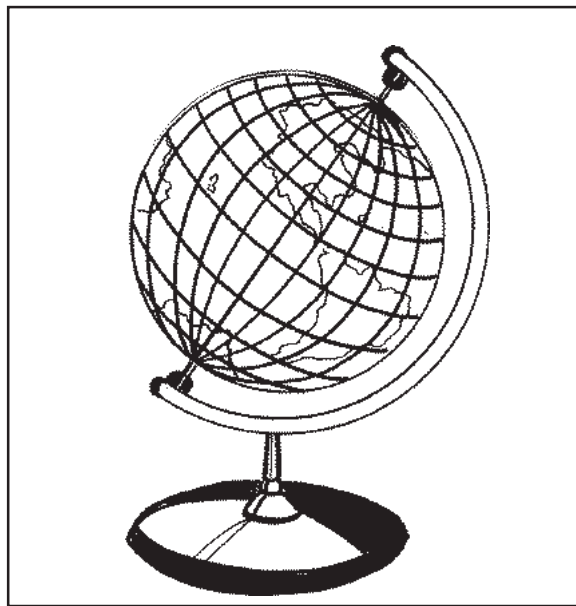
If all your answers are correct, very good! This shows that you already know much about the topic. You may still study the module to review what you already know. Who knows, you might learn a few more new things as well.

If you got a low score, don't feel bad. This means that this module is for you. It will help you understand important concepts that you can apply in your daily life. If you study this module carefully, you will learn the answers to all the items in the test and a lot more! Are you ready?

You may go now to the next page to begin Lesson 1.

# The Major Physical Features of the World

Have you seen a globe before? A globe is a sphere (ball shaped) that represents the physical world. It depicts how the earth would look from outer space. In a typical globe, the countries and major land masses are clearly depicted. Study a drawing of the different views of the world below. It would be better if you can find a globe and a map that you can study. Usually, a school library has both. Ask your Instructional Manager if he/she can lend you both.



What do you notice about the globe? What do the names and other markings on the globe represent?

A globe shows land masses and other physical features found on Earth. When you study a globe, you study where oceans are found and the countries and cities found in the land masses.

When you study the earth, you will first notice the large masses of land and the bodies of water. The land masses are called **Continents** and the large bodies of water are called **oceans , seas, and lakes.**

After studying this lesson, you should be able to:

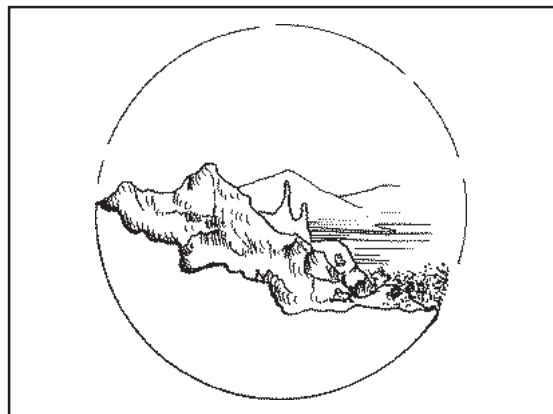
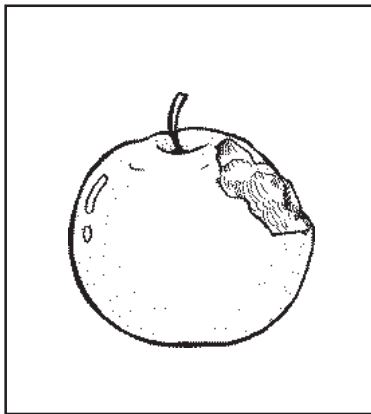
1. locate each continent on the map and the globe;
2. locate on the map and the globe the major physical features of the world; and
3. classify the major physical features of the world as oceans, seas, lakes, rivers, mountains or mountain ranges.

Do you now have a world map and a globe? In this lesson, you will do a lot of work with them so it is good that you have them with you as you read this module.



## Let's Try This

Take a guava or an apple and take a few bites from it. The earth's surface is like a guava or an apple that someone has been eating. There are deep canyons and trenches like big bite marks on the guava or apple. There are large bodies of water. Other parts are above the water, like the unbitten parts of the guava or apple. Some of them are flat and some are high peaks.



Usually, the blue colored areas of a globe represent bodies of water. The other areas represent dry land. Do you notice that some dry lands are big, while others are small? The large dry landmasses are called continents. Continents are composed of many countries that are near each other. There are seven continents in the world. The continents are large continuous land areas bounded mostly by large bodies of water such as **oceans, seas, lakes** and **rivers**. The continents also have high **mountains** and **mountain ranges**. See if you can locate the 7 continents or big land masses on the map.

We use maps and globes to help us locate and identify these geographical features on the earth's surface. Have you seen a world map before? Compare a map with the globe. Write their similarities and differences on the blank spaces below.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

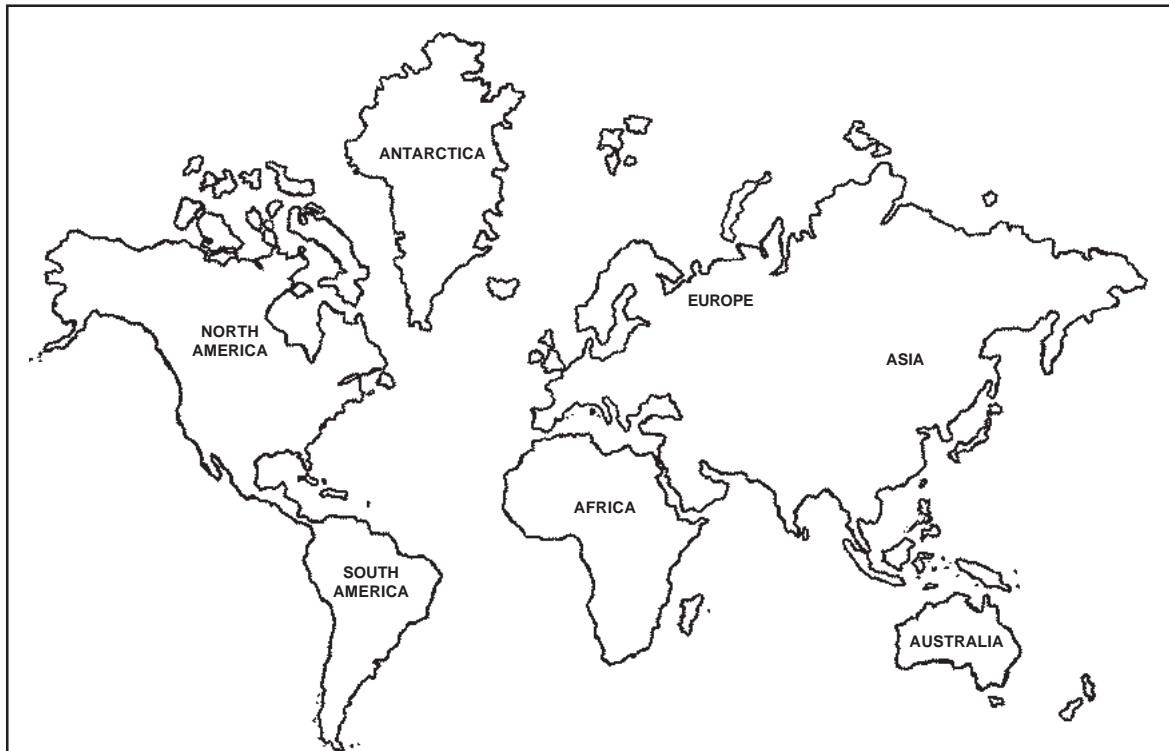
If you wrote that a world **map** is flat while a **globe** is round or spherical, you are correct! A world map is a flat representation of the earth, while a globe is a spherical, round representation.

If you wrote that both show landmasses and bodies of water, that's good! Both a world map and a globe depict the characteristics of areas found on earth.

If you wrote that the names of the countries and other areas are depicted in both, you're a keen observer. World maps and globes show names of these geographical areas.

Now, you must know that unlike globes, there are many types of maps. Maps are flat representations of areas found in the world. A map may show only a small area such as a city, a province or a country. A map that depicts all the geographical features of the world is called a **world map**.

Study the world map below:



Can you find the continents? Remember that the continents are large landmasses. Smaller land masses such as islands are also found in a world map but they are usually grouped with a larger land mass. Study the world map again. Can you see the large landmasses now?

Let's see how many you can locate. It would help if you encircle the landmasses that you can identify in a world map. If you have encircled these large landmasses that represent continents, look for their names. These are indicated on the map, too. Then, write the names of the continents that you have identified on the blank spaces below.

- |          |          |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ |          |

Have you completed your list of the seven continents of the world? Now check your list against my list. Find the locations of these continents once more on the world map.

- |                  |                  |              |
|------------------|------------------|--------------|
| 1. Asia          | 4. South America | 7. Australia |
| 2. Africa        | 5. Antarctica    |              |
| 3. North America | 6. Europe        |              |

Which continent is the largest? Which is found farthest north?

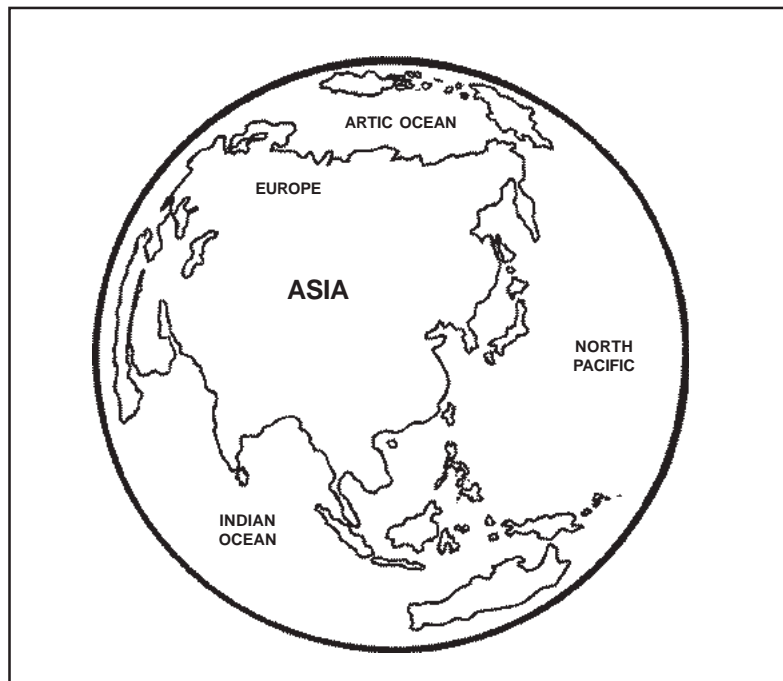


## Know This

Here are interesting facts about the seven continents of the world. Have you located them on the world map?

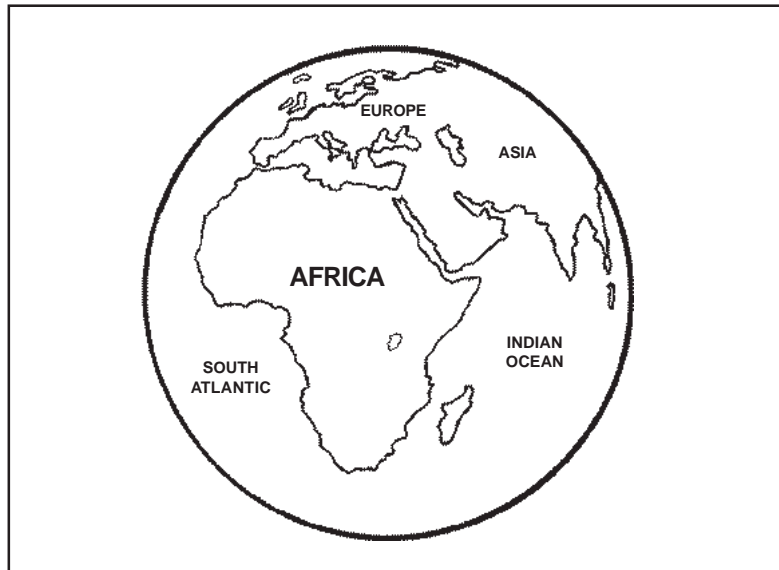
### *Asia*

Asia is the largest of all continents. Asia covers about 33% of the world's total land area. Asia is also home to about 60% of the world's population. That is equal to more than three billion people, sharing its rainforests, mountain ranges, inland seas, plains, and deserts. The continent of Asia is shared by 40 entire countries, which include islands and archipelagos ( groups of islands ). It is connected to the landmasses of Europe and Africa. Among the largest nations in Asia are China and India. Can you locate these countries on the globe? The Philippines is found in Asia too. Point to the location of the Philippines in the Asian Continent.



