

[PDF File](#)

## Course Overview

Welcome to Social Studies 160! In this course, you will focus on the people and places of the Eastern Hemisphere, including Asia, Africa, Australia, and Europe. You will also learn about the unique, early civilizations that developed in these regions and their enduring impact on the modern world. How do the people of the Eastern Hemisphere govern themselves? How does the movement of people, products, and ideas from one part of the globe to another affect their lives? You will also study your role as a consumer in a market economy along the effects of scarce resources, competition, supply, and demand. Let's get started!

## UNDERSTANDING THE GLOBE



*Globe Showing the Eastern Hemisphere on the Right*

## Unit Overview

Because this course emphasizes the Eastern Hemisphere, it is important to know exactly what this term means. We begin by looking at the globe, one of the most important geographic tools. You will see how cartographers divide the world into hemispheres by using two sets of imaginary lines. They use these same lines to create addresses that help us to find countries, cities, and landmarks easily and efficiently. Let's see how it all works!

## Longitude and Hemispheres

You will spend much of your time in this course learning about the people and places located in the Eastern Hemisphere. Where is the Eastern Hemisphere? What regions of the world does it include? An easy way to understand what we mean by the Eastern Hemisphere is to look at a **globe**. **Hemisphere** comes from Greek words that mean *half of a sphere*. In this case, the sphere is a representation of the Earth, or a globe. A globe shows us the location of places on the Earth. It is one of many **geographic tools** that we use to gather information about places, people, and environments. Globes come in a wide variety of sizes and styles. Today, they also are found in virtual forms, such as the one pictured below. It was created through computer software developed by the National Aeronautics and Space Administration (NASA).

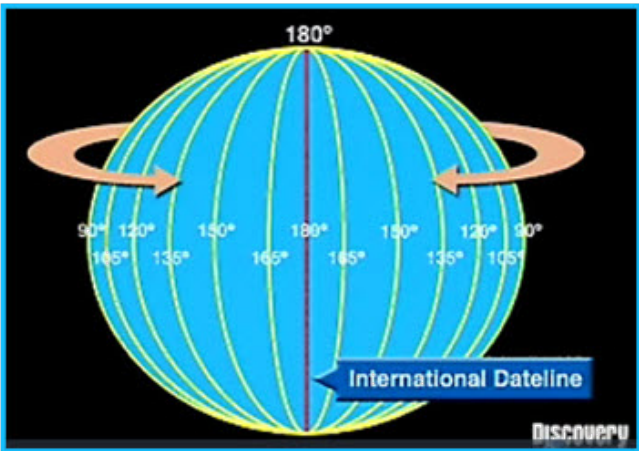
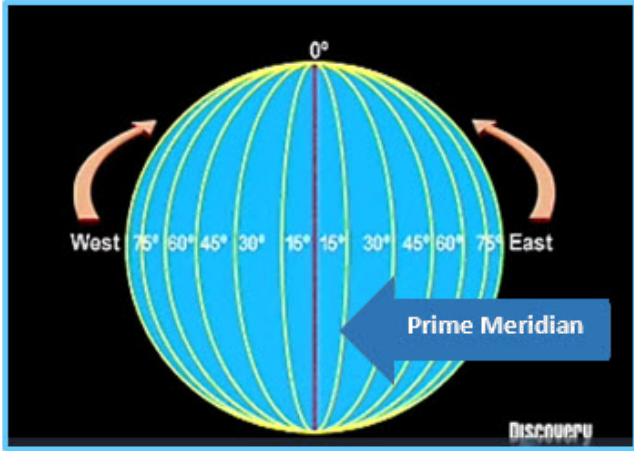


To locate places accurately, map-makers, also called **cartographers**, developed a system of imaginary lines that crisscross globes and maps. The lines that run up and down between the North and South Poles are known as **lines of longitude**. They are also called **meridians**, and the distance between them becomes smaller in the areas closest to the Poles. One line of longitude is marked at zero degrees ( $0^\circ$ ). This is the **Prime Meridian**. Because the Prime Meridian passes close to Greenwich, a town just outside of London in the United Kingdom, it is sometimes called the **Greenwich Line**.

