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About SQ3R ★★★★★★★★★★★★★★★★★★★★

SQ3R is the key to comprehension. The more you know about something before you read it, the better you'll understand it. SQ3R is simple, quick, and efficient.

Study the five steps below.

You will use SQ3R for every section in the book.

SURVEY

Look through the story quickly.
Read the introductory paragraph. Then look at all:

- headings and subheadings
- captions
- pictures
- charts
- graphs
- maps
- highlighted or boldface print

QUESTION

Turn them into questions that may be answered in that section. Then read all the questions at the end of the story. They give clues to the reading content as well. Also scan all documents as well as the questions in the Constructed-Response section.

HINT: Look for the answers when you read the article! In this book read the objective questions (you don't need to read all the answer choices now!)

Research shows:
The more you know about something before you start to read it, the better you will understand it.
Survey and Question will take less than five minutes.

READ

Read content area material slowly. If what you read does not make sense, it means that you might have read something wrong- REREAD.

HINT: *Sometimes it may be necessary to read something 4 or 5 times to understand it.*

RECITE

Summarize what you have read **aloud**. If you cannot retell it in your own words, it means that you did not understand it. REREAD. (It helps to take notes of the facts you have read. It will help you to study for a test later.)

HINT: *Just the act of writing will help you remember the material!*

REVIEW

Several days before a test, review your notes. Try to state the information in your own words. Have someone else ask you questions from your notes. (If you did all the other steps, this one should be the easy part!)

Research shows:
The more senses you use to study something, the better you will learn it. With SQ3R you are seeing, hearing, speaking, and writing (touch).

Unit 1:
Geography and Maps

SURVEY

After surveying this story, I can tell that:

1. A physical map shows a country's _____.
a. borders b. land forms

2. Maps divide the Earth into _____.
a. two hemispheres b. four hemispheres

3. The prime meridian represents _____.
a. 0˚ latitude b. 0˚ longitude

QUESTION

After looking at the objective questions and constructed-response questions, I can tell that:

4. Paul Revere's ride took place in _____.
a. Massachusetts b. New Hampshire

5. Most states in the southeastern part of the United States _____.
a. have very different climates b. have about the same climate

How did you do?
Check the Answer Box to see.