## *Africa*

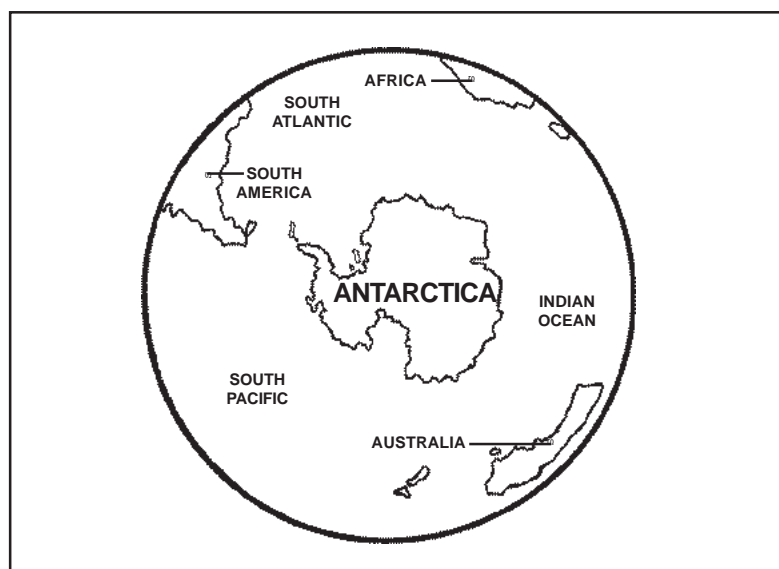
The African Continent is the second largest among the seven continents. Dry lands and deserts are found in its northern parts while lush vegetation abound (are plenty) in its central and southern parts. Europeans used to refer to Africa as the **“Dark Continent”** because it was unknown to them during the early times. Scientists believe that the first humans came from this continent and later on went to the other continents. Egypt and Nigeria are two countries that are found in Africa. Point to these two countries in the globe below.



## *Antarctica*

The Antarctic Continent is known as the frozen continent. It is considered one of the few places on earth largely undisturbed by human presence. Antarctica is found in the South Pole, the lowest portion of the earth. Because of this, it's very hard to reach. Would you like to live there?

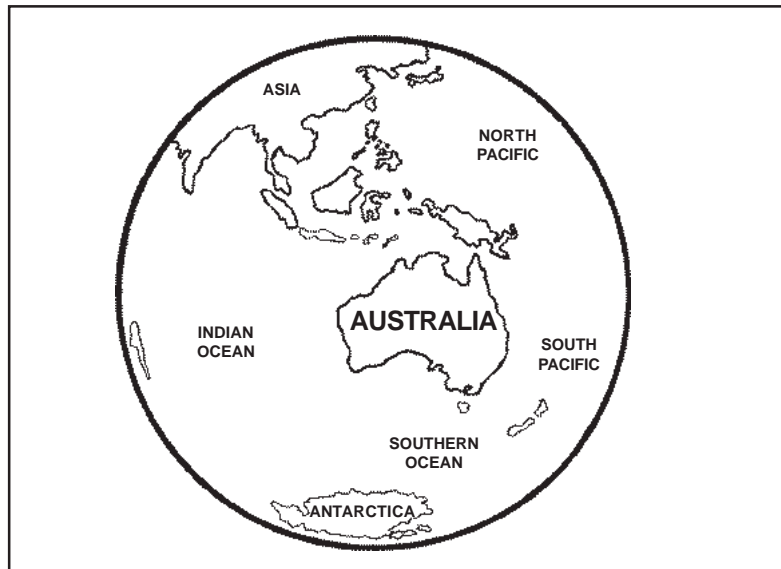
Why? No one can live in Antarctica because it is too cold for human life.





## *Australia*

This vast land is unique in the world. It is a continent, a nation, and a state all in one. It is located southeast of Asia and near Antarctica. Australia takes its name from the Latin *tierra australis incognita*, which means “unknown southern land” to the early European voyagers. It is often referred to as the land **down under**. Why do you think so? Australia is called the land down under because of its location in the lower part of the globe.



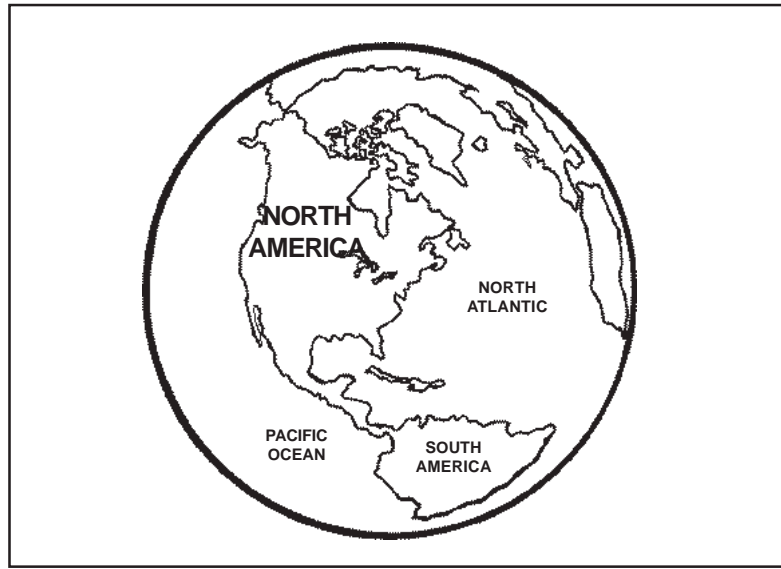
## *Europe*

The continent of Europe is the sixth largest in the world. Although being one of the smallest, Europe is where most of the world’s industrialized and richest countries are. There are 32 separate countries in Europe with only around 700 million population. Spain and Italy are two countries found in Europe. Can you locate these countries in Europe using the globe below?



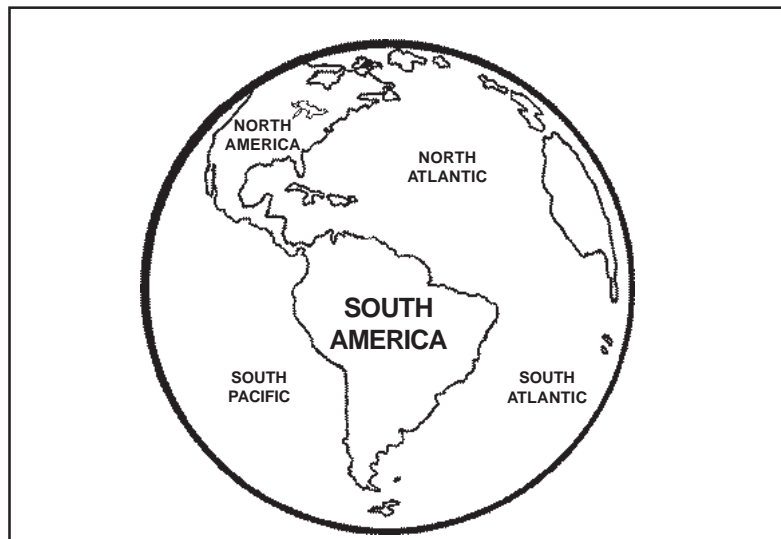
## *North America*

North America is the larger of the two American continents. It stretches to more than 24 million kilometers. European settlers considered North America as the “New World” during the early days. America was named after **Amerigo Vespucci**, a European explorer. A total of 23 independent countries make up the North American continent. The United States of America, perhaps the most powerful country in the world, is found in this continent. Locate the USA in the North American Continent on the globe.



## *South America*

This continent is often called **Latin America**. Most of the countries in this continent speak Spanish, which directly evolved from the Latin way of speaking. South America is the fourth largest continent. It has 12 independent countries. The continent of South America is home to the world’s largest rainforest ecosystem, the **Amazon**. Some part of the northern boundaries of this continent is connected with North America. Brazil and Argentina are two countries found in South America. Locate them on the globe below.





## Let's Try This

A. Identify the following continents and point to them on your world map or globe.

- \_\_\_\_\_ 1. Smallest continent
- \_\_\_\_\_ 2. Southernmost continent
- \_\_\_\_\_ 3. Continent with largest land area
- \_\_\_\_\_ 4. Continent with the most industrialized countries
- \_\_\_\_\_ 5. Smaller of the two American continents
- \_\_\_\_\_ 6. Second largest continent
- \_\_\_\_\_ 7. The “New World” during the early days

B. Answer the following questions:

1. If you were to choose, in which continent would you like to live? Why?

---

---

---

---

2. Before airplanes were invented, travelling between continents would take months or even years. Now, you can travel by air from Asia to Europe in less than 24 hours. What do you think is the effect of better and faster transportation on the relationship among countries in different continents?

---

---

---

---

---

Compare your answers with those found in the *Answer Key* on page 40. Did you get all items correct? That's good! if you did, it means that you are already familiar with the continents. You can now move on to study other geographical features of the world.



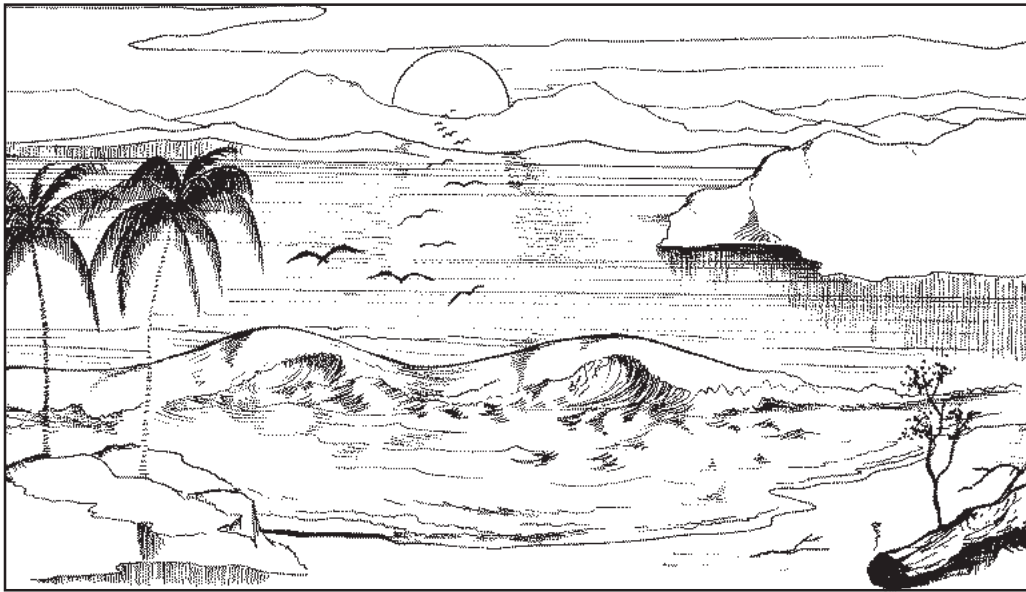
1. Africa
2. Asia
3. Australia
4. Europe
5. North America
6. South America
7. Antarctica

A black and white outline map of the world showing continents and major countries. The map is labeled with the names of the oceans: ARTIC OCEAN, ATLANTIC OCEAN, PACIFIC OCEAN, and INDIAN OCEAN. Major countries and regions are labeled, including CANADA, UNITED STATES OF AMERICA, MEXICO, BRAZIL, GREENLAND, RUSSIA, CHINA, INDIA, AUSTRALIA, and NEW ZEALAND. The map is oriented with North at the top.



12

Oceans and other bodies of water such as seas, rivers and lakes make up more than 75% of the world's surface. A quarter or 25% of it is composed of the landmasses.



If you look at the world map closer, you will note other large bodies of water aside from the ocean. Some of them are found within the continents. There are also seas, lakes, long river systems and smaller bodies of water.

## Oceans

Oceans are the largest bodies of water. The water in these oceans is salty. Locate these large oceans on the world map. What do you notice about them? Do they cover an area bigger than the area covered by the land masses? List down the four oceans you have located on the world map.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

There are four major oceans in the world. Point to the areas covered by these oceans on your world map. These are:

### *Pacific Ocean*

The largest ocean stretching from Asia and Australia, to North America and South America and Antarctica.

### *Atlantic Ocean*

The Atlantic is the world's second largest ocean. It covers a very big area from the Americas to Europe, Africa, and Antarctica down South.

### ***Indian Ocean***

This ocean lies between Africa, Asia, and Antarctica.