All lines of longitude west (left) of the Prime Meridian are numbered from  $1^\circ$  to  $179^\circ$  and are followed by a W. This part of the Earth is the **Western Hemisphere**. The United States,

Canada, and Mexico are some of the countries located here. All lines of longitude east (right) of the Prime Meridian are numbered from 1° to 179° and are followed by an E. This part of the Earth is the **Eastern Hemisphere**. China, India, and South Africa are some of the countries located here.

### Major Lines of Longitude



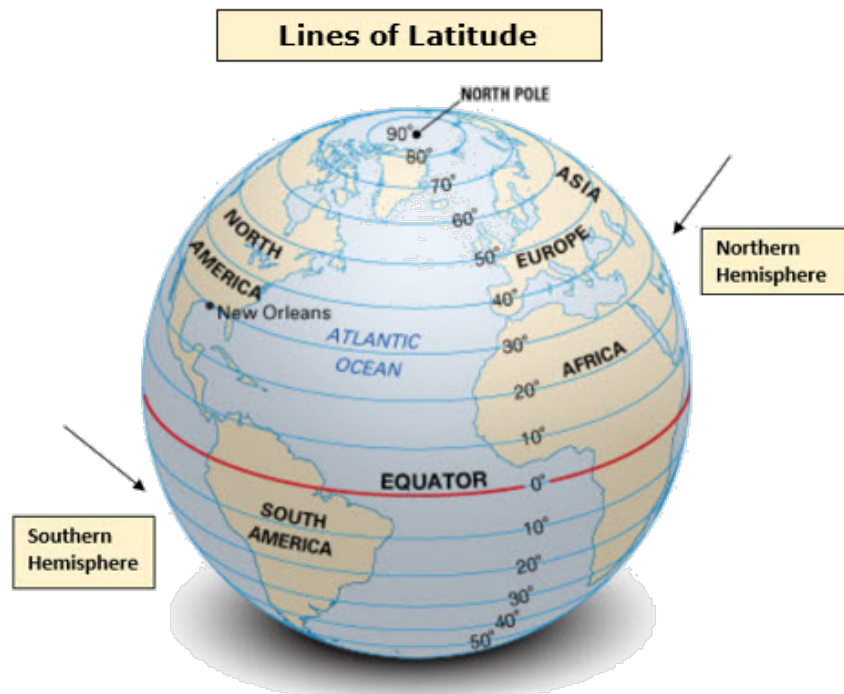
The Eastern and Western Hemispheres extend in opposite directions from the Prime Meridian for 179° to the other side of the globe. At 180°, there is a line of longitude, which runs mostly over the Pacific Ocean between the North and South Poles. It is called the **International Dateline**. Unlike other meridians, it is not labeled with a W or an E. If you travel east across the Eastern Hemisphere and cross the International Dateline, you will find yourself in the Western Hemisphere. If you continue in the same direction until you cross the Prime Meridian, you will re-enter the Eastern Hemisphere. The section of a globe pictured below will give you an idea of the wide variety of lands and people that make up the Eastern Hemisphere.

## Countries in the Eastern Hemisphere



## Latitude and Hemispheres

Cartographers developed another set of imaginary lines that form circles around the Earth from east to west. These are called **lines of latitude**. The most important line of latitude is the **Equator**. Picture it as a belt that ties at the Earth's waist. It is located halfway between the North and South poles and is designated as  $0^\circ$ . Other lines of latitude are labeled from  $1^\circ$  to  $90^\circ$  as they move away from the Equator toward the poles. Because they are parallel to the Equator, lines of latitude are also called **parallels**. Cartographers label parallels north of the Equator with an N and those south of the Equator with an S. The region above (north) the Equator is referred to as the **Northern Hemisphere**, while the region below (south) the Equator is referred to as the **Southern Hemisphere**.