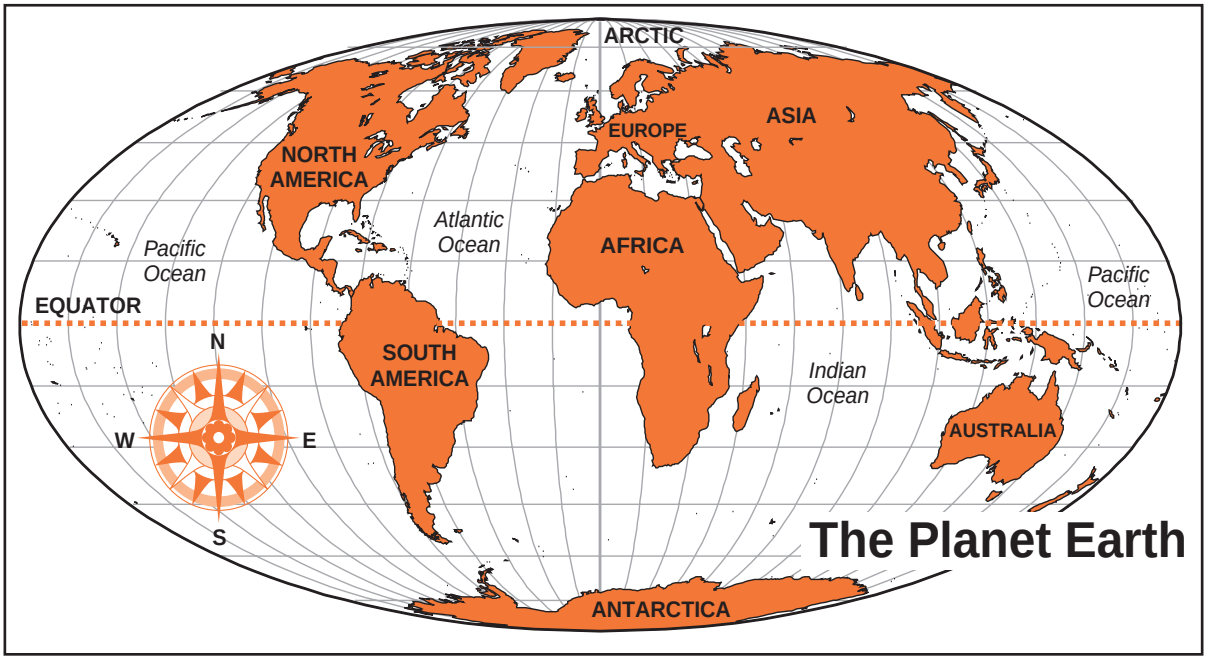
READ

ANSWER BOX

1. A physical map shows a country's land forms.
2. Maps divide the Earth into four hemispheres.
3. The prime meridian represents 0˚ longitude.
4. Paul Revere's ride took place in Massachusetts.
5. Most states in the southeastern part of the United States have about the same climate.

Read the following story carefully. Stop after each section to tell the main idea in your own words.

Geography and Maps



Geography is the study of where places are and what they are like. Since the beginning of time, people have been curious about the world. They also needed to give directions to find new places. This led them to create maps. Globes and maps help us to understand what our planet is like and how to travel around it. Globes are more accurate, but they are more difficult to carry around. In this unit we will take a look at how maps make it easier for us to understand our planet.

The first thing you will notice on this map is lots of white space. Four huge bodies of water, the Atlantic, the Arctic, the Indian and the Pacific **Oceans** cover a large area of the Earth. The next large areas are masses of land called **continents**. Earth has seven continents: Africa, Antarctica, Europe, Asia, Australia, North America, and South America. As the world population grew, people lived together in neighborhoods. Then they established cities. Finally families and people who spoke the same language formed countries. Continents are made up of the countries.

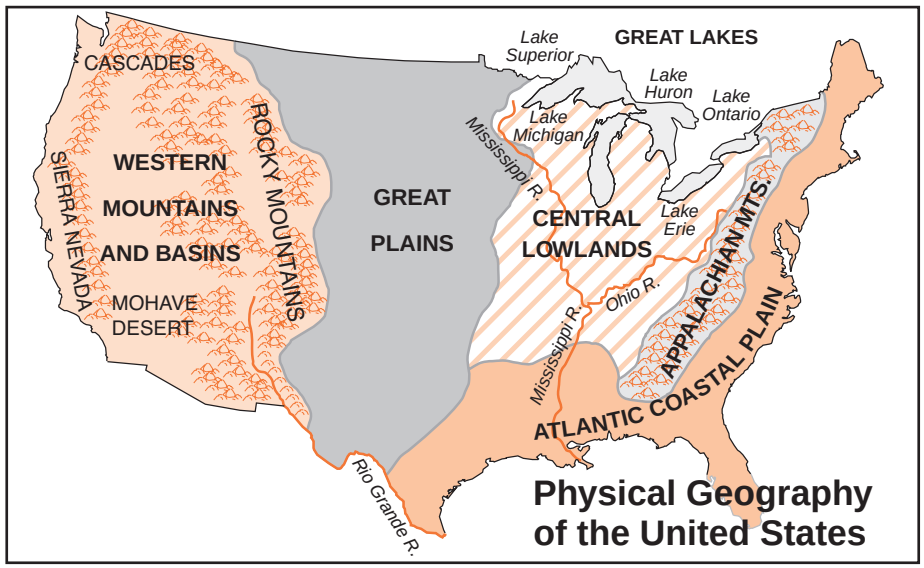
The Geography of the United States

The United States is a very large country. It reaches from the Atlantic to the Pacific and from Canada to Mexico. Let's divide it into five sections to learn about its physical geography.