### ***Arctic Ocean***

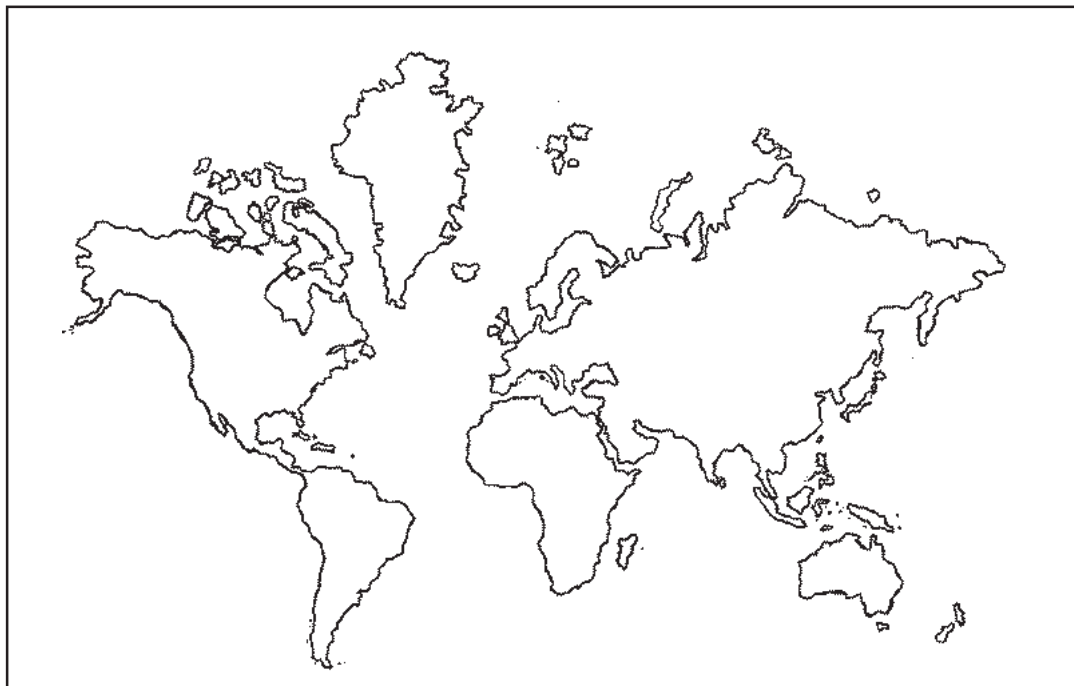
Some parts of this ocean are frozen (all ice) the whole year round. It is found north of Asia, Europe and North America.



### **Let's Try This**

Mark the areas covered by the four major oceans on the world map on the next page using the following symbols.

1. Indian Ocean: XXXXX
2. Atlantic Ocean: 00000
3. Pacific Ocean: //////////////
4. Arctic Ocean: >>>>>>

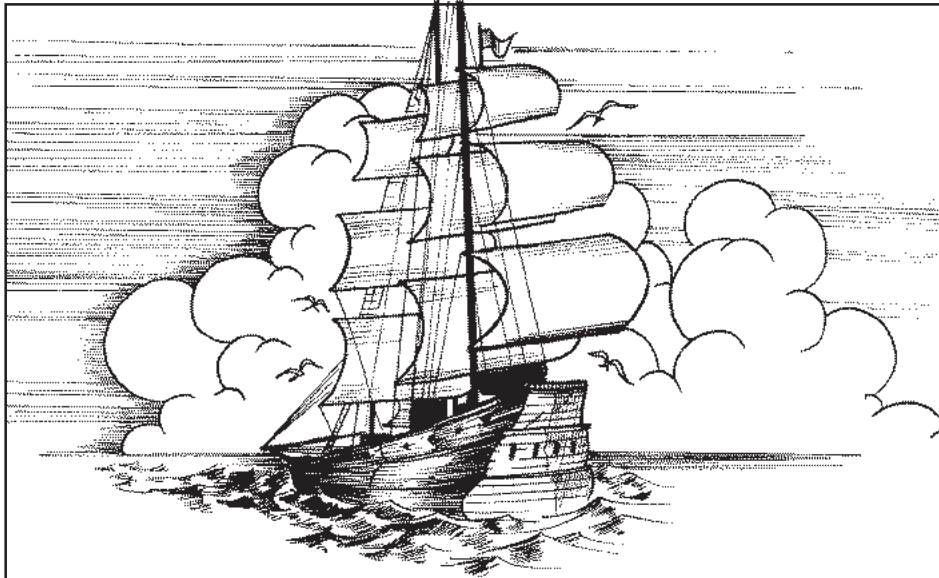


Check to see if you identified each ocean correctly. Turn to page 41 for the *Answer Key*.

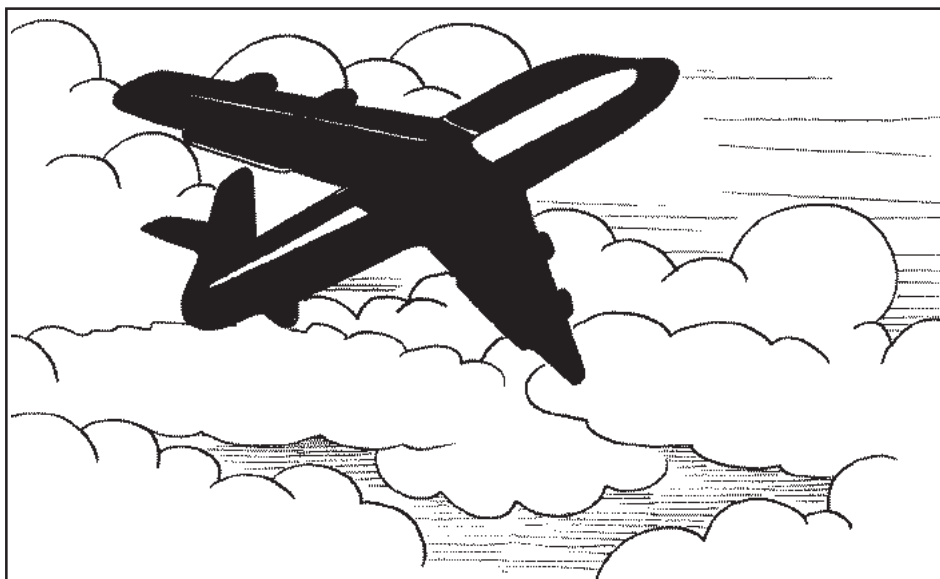


## Let's Think About This

You earlier learned that oceans and other bodies of water cover 75% of the earth's surface. To travel from one continent to another, an ocean is usually crossed, unless the two continents are adjacent (close to each other). During the early days, the explorers traveled via oceans in wooden ships called galleons to get to another continent. The voyage would take months to complete because the oceans are very wide!



Now crossing oceans is faster because of more powerful ships that can cross oceans in about a week or so. Other modern forms of travel also make ocean crossings easier. Can you think of other means of traveling between continents? If you thought of traveling in an airplane, you are correct! An airplane can get from Asia to North America in about 20 hours! This makes traveling very fast and even safer!



What effects do you think does intercontinental (between continents) travel have in your life?

Is there anybody in your family who works abroad? Many Filipinos work abroad. They are able to earn well and help their families because of this. The migration (movement from one place to another) of people between countries is now faster and safer because of airplanes and ships. This also makes the buying and selling of products between countries easier and faster.



## Let's Learn

### Seas and Lakes

Seas are bodies of water relatively smaller than oceans. The water found in seas, like in oceans is salty. You can see what a sea looks like when you go to the beach. Lakes are large bodies of water entirely surrounded by land. Have you been to a lake before? Can you remember what type of water is found in lakes? Most lakes contain fresh water. Laguna Lake is an example. Unfortunately, it is getting polluted by careless people.

Although seas are connected to oceans, and can be considered a part of the ocean, they have names to specify their location. Seas are actually part of oceans that are near land masses. An example would be South China Sea, which is found in the southern portion of China. Locate this sea on the world map. Is this sea near the Philippines?

Remember that lakes are smaller than oceans or seas and most contain fresh water. Some lakes may have salty water. A lake is land-locked, meaning it is completely enclosed by dry land.

Here are some of the major seas and lakes in the world. Locate these bodies of water on your world map as you read about each one.

#### ***Mediterranean Sea***

Three continents border the Mediterranean: Europe, Asia, and Africa.

#### ***Caribbean Sea***

This is found between North America, South America and the Atlantic Ocean.

#### ***South China Sea***

This sea lies in the heart of Southeast Asia, near China. The South China Sea is found near the western portion of the Philippines.



### ***Caspian Sea***

This sea is actually a lake because it is totally surrounded by land. It is called a sea because of its size, but it is still a lake. In fact, it is the largest salt-water lake in the world. The Caspian Sea separates Europe and Asia.

### ***Lake Victoria***

This is the *second* largest fresh water lake found in Africa. Check its location on the map. It is near two other big lakes. Can you name these two lakes? If you answered **Lake Tanganyika** and **Lake Nasa**, you are correct! Both lakes are also found in Africa, near Lake Victoria.

### ***The Great Lakes***

The Great Lakes is comprised of five lakes in North America: Lake Huron, Lake Superior, Lake Erie, Lake Ontario, and Lake Michigan.

Have you found these bodies of water on the map? If you did, very good ! If not try again.

Did you find the activity interesting? There are other seas and lakes not mentioned. You can look for them on the world map. Find five more and write them in the spaces provided below. Compare your answers with the list found in the *Answer Key* on page 43 afterwards.

Other Major Seas and Lakes of the World:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

### **Rivers**

Now that you have identified oceans, seas and lakes, let us now focus on rivers. Rivers are fresh water systems like lakes, emptying into the seas and oceans. Can you guess the difference between rivers and lakes? You can consult your world map to answer this.

Lakes differ from rivers because they usually cover a large area in diameter and are land-locked. Rivers travel through a narrow but long path. Check this on your world map. Aside from that, rivers have fast moving water while lake waters are mostly still or very slow moving.

Here are six of the world's greatest rivers. As you read their description, locate them on your world map.

### *Nile*

The River Nile is the longest river in the world. This river system is found mostly in Egypt, in the African Continent. The Nile is a river sacred to the Egyptians. It provides water that makes agriculture possible in the dry lands of Egypt.

### *Amazon*

This river system provides water to the Amazon Jungle, which is the world's largest rainforest ecosystem. Do you remember in what continent the Amazon is found? If you say South America, you are correct!

### *Mississippi/Missouri*

This is found in North America. It is the third longest river in the world. Many Filipinos who have migrated to the United States live in cities near this river system.

### *Yangtze-Kiang*

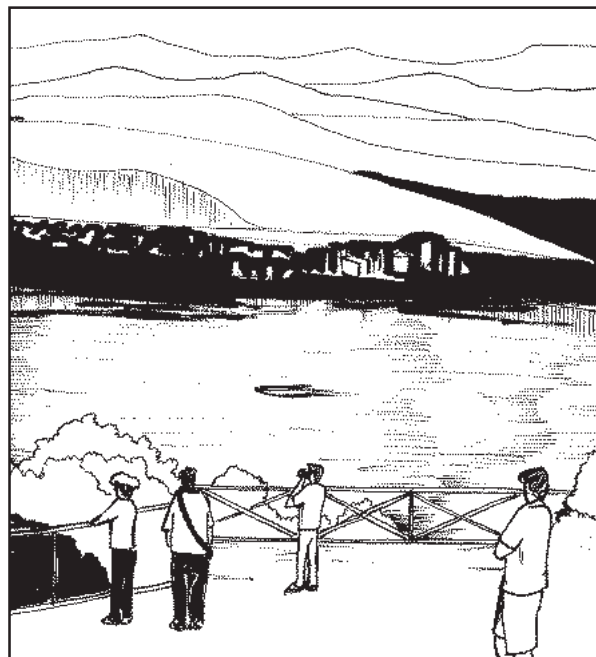
This river is Asia's longest river system. It is found mainly in mainland China. Locate this river in the Asian continent.

### *Murray Darling*

The Murray Darling River is the chief river system of Australia.

### *Danube*

The Danube is the longest and most important river in Europe. Its crystal clear and blue waters inspired the famous waltz "The Blue Danube".