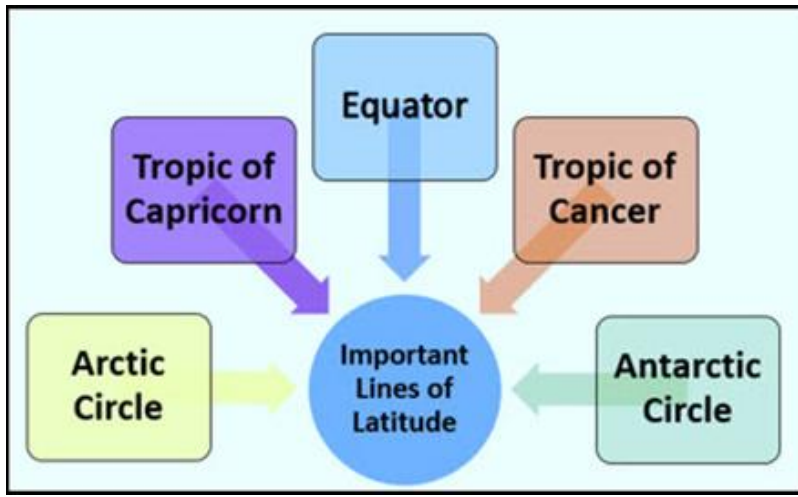


Along with the Equator, there are four additional lines of latitude that are important. They not only help us to locate places but also tell us what to expect in terms of the weather, the hours of sunlight, and seasonal changes.

- **The Tropic of Cancer:** The Tropic of Cancer is located  $23\frac{1}{2}^{\circ}$  north of the Equator. It is the northernmost point that the sun appears directly overhead. Once a year, the Sun shines directly over this imaginary line. When this happens, it is the first day of summer in the Northern Hemisphere and the first day of winter in the Southern Hemisphere.
- **The Tropic of Capricorn:** The Tropic of Capricorn is  $23\frac{1}{2}^{\circ}$  south of the Equator. Like the Tropic of Cancer, it is named for a constellation. The Tropic of Capricorn is the southernmost point that the sun appears directly overhead. Once a year, the sun shines directly over this imaginary line. When this happens, it is the first day of winter in the Northern Hemisphere and the first day of summer in the Southern Hemisphere.
- **The Arctic Circle:** The Arctic Circle is located  $66\frac{1}{2}^{\circ}$  north of the Equator. When it is winter in the Northern Hemisphere, the sun does not rise here, but it shines continuously during the summer.
- **The Antarctic Circle:** The Antarctic Circle is located  $66\frac{1}{2}^{\circ}$  south of the Equator. When it is winter in the Southern Hemisphere, the sun does not rise here, it but shines continuously during the summer.

The lands between the Tropic of Cancer and the Tropic of Capricorn are known as the **tropics**. They experience very warm temperatures and little seasonal change throughout the

year. Although areas within the Arctic and Antarctic Circles also experience little in the way of seasonal change, they are subject to very cold temperatures year round.



## Locating Places on the Globe

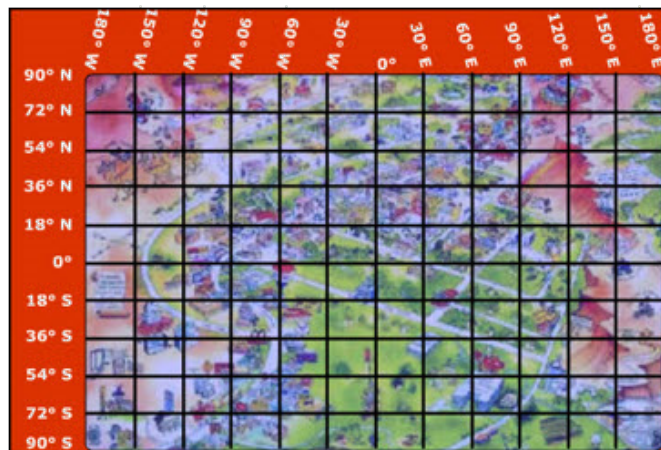
The main purpose of a globe is to show where things are on the Earth. One way to describe the location of a place is to compare it to somewhere that you already know. You can then note that it is north, south, east, or west from a certain point. These types of directions are known as **cardinal directions**, and they are the most common way to explain a location. Globes and maps usually include a **compass rose**, like the one pictured below, for this reason. This compass rose also includes **intermediate directions**, such as northeast, southeast, southwest and northwest. For example, if someone asked you for directions to the nearest public library, you might tell them to turn left at the next traffic light and to continue walking three blocks south. This kind of description is called **relative location** because you related them to, or based them on, the person's current location. On a bigger scale, if a friend asked you to help him find Mexico on the globe, you would probably remind him that it is south of the United States.