Mountains and basins cover the western **region** of the country. The Rocky Mountains, the Sierra Nevada Mountain Range, and the Cascades dip into deserts, such as the Mohave Desert and dry basins, or very low lying areas.

East of the Rockies, the land spreads out in the **Great Plains**. Dry, hilly farm and grassland stretch from Canada to Mexico. They extend hundreds of miles east of the mountains to the Mississippi River.

The Central Lowlands, sometimes called the breadbasket of the United States, produce huge amounts of crops. The land is flat and covered with grasslands used for farming.



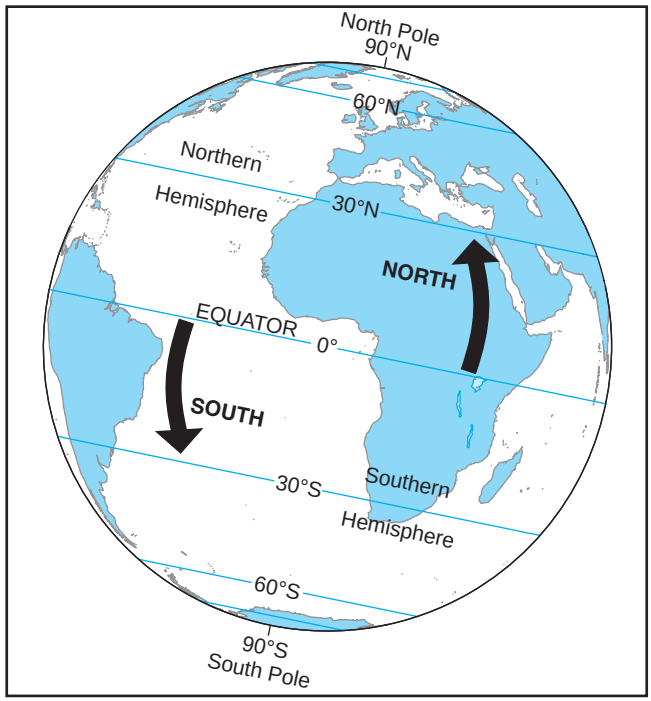
To the east, the tree-covered Appalachian Mountains rise along the eastern United States, from north to south. The Appalachians are not as high as the Rockies. However, hiking and driving trails draw visitors to this scenic place.

The Atlantic Coastal Plain starts at the Gulf of Mexico, south of the Central Lowlands. This low, fertile area curves around from Texas and up the Atlantic seaboard to Maine. The United States has rich and varied **landforms**. Picturing the five sections makes it easy to remember them.

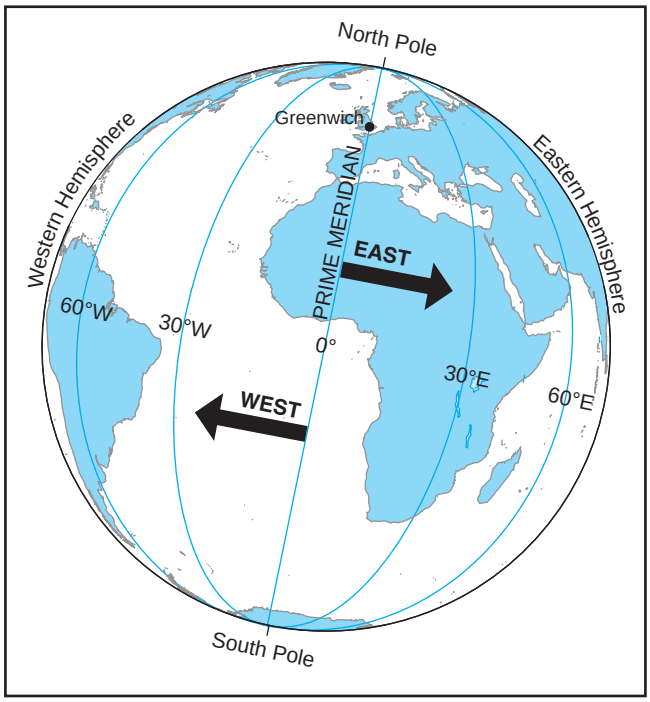
How to Read Maps

Maps divide the world into four **hemispheres**. The **equator**, an imaginary line, circles the earth like a belt. It is the most important **latitude** line. The land north of the equator is in the **Northern Hemisphere**. The United States is located in the Northern Hemisphere. The land south of the equator falls in the **Southern Hemisphere**. To locate the latitude of a place, measure how far north or south of the equator it is.