## Let's Try This

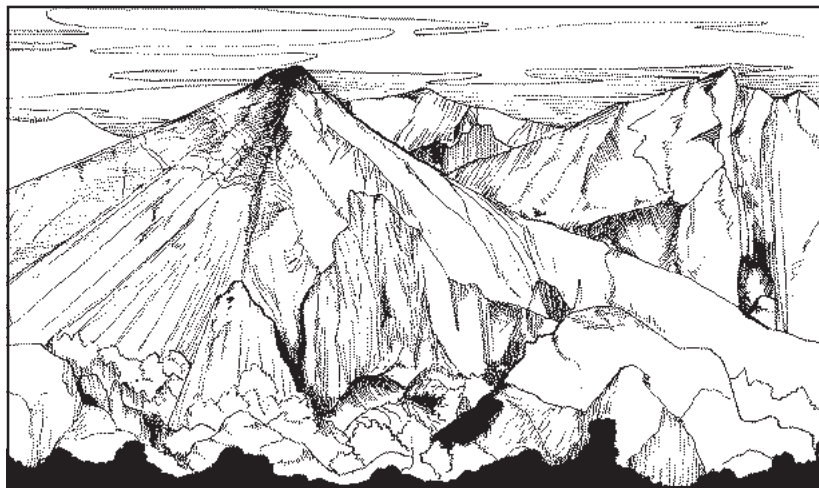
Locate the rivers named above on the map. With your fingers, trace the path of each from beginning to end. See if you can name the countries that the rivers pass through. Also name the sea or ocean each river leads to. Consult the *Answer Key* on page 41 for the correct answers.



## Study and Analyze

### Mountain Ranges

Mountain ranges are long chains or groups of mountains within a continent. These are formed when the land masses collide with each other, causing an upward movement of the earth's crust. To collide is to strike strongly against each other. Study the drawing below to understand how mountains form into groups or happen to be found near each other.



When land masses move towards each other, an upward movement of land happens, creating mountain ranges.

Below are the major mountain ranges found in continents. As you read about each one, locate it on your world map or globe.

#### ***Andes Mountains***

The Andes Mountains are found in South America. This chain of mountains is located in the western part of the continent.

#### ***Rocky Mountains***

The Rocky Mountains are the chief mountain range of North America. They stretch across Canada and the U.S.A..

### ***Great Dividing Range***

These are the mountains of Australia. They lie on the eastern coast of the continent. Do you remember that Australia is the only nation that is also a continent?

### ***Himalayas***

This chain of mountains is the home of the world's highest mountain, **Mt. Everest**. Can you guess in which continent the Himalayas are located? Consult your map again. If you answered Asia, you are correct! The Himalayas are found near India, China and Tibet. Can you find these countries on the map?

### ***Ural Mountains***

These mountains are found in Russia. The Ural Mountains separates Asia from Europe. Find this mountain range on the map. Have you found it? Do you see how it separates two continents? What continents are they?

### ***Atlas Mountains***

The Atlas Mountains lie in the northwestern part of Africa. Can you find them on the map?

Were you able to locate these mountain ranges on the world map? If not, study your world map more closely. These mountain ranges are usually indicated on the map because they are important geographical features of the continents.

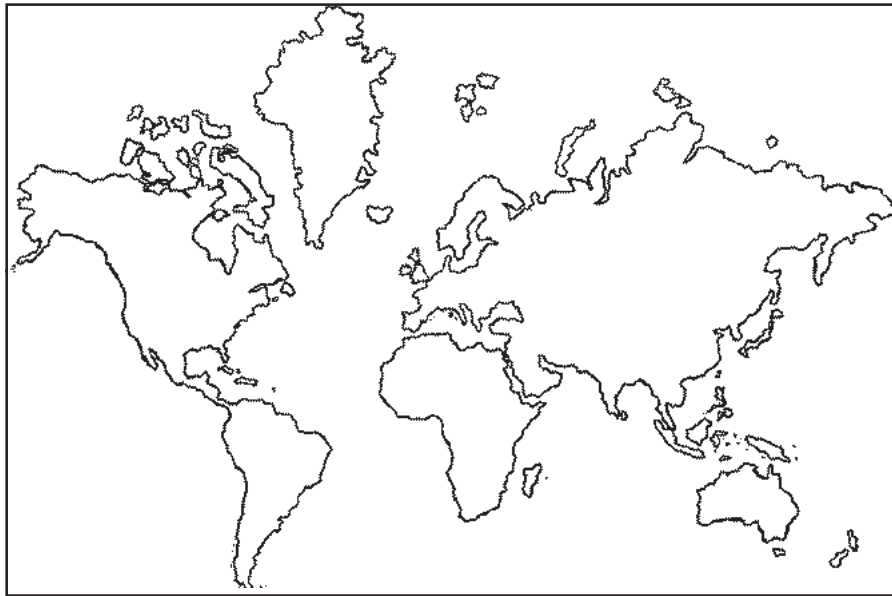


## **Let's Try This**

- A. Match the choices in column A with those in column B. Write the letters in column B in the space provided before each number.

<b>A</b>		<b>B</b>
_____ 1.	Sea enclosed by three continents	A. Caspian Sea
_____ 2.	Longest river system	B. Andes
_____ 3.	South American mountain range	C. Arctic
_____ 4.	Largest Lake	D. Mediterranean
_____ 5.	Ocean made up largely of ice	E. Nile

B. Locate each of the geographical features mentioned above on the map.



Compare your answers with those found in the *Answer key* on page 42.



## Let's Remember

The key geographical Features of the earth include:

1. **Continents** – large land masses. There are 7 continents.
2. **Oceans** – very large bodies of saltwater. There are 4 major oceans in the world.
3. **Seas** – parts of oceans that are near land masses.
4. **Lakes** – bodies of water enclosed by land.
5. **Rivers** – fast moving freshwater systems that empty into seas and oceans.
6. **Mountain Ranges** – long chains of mountains usually found in continents.

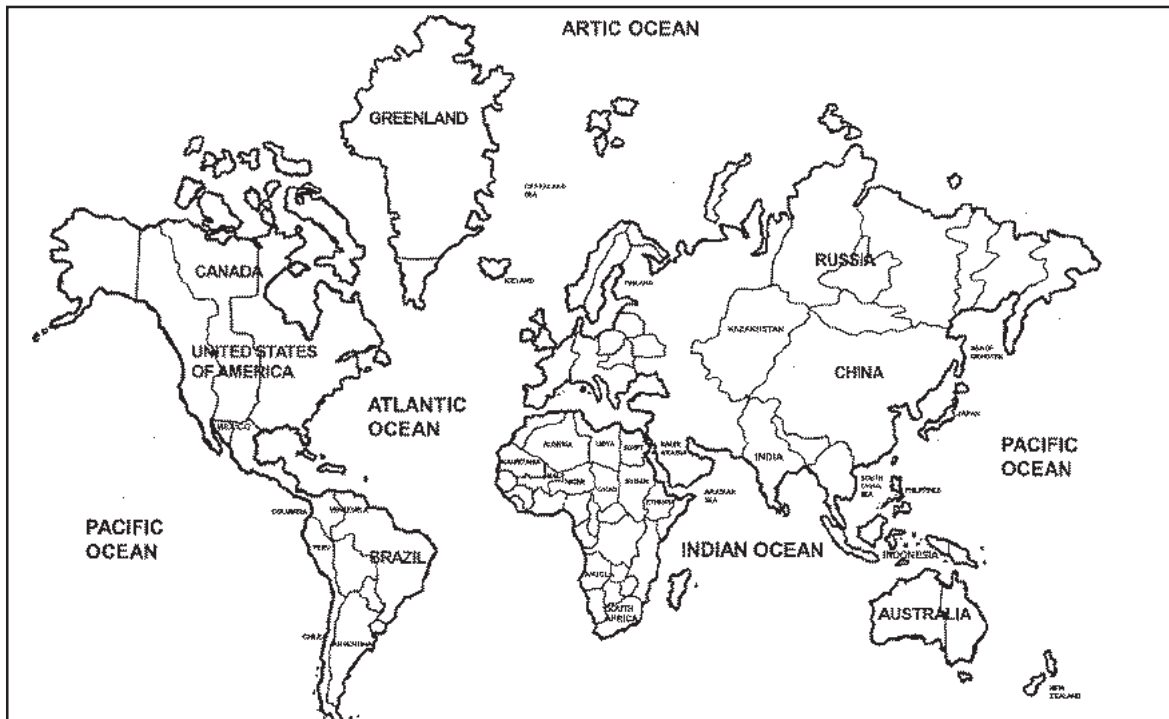


## Let's Try This

A. Name the seven continents according to size. Write them down from the largest to smallest. Consult the world map to help you get the correct answers.

- |          |          |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ |          |

- B. Study the world map below. Based on the world map, answer the questions that follow.



1. What is the world's largest ocean?  
\_\_\_\_\_
2. Name the mountain range where Mount Everest is found.  
\_\_\_\_\_
3. Name the chief river of South America. \_\_\_\_\_
4. What is the mountain range found in the only continent-nation- state in the world? \_\_\_\_\_
5. Name Africa's largest lake and the world's second largest freshwater lake. \_\_\_\_\_

Check if you got all your answers correct. Refer to the *Answer key* on page 42. Did you get all answers right? If so, congratulations! You are now ready for the next lesson.

If you didn't get all the items correct, that's okay. All you need is to review the items you missed.

If you feel you have already learned a lot about the major geographical features of the world, proceed to the next lesson. You will learn the other geographical features of the world. Good Luck!

Take a brief brake before proceeding to the next lesson. Relax . . . close your eyes, then take a deep breath. Inhale . . . exhale. Do this 6 times.

Are you now ready for *Lesson 2*? Turn to the next page.

# Equator, North and South Poles, Latitude and Longitude

In *Lesson 1* you learned out about the seven continents and the major physical features of the world. In this lesson, you will study a more precise (accurate) way of locating any place on Earth. Specifically, you will learn to locate places in reference to the north and south poles, equator and latitude and longitude.

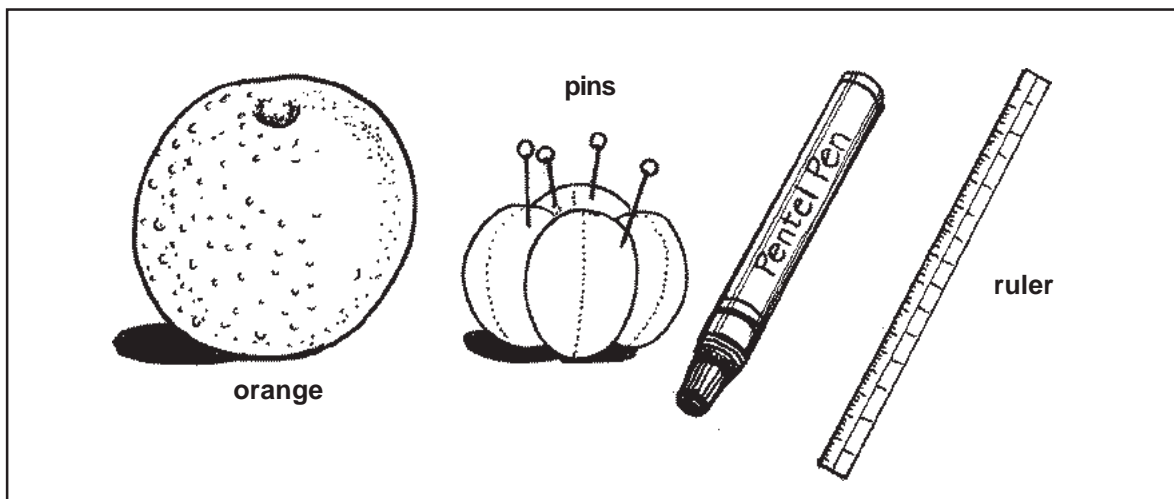


## Let's Try This

Here are the materials you will need for this activity:

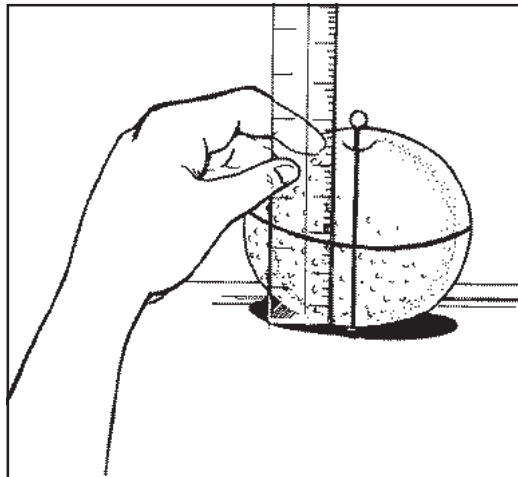
1. A round fruit, e.g. orange, star apple
2. Pins with colored heads: one yellow, one blue ( You may tie a yellow thread on one and a blue thread on the other.)
3. Black pentel pen
4. Ruler

Ask your Instructional Manager to lend you the materials listed in numbers 2,3 and 4 above.



Here's what you are to do:

1. Put the fruit on a table with its bottom flat on it.
2. Place the yellow pin on the eye (top) of the fruit.
3. Place the blue pin on the bottom of the fruit.
4. Draw a horizontal line around the fruit. The line should divide the fruit into a top half and a bottom half.
5. Now draw a line  $\frac{1}{2}$  to 1 inch above the first line drawn at the center of the fruit.
6. Draw a vertical line connecting the yellow pin with the blue pin.
7. On the other side of the fruit, draw another line connecting the yellow pin with the blue pin.
8. Use the ruler to check if the lines are straight when facing you.
9. Your work should look like this.



