

Refresher Course

CHAPTER 2

DEFINING GEOGRAPHY

Singing the “Where In the World Is It Geography Blues”? Then this section is just for you! Some information is elementary, so if you feel completely confident about your ability to teach geography, go ahead and skip it. The rest of you take heart—it’s not as confusing as it seems! This chapter will help to set some basic facts in order. There are a lot of vocabulary words here, so pay close attention if they’re unfamiliar to you. Listen up, teachers—there’ll be a test at the end of this unit!

What’s the first thing you think of when you hear the word “geography”? Maps? Globes? Carmen San Diego? You’re not alone—those are the three most common responses in our geography seminars!

What is geography, anyway? Maybe this definition from the National Geographic Society will help:

Geography: A knowledge of place names, location of cultural and physical features, distribution and patterns of languages, religions, economic activities, population and political systems. Physical regions and physical phenomena, such as tectonic activity, land form, climate, bodies of water, soils and flora and fauna. The changes in places and areas through time, including how people have modified the environment. Cartographers’ tools, such as maps, instruments, graphs and statistics, are also a part of geography.

Wow! Maybe a better question might be “What isn’t geography?”

The word “geography” is from the Greek word *geographia*, meaning “writing about the earth.” The word “earth” used here is all inclusive regarding people, places, and the relationships between people and the places where they live and interact. So first and foremost, throw out the thought that geography is simply knowing countries and capitals!

Geography can be broken into two main divisions: geography of the earth (physical geography) and geography of people who live here (human geography).

PRINTABLE PAGES

Geography Terms Flash Cards



High school students should read this refresher course chapter in conjunction with the high school geography chapter.





- **Physical Geography**
 - The Earth in Space
 - Time Zones
 - Climate Zones
 - Globes, Maps, Atlases
- **Human Geography**
 - Race
 - Nationality
 - Language
 - Religion
 - Government
 - Culture

- **Physical Geography** includes everything about the earth itself; its make-up, its position, and its movement in the solar system, the moon, seasons, its heat energy from the sun, the atmosphere, all natural features of the earth, water, rocks (geology), weather patterns and other natural processes that shape the world. See how this is intertwined with science?
- **Human Geography** is all about human lifestyles, beliefs, growth and development, the interactions of people to the earth itself and with other peoples who dwell here. It's understanding where people live and why they live where they do, how they communicate, what they eat, how they dress, how they use their resources, how communities develop, and how people impact their own environment. It's all about how these choices are related to the physical geography of the earth.

After going over some basics in these two groups, you'll begin to fill the gaps in your own foundation of geography.

PHYSICAL GEOGRAPHY

Space

Let's start with basics about our planet and the solar system that is home to the earth. Earth is the third planet of nine in the solar system located in the Milky Way Galaxy. It's the only planet in this system known to support life. The Milky Way Galaxy is a gravitational spiral nebula made up of over 200 billion stars. It's so large it would take light 100,000 years to travel from one end to the other. The Milky Way is one of millions of known galaxies in the universe. The center of the solar system—the sun—is 109 times larger than the earth; its farthest planet is over 3.5 billion miles away.

The earth is almost 93 million miles from the sun, and travels in an elliptical path around it at about 66,700 miles per hour while spinning on its axis more than 1,000 miles per hour at a 23.4° tilt! Whew! It takes the earth 365.25 rotations on its axis to make one complete trip around the sun. This orbit and the earth's tilt produce the different seasons and variations in daylight hours.

Hemispheres

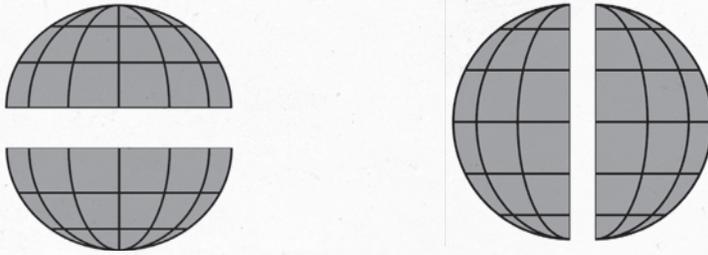
To make it easier to study geography and locate places, the earth is divided into **hemispheres**. The imaginary line running horizontally around the broadest part of the sphere, called the



Amazing but True

One out of every four adult Americans believe the earth travels around the sun once a day! Hang onto your hats!

equator, divides the earth into **Northern Hemisphere** and **Southern Hemisphere**. The circumference of the earth at this point is 24,901 miles.



Another imaginary line runs around the earth perpendicular to the equator and through both north and south poles. Its circumference is 24,855 miles. This divides the earth into the **Eastern Hemisphere** and the **Western Hemisphere**. The Western Hemisphere is commonly defined as North and South America. Now you know why Americans live in the “West,” and you can guess why the “Far East” is called the Far East!