The equator is at 0 **degrees** (0˚). The imaginary lines going north are measured 30 degrees apart. So the equator is at 0 degrees and the North Pole is at 90 degrees North (90˚N). The same thing happens going south. The equator is at 0 degrees and the South Pole is at 90 degrees South (90˚S). These lines are always



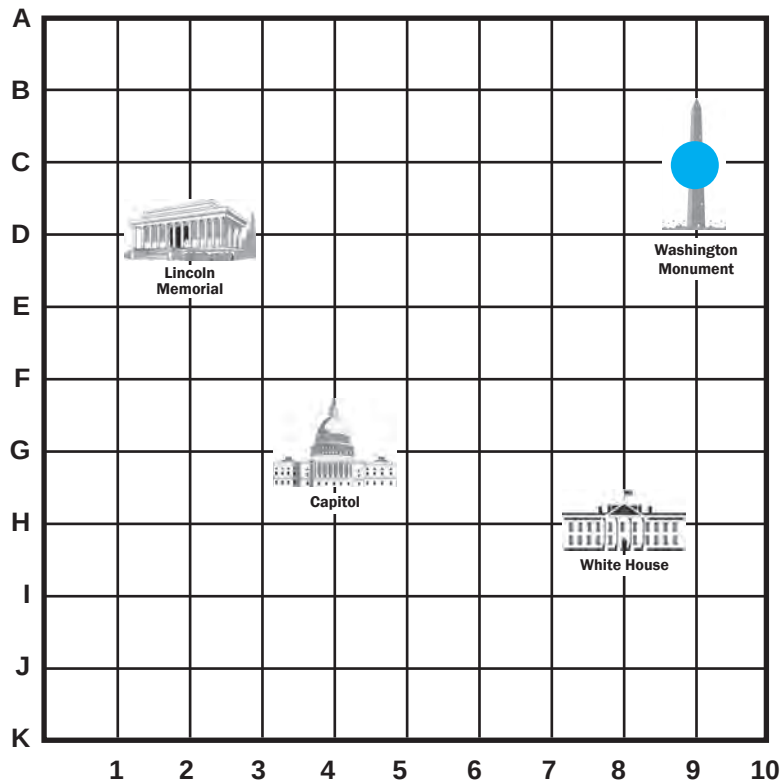
Lines of Latitude



Lines of Longitude

parallel. That means they are always the same distance apart.

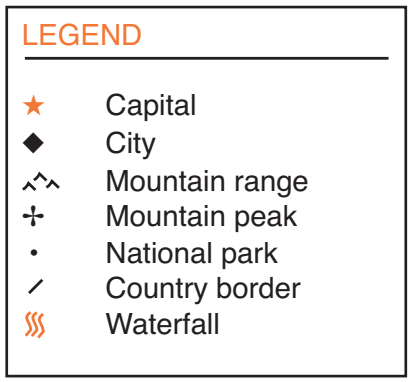
Maps also use an imaginary line to divide the Earth from top to bottom. This imaginary **longitude** line is called the **prime meridian**. It divides the world into the **Eastern Hemisphere** and **Western Hemisphere**. We live in the Western Hemisphere. Longitude lines are used to measure distance east or west of the prime meridian, which is at 0 degrees (0˚). The starting line runs from the North Pole straight through Greenwich, England, down to the South Pole. Longitude lines go east and west around the globe until they reach 180 degrees (180˚) in the middle of the Pacific Ocean. The longitude, or **meridians**, to the west of the prime meridian, go up to 180 degrees and are labeled W for west. The lines going east are labeled E. You will find Central Park in New York City at 40˚N (40 degrees north latitude) and 79˚W (79 degrees west longitude). Always give latitude first and longitude second. Longitude lines are not parallel. They are far apart at the Equator, but they all meet at the Poles.