## Study and Analyze

The lines and pins represent imaginary lines and points on the globe. These imaginary lines and points represent specific spots on the earth's surface.

The yellow pin marks the **north pole**. It is located on the northernmost part of the globe. The blue pin marks the **south pole**, which is on the southern end of the globe. Can you locate the north and south poles on the globe?

The horizontal line at the center circling the fruit is the **equator**. The line above it is the line of **latitude**. On one side of the fruit, the line connecting the yellow and blue pins is the **prime meridian**. Its counterpart on the opposite side is called the **international dateline**. These two lines are both lines of longitude. Now, look at the



globe. Where would the equator be? How about the **latitudinal** and **longitudinal** lines? Where would the prime meridian be? How about the international dateline?

Now, go back to the illustration on the previous page. Label the lines represented on the fruit based on what you just learned. You may compare your answers with mine on page \_\_\_\_\_.



## Let's Learn

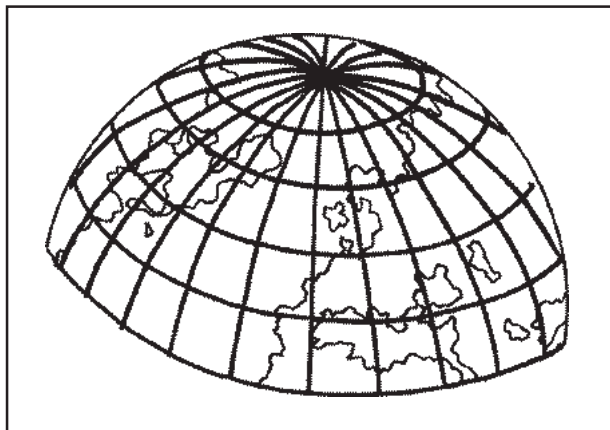
The **north pole** marks the northernmost (topmost) part of the earth. Can you identify the ocean found in this area? The north pole is found in the Arctic Ocean, where all the northern longitudinal lines meet.

The **south pole** is located in the underside of the earth. It is where Antarctica is found and where the southern longitudinal lines meet.

The two poles make up another imaginary line called the *earth's axis* on which the earth rotates.

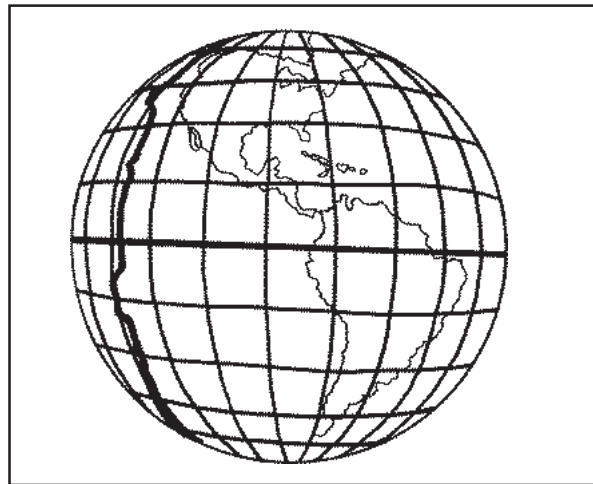
The **equator** is a line of reference drawn around the earth. It divides the earth into two equal parts. It has equal distance from the north pole and the south pole. The portion of the earth above the equator is called **northern hemisphere** (*upper half of the globe*). The portion below this line is the *southern hemisphere* (*lower half of the globe*).

Identify five countries found in the northern hemisphere and five countries found in the southern hemisphere. Use the map on page 40 to do this. Also, identify some countries found in the eastern and western hemisphere.

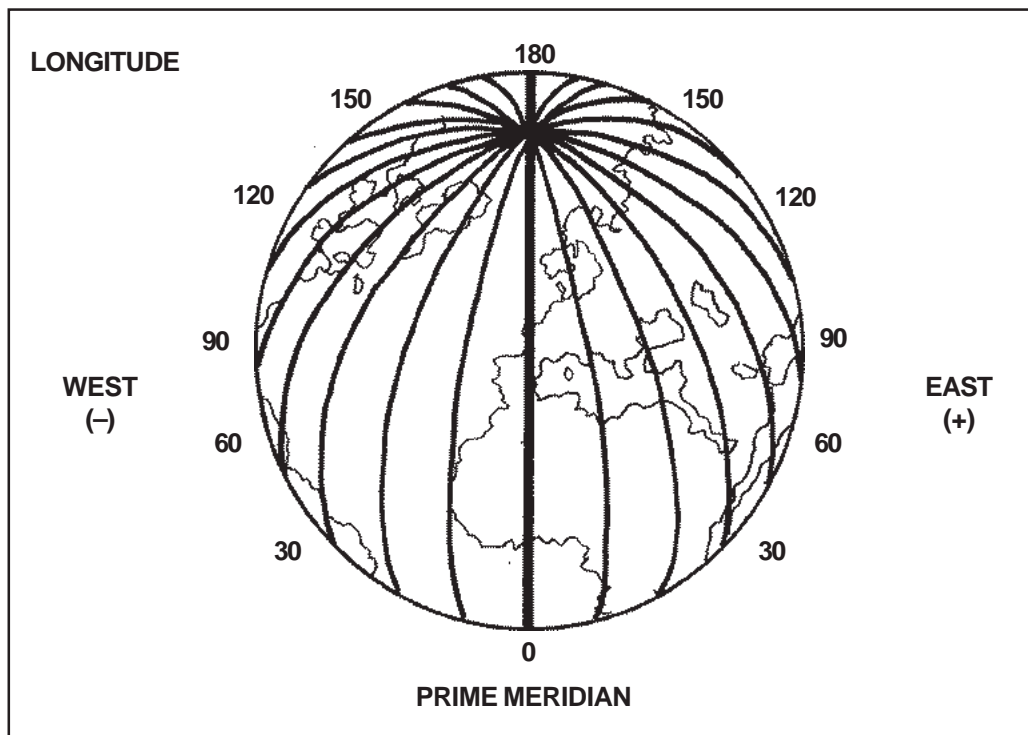


The **prime meridian** is a similar line of reference that runs from north to south through Greenwich, England or the U.K.. On the other side of the earth, another significant meridian is the *international dateline* in the Pacific Ocean. It lies directly opposite the *prime meridian*. The prime meridian and the international dateline divide the globe into the *eastern hemisphere* (east of the prime meridian) and the *western hemisphere* (west of the prime meridian).

The **international dateline** is important because it is a reference point for the time zones of the world. For example, if it is 7 P.M. in Manila, it could be 8 A.M. in the United States. This is because only half of the globe faces the sun every time. That part will have daylight while on other side, it will be nighttime. Also, because of the time zone differences, the international dateline determines differences in dates. For example, it could be May 28 on the right side of the international date line while on the left, the date would still be May 27.



**Latitudinal lines** are imaginary lines on the globe that run east to west and measure *angular distance* north or south of the equator. **Longitudinal lines** are imaginary lines on the globe that run north to south and measure *angular distance* east or west of the prime meridian.

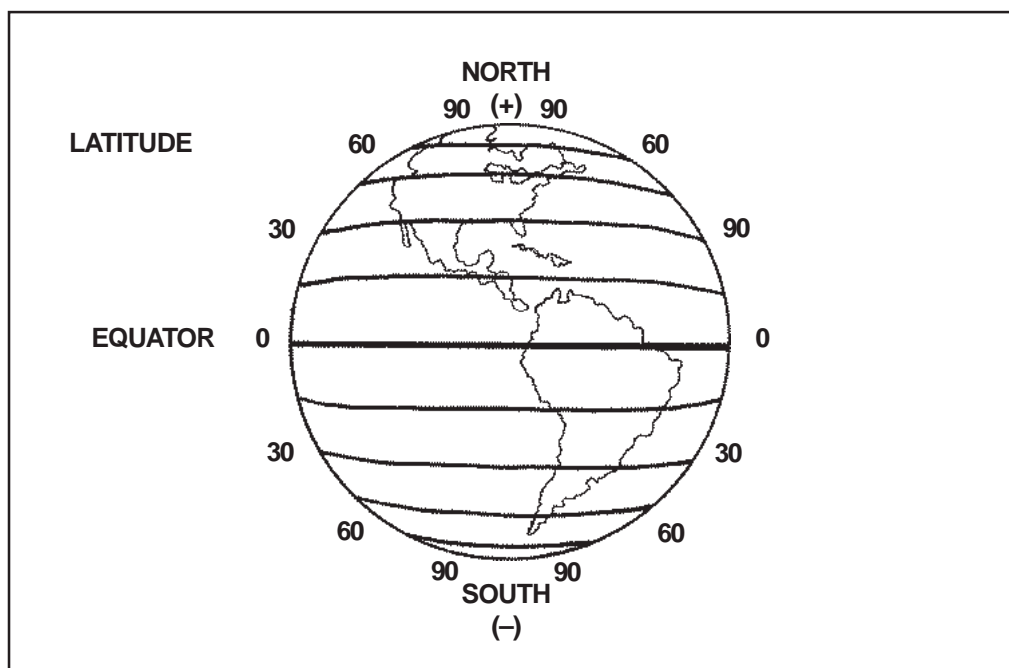




## Let's Try This

The idea of angular distance is simple. Imagine two lines of the same length beginning at one common point but going in different directions. The angular distance between the endpoints of these two lines would be represented by the measurement of the angle that the two lines form. Angular distance is expressed in *degrees* ( $^{\circ}$ ), subdivided into *minutes* ( $'$ ) and *seconds* ( $''$ ).

If we take the very center of the earth as a common point, any point on the earth's surface will have an angular distance from the nearest point on the equator ( $0^{\circ}$  latitude). This along with its position relative to the equator (north or south) would be its *latitude*.



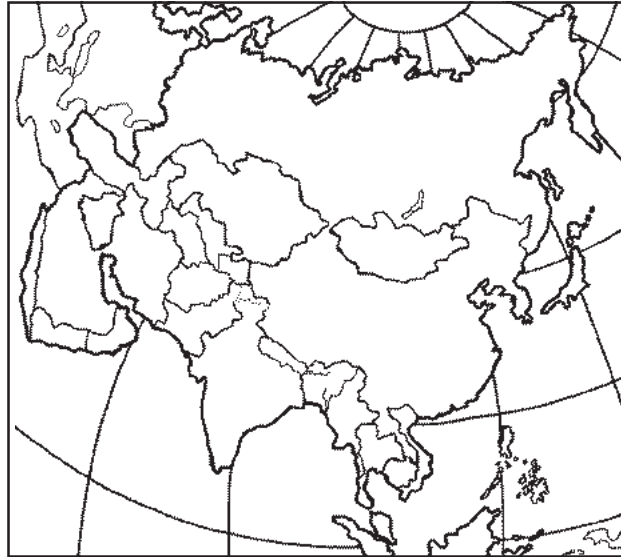
The same point on the earth's surface would also have an angular distance from the nearest point on the prime meridian ( $0^{\circ}$  longitude). This along with its point relative to the prime meridian (east or west) would be its longitude. Any point on the earth's surface can therefore be located using its latitude and longitude as coordinates.

Study a portion of the globe showing the countries in Asia on the next page, Note the longitude (vertical lines) and latitude lines (horizontal lines). Note too that each line represents a specific angular distance from the prime meridian as shown at the topmost part of the line.

Study the map of the Philippines. What is the angular distance of the longitudinal line that passes through Luzon?

If you answered 120 degrees, you are correct! To be more specific, Luzon is about 120 degrees East longitude (east of the prime meridian).

Now, locate the northernmost (uppermost) part of the Philippines. A latitude line is near it. What is the angular distance of that line? If you answered 20 degrees, that's

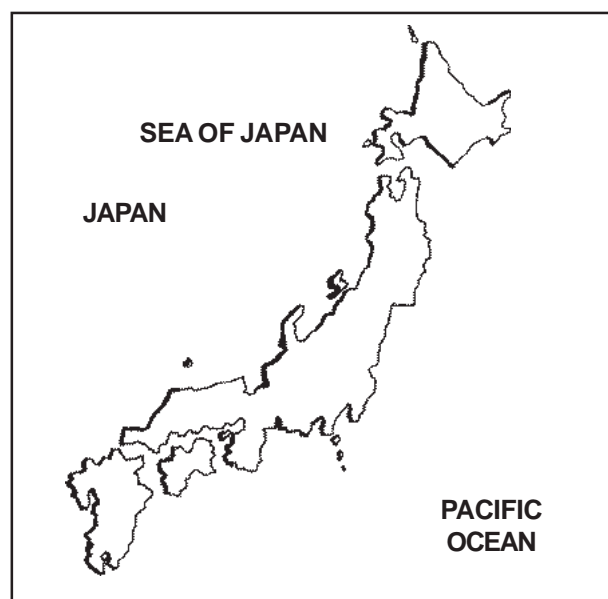


correct. That would make the northern part of the Philippines about 20 degrees in latitude. Is it above (north) or below (south) the equator? Check your map again. The northern part of the Philippines is about 20 degrees north latitude.