Summer Solstice and Winter Solstice

During that 66,700 mile per hour trip whirling around the sun, the different positions of the earth in relationship to the sun causes seasons and varies the length of days.

In June, the Northern Hemisphere is tilted toward the sun, where it receives the most direct rays. On June 21st, the **Summer Solstice** occurs, marking the first day of summer when the Northern Hemisphere experiences the longest day of the year in sunlight hours. The sun is directly overhead at noon at 23.5° north of the equator. Geographers have marked this with an imaginary line running parallel to the equator and have named it the **Tropic of Cancer**.

Have you ever wished you had more hours in your day? Plan a trip north of the Arctic Circle during the Summer Solstice and you can! That’s right—the sun doesn’t seem to set for a full day, and when it does, it’s back in a flash until the Northern Hemisphere’s position in its orbit around the sun is no longer tilted directly at the sun. Have you ever heard Alaska referred to as the “Land of the Midnight Sun?” Now you know why!

Imagine what’s happening in the Southern Hemisphere at the same time. It’s tilted AWAY from the sun. Winter! Another interesting thing takes place at this time. Maybe you’ve guessed it already...places below the **Antarctic Circle** are experiencing night all day long! If you got up at sunrise there, you’d be sleeping all day.

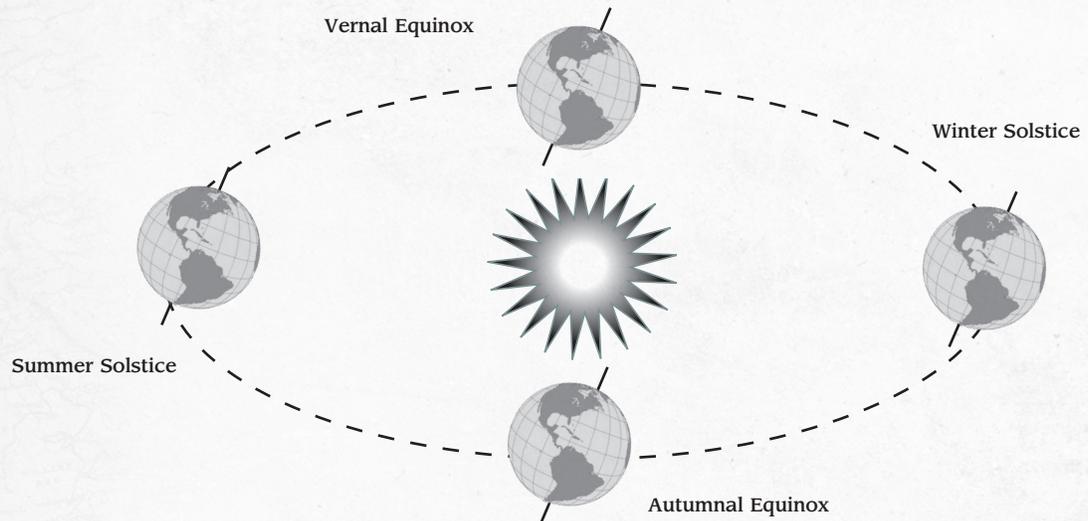


GeoBit Says:

Geo-nuts may have already noted the earth isn’t exactly spherical in shape, or both circumferences mentioned would be the same. The earth is actually a sort of flattened sphere, bulging at the equator. Although this shape is more accurately termed a “geoid,” for the sake of simplicity it’s commonly referred to as a “sphere.” (But feel free to add this to your Scrabble arsenal!)



Now, if you followed the description of the Summer Solstice, the **Winter Solstice** will be a breeze! Imagine the earth six months later, in December. It's at the farthest distance of its rotation around the sun, and the tilt of the Northern Hemisphere is 23.5° away from the sun. The noon sun is directly overhead at 23.5° south of the equator, and the night hours outnumber the daylight. It's now winter, the shortest day of the year, the Winter Solstice.



This location (23.5° South) is marked on the globe by geographers with a horizontal line running parallel to the equator, and is named the **Tropic of Capricorn**. While the people in the Northern Hemisphere are shoveling snow and skiing in the mountains, those in the Southern Hemisphere are basking in the sun on sandy beaches sipping kiwi juice. Now the long daylight hours are experienced by people living south of the Antarctic Circle, while north of the Arctic Circle it's a twenty-four hour night. (Time for a nap!)



GeoBit Says:

Does anyone REALLY live below the Antarctic Circle? Only scientists live in Antarctica.

Equinoxes

The length of day and night is always equal at the equator, but as you can see it varies elsewhere, according to the position of the earth's orbit around the sun. There are two times when daylight and nighttime hours are equal everywhere else on the globe. One is in the fall, when the noon sun is directly overhead at the equator. This marks the beginning of autumn and is aptly named the **Autumnal Equinox**. Likewise, six months later the direct rays of the sun again hit at the equator, marking the beginning of spring. This is called the **Vernal Equinox**. Consider yourself educated!