Grids Divide Maps into Small Boxes

A map may use a **grid**, lines that divide it into little boxes. It helps you find directions as well as locations. Along the top or bottom of the map are letters on each line. Down the side of the map each line may be numbered.

Let's say that you are touring Washington, D.C. First, you want to visit the Washington Monument. Move one finger down the side of the map to C. Then move across the C line to the spot where line 9 crosses the C line. You have found the Washington Monument at C9. At what point on the map will you find the Capitol Building? The White House? The Lincoln Memorial?



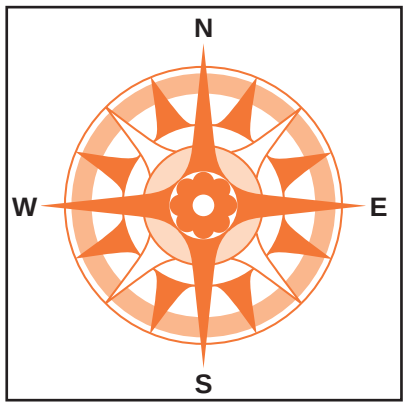
A legend is a list that explains symbols used on a map.

Symbols Explain Information on a Map

All maps need a **legend** or a **key**. Mapmakers use **symbols** to squeeze lots of information into a small space. Some symbols look just like the thing they represent. A small tent shows the location of a campsite. Other symbols may be just a letter or a line. A legend, or a key, explains the symbols used in a map.

On a map, north, south, east, and west are called **cardinal directions**. On some maps, a **compass rose** is used to show directions. North is always at the top.

A **scale** makes it possible to show large areas on maps. In a corner of the map, a line 5 inches long may represent 500 miles.

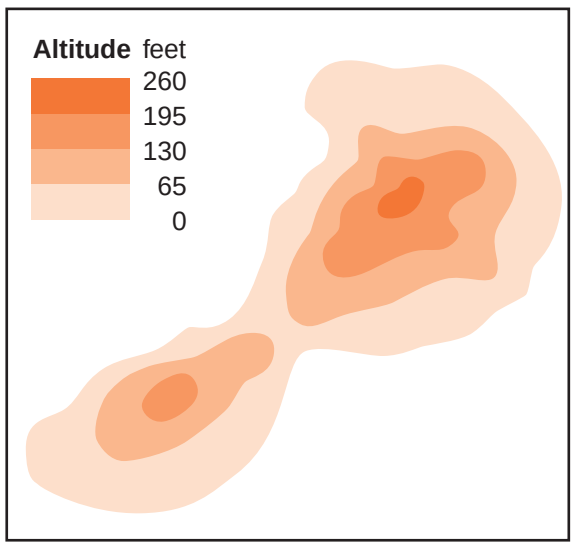


A compass rose shows directions on a map.

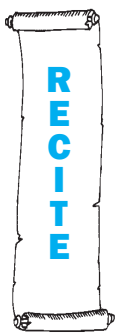
Kinds of Maps

Physical, or topographic maps show natural land, mountain, and water forms (see page 3). **Political maps** indicate the borders of countries, cities and towns (see page 234). Political maps change when boundaries change. Special purpose maps include natural resource maps, product maps, population maps, road maps, flight maps, and so on.

Relief maps show types of terrain. They show the depths of valleys, the heights of mountains, and the length of rivers. **Cartographers**, or map makers, use **contour lines** to show height. They also use colors or short lines to show the height of mountains.



Cartography may show height above sea level (elevation) with contour lines like those shown in this picture.



Name five aids that help you read maps.

Terms to Remember

The following names, places, and words about geography are important to remember. Study them carefully. The sentences will help you understand their meanings.

Test Yourself. Cover the Definitions column and tell the meaning in your words. Next cover the Terms column and do the opposite.