Note that the equator has a latitude of 0. Countries near the equator are warmer countries. Would you expect the Philippines, a country only about 10 to 20 degrees north of the equator to be warm? Yes. The Philippines has a warm tropical climate.

Locate Japan on the map. What is the angular distance of the latitude line that passes through Japan? If you answered 40 degrees North latitude, you got it right!

Would you expect Japan to be colder than the Philippines? Countries that are farther from the equator are colder countries. Yes, Japan is farther from the equator. It experiences snow so it is colder than the Philippines!



Would that make Japan north of the Philippines? Yes it would because Japan has a higher northern latitude of 40 degrees than the Philippine's 20 degrees.

Do you have a relative or know somebody who has a relative who works in Saudi Arabia? **Saudi Arabia** is found in the Arabian Peninsula. Locate it on the map on page 40.

The Arabian Peninsula is between what two longitude lines? If you answered 40 degrees and 60 degrees longitude, you are correct. It is found east of the prime meridian. That would make the Arabian Peninsula between 40 degrees and 60 degrees east longitude.

What about it's latitude? Like the northern part of the Philippines, it also has a latitude of about 20 degrees north. But why is Saudi Arabia generally warmer than the Philippines? It is because the Arabian Peninsula is mostly a desert.

Do you now know how to determine the latitude and longitude of any given place? Can you try it the other way around? Can you identify a place given its latitude and longitude alone?

Find the name of this dry place with a longitude of exactly 100 degrees east and latitude of exactly 40 degrees north.

If your answer is the **Gobi Desert**, that's great. The Gobi desert is the biggest desert in Asia. It is a very large dry area of land found north of China.

The latitude and longitude lines are also used to locate more specific places. Maps and globes are marked with vertical and horizontal lines that represent every fifth or tenth degree of latitude and longitude. The resulting grid makes it easier to pinpoint locations on the map or globe. Now that you know how to use these lines, find out the latitude and longitude of Manila on the map below.

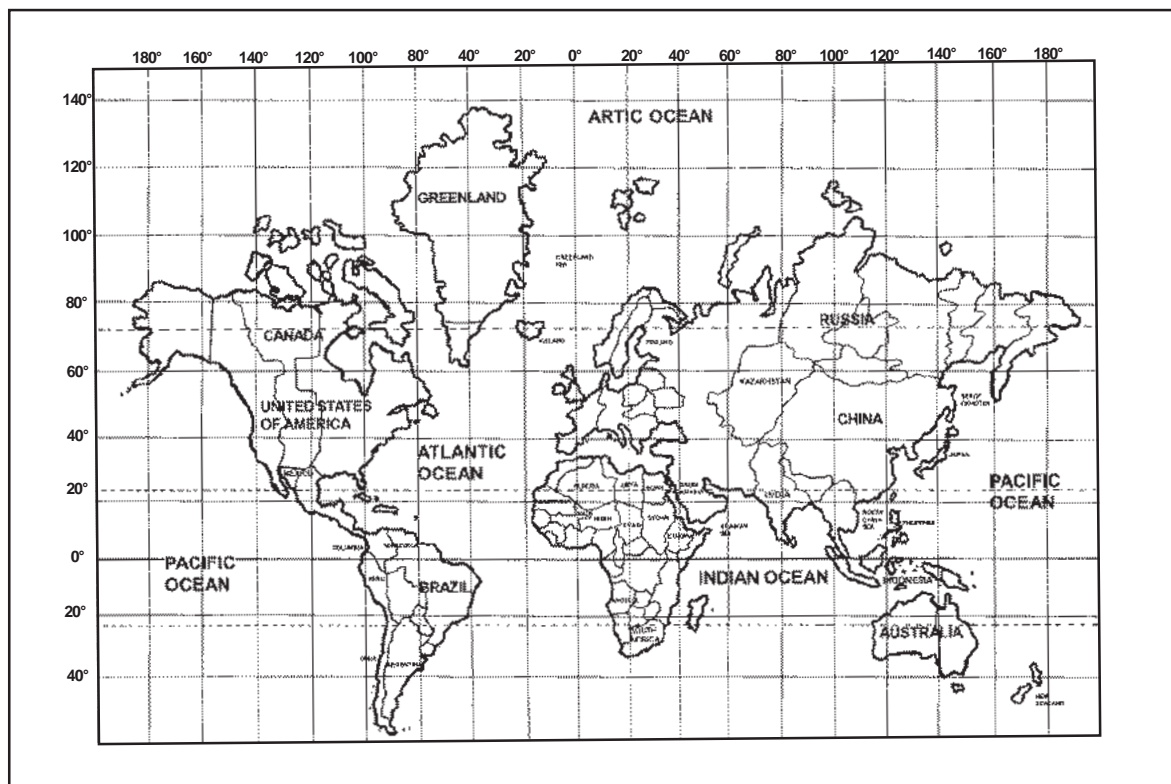


What did you find? The latitude of Manila is about 15° North, and the longitude is about 120° East. Its exact coordinates are 14°35' North, and 121° East. Is your answer near this value? If it is, you are now ready to identify the location of a place on the world map or globe through its latitude and longitude lines.



## Let's Review

Here is another simple test to find out how well you understand the lines and points on the globe. Study the map below. Then answer each question based on the map.



1. Name the continents found in the northern hemisphere.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. What continents lie in the southern hemisphere?  
\_\_\_\_\_  
\_\_\_\_\_
3. What continents are situated in both the northern and southern hemispheres?  
\_\_\_\_\_  
\_\_\_\_\_
4. Along what country is the prime meridian located?  
\_\_\_\_\_  
\_\_\_\_\_

5. Along which continents does the prime meridian pass?  
\_\_\_\_\_
6. In what ocean can you find the north pole? \_\_\_\_\_
7. In which continent can you find the south pole?  
\_\_\_\_\_
8. On what imaginary line does the earth rotate?  
\_\_\_\_\_
9. What points on Earth make up this line of rotation?  
\_\_\_\_\_
10. In which hemisphere is the Philippines located relative to the equator, the northern hemisphere or the southern hemisphere?  
\_\_\_\_\_
11. To which is the Philippines closer: prime meridian or international dateline?  
\_\_\_\_\_
12. On which side of the globe is the Philippines located- eastern hemisphere or western hemisphere?  
\_\_\_\_\_
13. Use the map on page 30 to find the approximate latitudes and longitudes of the following Philippine cities:
  - a. General Santos \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
  - b. Cebu City: \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
  - c. Puerto Princesa \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
  - d. Laoag City \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
  - e. Batangas City \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
  - f. Jolo \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
14. Use the map on page 30 to identify the cities near the following coordinates:
  - a. 11° North latitude, 122° East longitude: \_\_\_\_\_
  - b. 13° North latitude, 123° East longitude: \_\_\_\_\_
  - c. 17° North latitude, 121° East longitude: \_\_\_\_\_

Check if you got all answers correct. Refer to the *Answer Key* on page 43.

Take another break before going to *Lesson 3*. Sit straight with your feet flat on the floor. Close your eyes. Now take a deep breath. Inhale . . . exhale. Do this six times.

Are you ready for *Lesson 3*? If so, turn to the next page.

## Focus on the Philippines

In *Lesson 1*, you studied the continents and other major physical features of the world such as oceans, rivers and mountain ranges. These are the most noticeable features of the earth, especially from outer space. In *Lesson 2*, you learned how to identify the poles and the equator. You also learned how to use the longitude and latitude lines to locate areas on a map. Now, we are going to focus on our country and study its major geographical features.

This lesson shall introduce you to the physical features of the Philippines. You will also learn where these major features are located using a map.

By the end of *Lesson 3*, you should be able to:

1. identify the major geographical features of the Philippines, and
2. locate these features on a Philippine map.



### Let's Try This

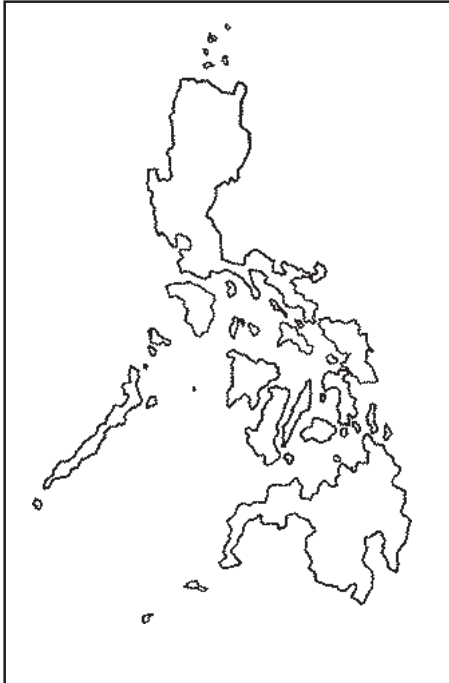
Do you remember the major geographical features you studied in Lesson 1? Write these down in the blanks below.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_



In *Lesson 1*, you studied the continents, mountain ranges, oceans, seas, rivers and lakes. Now apply what you have learned to our country. Study the map of the Philippines below and answer the questions.

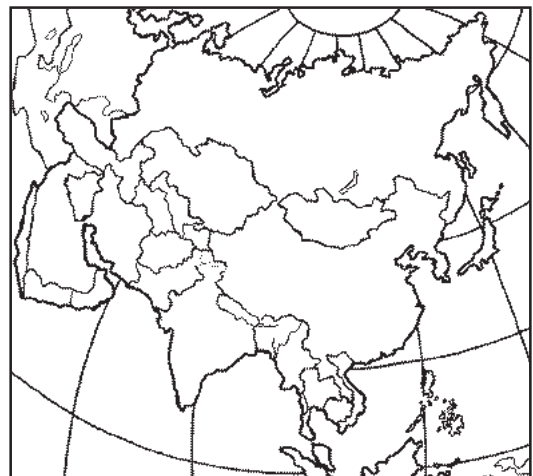
Is the Philippines a continent? \_\_\_\_\_



The Philippines is not a continent. It is a country made up of a group of small land masses surrounded by water called **islands**. This is why the Philippines is called **Philippine Islands**. It is made up of **7,107 islands** in all. A group of islands is called an archipelago.

If the Philippines is not a continent, to what continent does it belong? \_\_\_\_\_

The Philippines is found in Asia, the world's biggest continent. Asia is also called the **Orient**, because it is found in the east. Locate Asia on your world map. Does the Philippines belong to that continent? The Philippines is sometimes called Pearl of the Orient Seas. Do you know why? If you don't, can you guess why? Ask your Instructional Manager if your guess is correct.



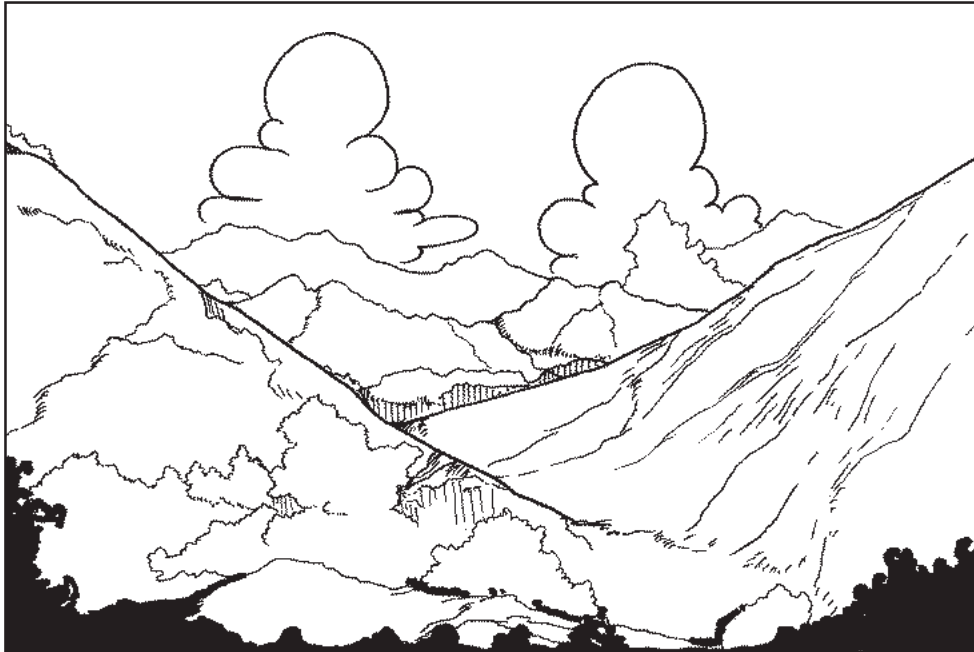
Did you find Asia on the map? Note that the Philippines is a part of the Asian continent, but is separated from other countries by water.