TERM	DEFINITION	SENTENCE
cardinal directions	north, south, east, west directions	The compass rose shows the **cardinal directions**.
cartographer	a map maker	Explorers buy maps made by excellent **cartographers**.
compass rose	a small drawing on a map that shows directions	A **compass rose** indicates the cardinal directions on a map.
continent	one of Earth's seven great bodies of land	Antarctica is the coldest **continent**.
contour lines	shows heights of land	**Contour lines** often have colors to show different heights of land.
degrees	a unit for measuring distance on the Earth's surface	The symbol ° stands for **degrees**.
Eastern Hemisphere	the half of the earth that lies east of the prime meridian	Asia is in the **Eastern Hemisphere**.
equator	an imaginary circle around the Earth, dividing it into equal halves	The **equator** is at 0°latitude.

TERM	DEFINITION	SENTENCE
geography	the study of Earth and the way people, plants, and animals live on it	People need map skills to study **geography**.
Great Plains	a large area of flat land	The **Great Plains** is a good location to farm.
grid	the crisscrossing lines drawn on a map	Any point may be found on a map **grid** by locating where the letters and numbers cross at that point.
hemisphere	the Northern or Southern half of the Earth divided by the equator; or the Eastern or Western half divided by the prime meridian	North America is in the Northern and Western **hemispheres**.
landform	any of the shapes that make up Earth's surface	The Rocky Mountains are a **landform** in the United States.
latitude	imaginary parallel lines that run east and west on a map	Distances north and south of the equator are shown as lines of **latitude**.
legend or key	an explanation of what the symbols on a map represent	Check the **key** to see what figures on a map mean.
longitude	imaginary lines that run north and south on a map	Distances east and west of the prime meridian are shown as lines of **longitude**.
meridians	another name for lines of longitude	**Meridians** are not parallel; they meet at the North Pole and the South Pole.
Northern Hemisphere	the half of the earth that lies north of the equator	The United States is a country in the **Northern Hemisphere**.
ocean	body of water	The Atlantic, Pacific, Indian, and Arctic **Oceans** cover much of the Earth.

TERM	DEFINITION	SENTENCE
physical map	a map that shows natural land and water forms	A **physical map** shows rivers and mountains.
political map	a map that shows boundaries of states and countries	Check a **political map** to find out where New York is located.
prime meridian	the meridian at 0˚	The **prime meridian** is the first place to start measuring longitude.
region	an area that has features different from other areas	The Northeast, Southeast, Midwest, Southwest, and West are the five **regions** of the United States.
relief map	a map that looks like a picture taken from above	A **relief map** is a kind of physical map.
scale	the relationship between the distance shown on a map and the distance on Earth	**Scale** is a method by which larger distances are shown by smaller distances.
Southern Hemisphere	the half of the earth that lies south of the equator	Australia is a continent in the **Southern Hemisphere**.
symbol	a figure that stands for something else	A small triangle on a map may be a **symbol** of a camping ground.
Western Hemisphere	the part of the earth that lies west of the prime meridian	The United States lies in the **Western Hemisphere**.

Objective Questions

Circle the correct answer choice for each question.

If you don't recall the information asked for, quickly scan the story. Look at the headings and pictures to help you find the section quickly. Then reread that part. (You can also check the Terms to Remember!)

1. To find the distance between places on a map, look at:
a. the prime meridian b. the scale
c. the map symbols d. the caption

2. A compass rose is used to:
a. draw circles b. tell the height of the land
c. locate directions d. measure scale

3. Which of the following statements is a true fact about lines of latitude?
a. They are always parallel.
b. They meet at the North and South Poles.
c. They include the prime meridian.
d. They are not imaginary.