What seas surround the Philippines? \_\_\_\_\_,

\_\_\_\_\_

Refer to the map of the Philippines. The Philippines is surrounded by the South China Sea in the west, Sulu and Celebes Seas on the South and Philippine Sea in the East.

Does the Philippines have mountain ranges?\_\_\_\_\_. Look at the map of the Philippines. See if you find any mountain ranges.



The Philippines, has a mountain range, too. It is not as extensive (large and long) as the mountain ranges in other countries. Do you know this mountain range? If you answered the **Cordilleras**, you are correct! Locate this mountain range on a Philippine map. Trace it with your fingers. In what part of the country is it found?

The Cordillera Mountains are found in Northern Luzon. It is the home of many Philippines tribes such as the Igorots and the Ifugaos. The world famous Banawe Rice Terraces are found here. Did you locate the Cordillera mountain range? In what provinces is it found?

The Cordilleras are found in the provinces of Abra and Mountain Province.

Identify the 3 major Island groups of the Philippines on the map. Were you able to locate Luzon, Visayas, and Mindanao? The islands of Luzon and Mindanao are among the twenty largest islands in the world. Can you name 5 cities found in Luzon?

There are many cities in Luzon. Manila, Quezon City, Tarlac City, Angeles City, Baguio City, and Laoag City are some of them.

Mindanao, too has many cities. Dipolog, Davao, Cagayan de Oro, Butuan and General Santos are some of them. Locate these cities on the Philippine map.

Among the Philippine mountains, **Mt. Apo** is the tallest at 2,954 meters above sea level. It is found in **Davao**, in the island of Mindanao. Mt.Apo is home to the **Manobos**, an indigenous Philippine tribe. It is also the home of the famous and

beautiful **waling-waling orchid** and the **Philippine Eagle**. Point to the location of Davao on your map.



The Philippines also has a lot of rivers and lakes. The most popular river is the **Pasig River**, which runs through the capital city of Manila. Other rivers are: **Cagayan River** and **Pagsanjan River**, both in Luzon. Can you find them on the map? In what provinces are they found?

Among the lakes of the Philippines, Laguna Lake is the most popular. It is found in Luzon. **Lake Buhi** can be found in the Bicol Region. **Lanao Lake** is a major lake in Mindanao. Can you locate these lakes on the map?

There are many small islands in the Philippines that are famous for their natural beauty. **Boracay Island** is world famous for its beautiful white beaches. It is an island belonging to the province of **Aklan**. Another famous island is **Camiguin**, famous for its **Lanzones Festival**. It is found in Mindanao, near Cagayan de Oro City.

There are many other geographical features that the Philippines can be proud of. Some of these are the beautiful **Mayon Volcano** in the Bicol Region, the **Chocolate Hills** of Bohol, **Corregidor Island**, the site of a historical battle and the sand dunes of **Laoag** in the Ilocos Region. Find to these places on your map.



## Let's Think About This

Why is it important to preserve the main geographical features and scenic spots in our country? What can you do to help maintain these places when you go there to visit? \_\_\_\_\_

---

---



## Let's Try This

Fill in the blanks. Choose your answer from among the following:

Eastern

Celebes

Asia

Apo

Archipelago

South China

Asia

Cordillera

Philippine

1. What are the three seas that surround the Philippines?  
\_\_\_\_\_
2. Name the highest mountain in the Philippines. \_\_\_\_\_
3. To what continent does the Philippines belong? \_\_\_\_\_
4. The word orient means \_\_\_\_\_
5. \_\_\_\_\_ is a mountain range found in the Philippines.

Check if you got all your answers correct. Refer to the *Answer key* on page 43. If you got all answers correct, congratulations! You now know the main geographical features of the Philippines.

If you didn't get all items correct, that's okay. All you need to do is to review the items you missed.

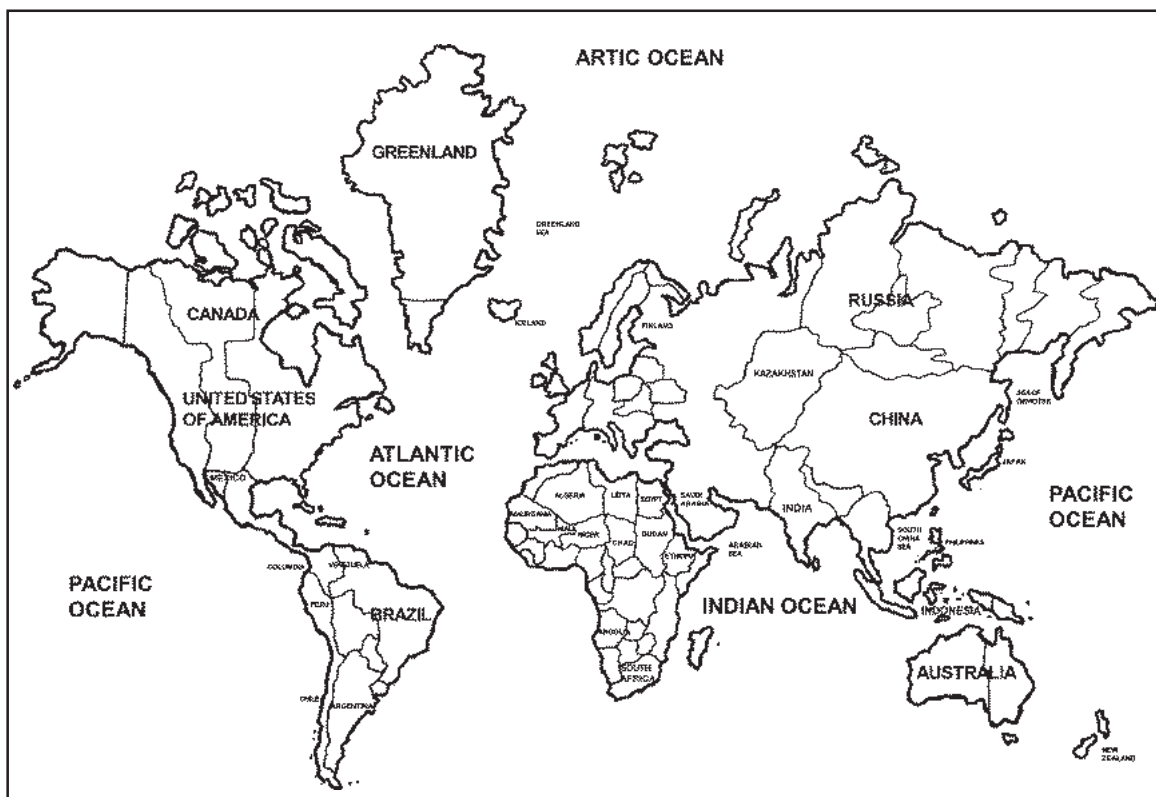


## What Have You Learned?

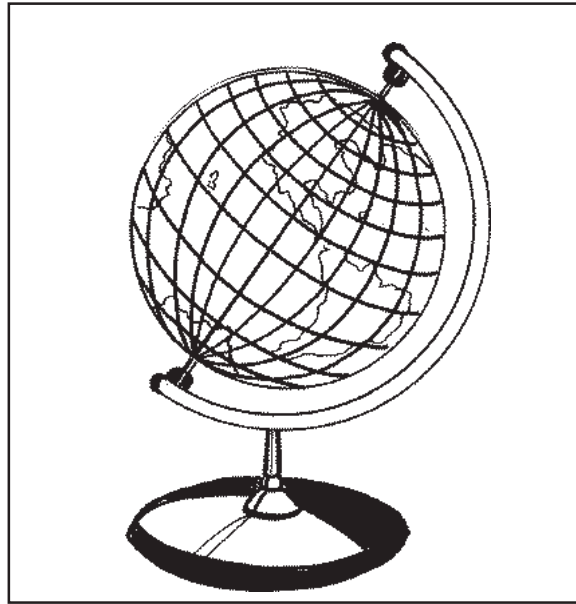
Congratulations! You are now finished studying this module. By this time you already have the needed knowledge and skills for identifying the different key geographical features on the map and on the globe. Test what you have learned by answering the following.

- A. Study the map on the next page. Read each question and look for its corresponding number on the map. Write your answer in the space provided.
1. In which ocean can you find the north pole? \_\_\_\_\_
  2. Name this group of lakes in North America. \_\_\_\_\_
  3. What is South America's most important river? \_\_\_\_\_
  4. Name this important line separating the northern and southern hemispheres. \_\_\_\_\_
  5. What is the name of this mountain range? \_\_\_\_\_
  6. Name the largest ocean in the world. \_\_\_\_\_

7. What ocean is the second largest in the world?  
\_\_\_\_\_
8. Name this city, the largest in Africa. \_\_\_\_\_
9. Name this important sea surrounded by three continents.  
\_\_\_\_\_
10. Name the largest saltwater lake in the world.  
\_\_\_\_\_
11. In which group of mountains can you find Mt. Everest?  
\_\_\_\_\_
12. What ocean is found in South Asia? \_\_\_\_\_



- B. Study the globe below. Look for the numbers on it. Then identify the items numbered 13-16 on the globe. To guide you, read the questions.



13. What do you call the southernmost point on the earth?  
\_\_\_\_\_
14. Name this continent that is also known as the frozen continent.  
\_\_\_\_\_
15. What do you call the lines meeting at the southern end of the earth?  
\_\_\_\_\_
16. What continent is found north of this ocean?  
\_\_\_\_\_

- C. Complete items 17–30 as they appear below. Refer to the globe showing the earth above.

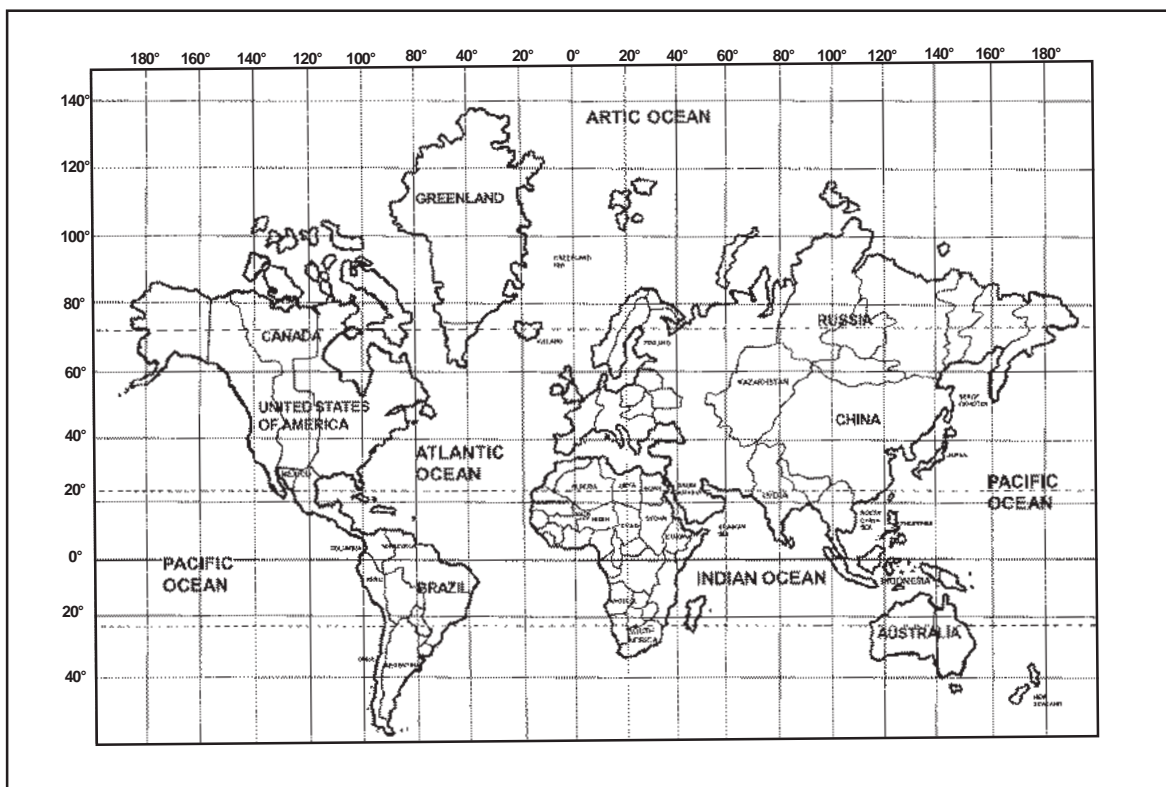
17. What do you call this line in the Pacific? \_\_\_\_\_
18. Name this ocean, the smallest in the world. \_\_\_\_\_
19. What do you call this northernmost point in the world?  
\_\_\_\_\_

20. Use the map on page 39 to find the approximate latitudes and longitudes of the following cities:

- a. Manila: \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
- b. Davao City \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
- c. Rome: \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
- d. Ottawa: \_\_\_\_\_ latitude, \_\_\_\_\_ longitude
- e. Sydney: \_\_\_\_\_ latitude, \_\_\_\_\_ longitude

21. Use the map below to identify the cities near the following coordinates:

- a. 35° North latitude, 140° East longitude: \_\_\_\_\_
- b. 40° North latitude, 77° West longitude: \_\_\_\_\_
- c. 50° North latitude, 5° East longitude: \_\_\_\_\_
- d. 20° North latitude, 120° West longitude: \_\_\_\_\_
- e. 10° North latitude, 124° East longitude: \_\_\_\_\_



Check your answers against those found in the *Answer Key* on pages 44–45. How well did you do? I hope you learned a lot from this module. If you did, congratulations for a job well done!



## Module Summary

In this module on the key geographical features of the world, you learned about the major landmarks and other important features of places on earth.

In *Lesson 1*, you studied how to use a map and a globe. You also studied geographical features such as continents, oceans, seas and other bodies of water.

In *Lesson 2*, you located the equator and the north and south poles. You also learned how to use latitude and longitude lines in locating places in the world.

In *Lesson 3*, you studied the main geographical features and key cities of the Philippines.

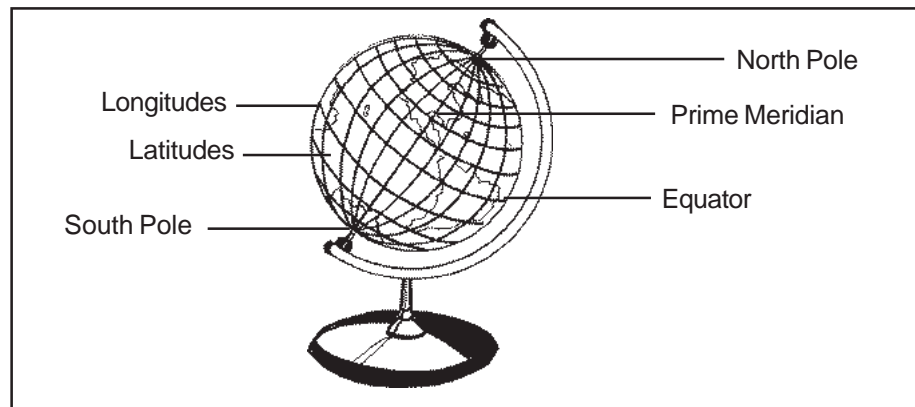


## Answer Key

### A. Let's See What You Already Know (*pages 2–3*)

- A.
1. Asia
  2. Africa
  3. North America
  4. South America
  5. Antarctica
  6. Europe
  7. Australia

B.



- C.
1. Asia
  2. Pacific
  3. Manila
  4. Northern Hemisphere
  5. Eastern Hemisphere

### B. Lesson 2

*Let's Try This (page 11)*

- A.
1. Australia
  2. Antarctica
  3. Asia
  4. Europe
  5. South America
  6. Africa
  7. North America
- B.
1. (You can have any answer for this question).
  2. Better and faster transportation between countries allow these countries to have more interaction with each other, in terms of trade and commerce and sharing of cultures. Better transportation leads to a “global community”.

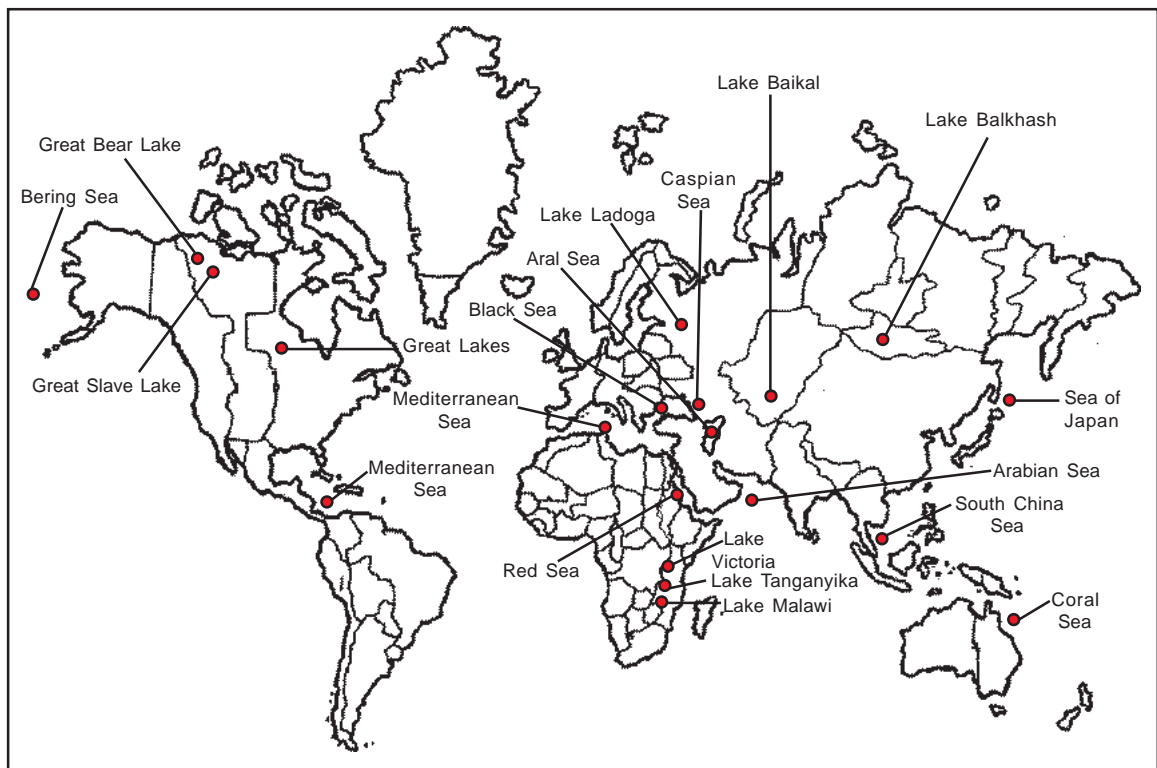


*Let's Try This (pages 14)*

1. Indian Ocean XXX
2. Atlantic Ocean OOOO
3. Pacific Ocean /////
4. Arctic Ocean >>>>>



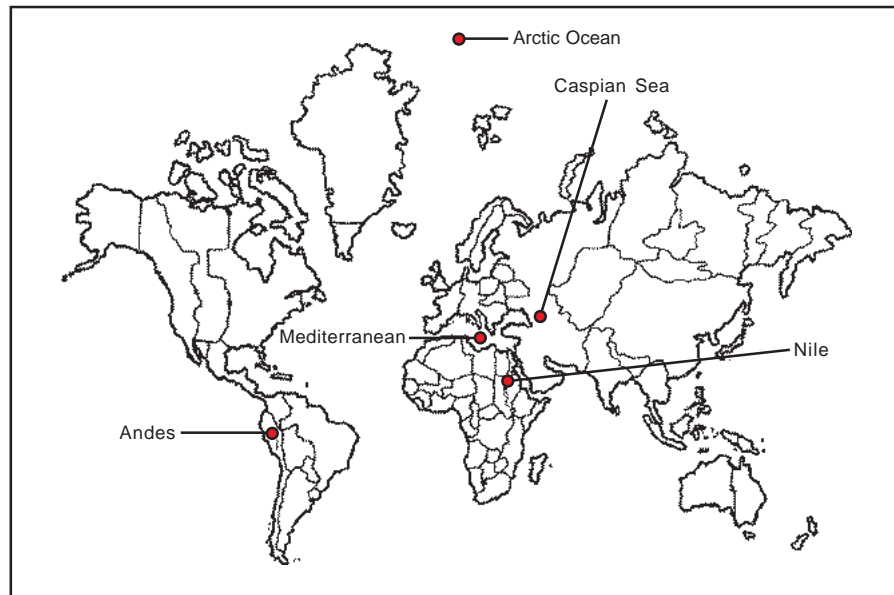
*Let's Try This (page 19)*



*Let's Try This (pages 20–21)*

- A. 1. D
- 2. E
- 3. B
- 4. A
- 5. C

B.



*Let's Try This (pages 21–22)*

- A. 1. Asia
  - 2. Africa
  - 3. North America
  - 4. South America
  - 5. Antarctica
  - 6. Europe
  - 7. Australia
- B. 1. Pacific
  - 2. Himalayas
  - 3. Amazon
  - 4. Great Dividing range
  - 5. Victoria

## C. Lesson 2

*Let's Review (pages 30–31)*

1. North America, Europe, Asia, parts of Africa
2. Australia, Antarctica, parts of Africa
3. South America, Africa, Asia
4. United Kingdom (Greenwich, England)
5. Europe, Africa
6. Arctic
7. Antarctica
8. Earth's Axis
9. North Pole, South Pole
10. Northern Hemisphere
11. International Dateline
12. Eastern Hemisphere
13. 

a. General Santos	6 North latitude, 125 East longitude
b. Cebu City:	10 North latitude, 124 East longitude
c. Puerto Princesa	10 North latitude, 119 East longitude
d. Laoag	18 North latitude, 121 East longitude
e. Batangas City	14 North latitude, 121 East longitude
f. Jolo	6 North latitude, 121 East longitude
14. Use the map on page 30 to identify the cities near the following coordinates:
  - j. 11° North latitude, 122° East longitude: Iloilo City
  - b. 13° North latitude, 123° East longitude: Naga City
  - c. 17° North latitude, 121° East longitude: Baguio City

## D. Lesson 3

*Let's Try This (page 36)*

1. Celebes, South China and Philippine Seas
2. Mt. Apo
3. Asia
4. East
5. Cordilleras

**E. What Have You Learned?** (*pages 36–39*)

- A.
  - 1. Arctic Ocean
  - 2. Great Lakes
  - 3. Amazon River
  - 4. Equator
  - 5. Rocky Mountains
  - 6. Pacific Ocean
  - 7. Atlantic
  - 8. Cairo
  - 9. Mediterranean Sea
  - 10. Caspian Sea
  - 11. Himalayas
  - 12. Indian Ocean
- B.
  - 13. South Pole
  - 14. Antarctica
  - 15. Longitudes
  - 16. Asia
- C.
  - 17. International Dateline
  - 18. Arctic Ocean
  - 19. North Pole
  - 20. Manila: 15 North latitude, 121 East longitude
  - Davao City: 7 North latitude, 125 East longitude
  - Rome: 45 North latitude, 15 East longitude
  - Ottawa: 45 North latitude, 80 West longitude
  - Sydney: 32 South latitude, 150 East longitude
  - 21. 35° North latitude, 140° East longitude: Tokyo
  - 40° North latitude, 77° West longitude: Washington' D.C.
  - 50° North latitude, 5° East longitude: Paris
  - 20° North latitude, 120° West longitude: Taiwan
  - 10° North latitude, 124° East longitude: Cebu City



## Glossary

**Adjacent** close to each other

**Archipelago** groups of islands

**Axis** point of rotation

**Border** marks end of a territory, occupies the edges

**Collide** strike with strong force against each other

**Continents** major land masses

**Crust** outermost layer of the earth

**Depicted** shown, illustrated, presented

**Desert** very dry and warm sandy environment

**Diameter** area covered from one end to another in a circle /sphere

**Equator** line dividing the earth to upper and lower half

**Galleons** old wooden ships used by early traders

**Globe** sphere or ball-shaped representation of the physical world

**Geography** study of the physical features of the world

**Hemisphere** half of a sphere or globe

**Horizontal** flat, sideward direction

**Independent** self governing

**Industrialized** economy is based mostly on non-agricultural production

**Key** important

**Map** flat representation of the physical world

**Migration** movement from one place to another

**Orient** east

**Polluted** damaged, dirtied, made ugly

**Peninsula** large body of land projecting into the sea, or almost surrounded by water

**Sacred** holy, revered, regarded with great respect

**Settlers** first inhabitants, pioneers in a place

**Vertical** upwards or downwards