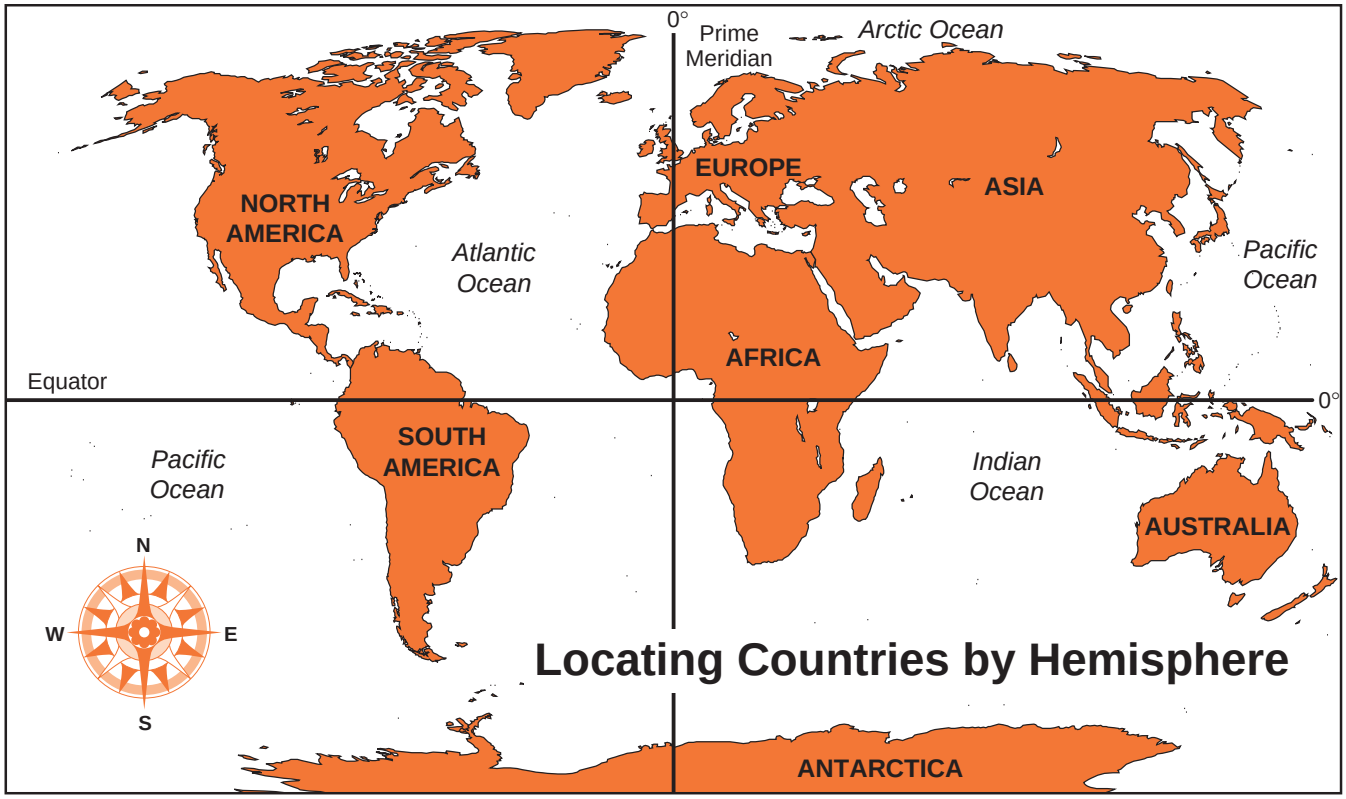
4. On a map, 40˚ North and 80˚ West refers to:
a. altitude and elevation b. temperature
c. land formations d. latitude and longitude

5. The Great Lakes are found in what region?
a. the Great Plains
b. the Central Lowlands
c. the Appalachian Mountains
d. the Cascade Mountains

Objective Questions

6. A legend on a map tells you about:
a. map directions b. map mileage
c. may symbols d. map size

Base your answers to questions 7 through 9 on the map below.



7. Which continent is located in both the Northern and Western Hemisphere?
a. Antarctica b. Asia
c. North America d. Australia

8. Which statement below is NOT correct?
a. The continent of Asia touches three oceans.
b. The continent of North America touches the equator.
c. Parts of Africa are in the Eastern and the Western Hemispheres.
d. The continent of Australia is in the Southern Hemisphere.