**Example of a  
Compass rose**



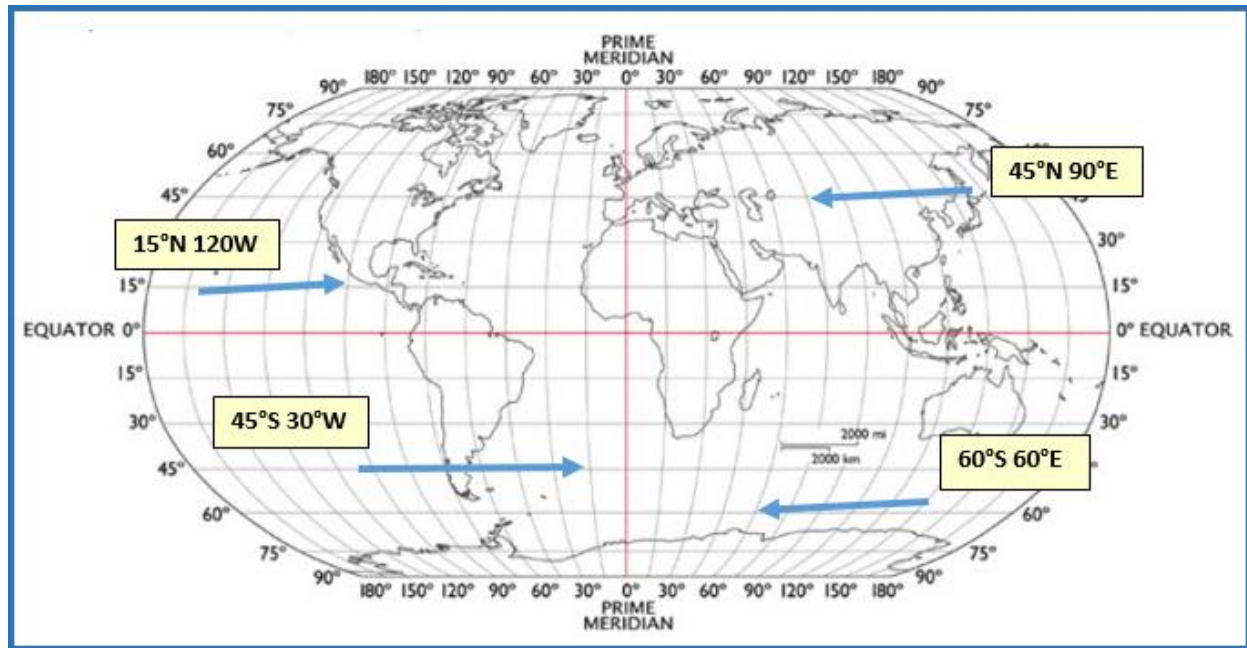
When American students study the Western Hemisphere, they already know where many major cities, rivers, and landforms are. However, in this course, you will be studying regions located in the Eastern Hemisphere. It is likely that you will be looking for cities and countries whose names you may not recognize. This makes it difficult to rely on relative location. Fortunately, geographers have developed a system that gives us an exact address, or **absolute location**, of every place on the Earth. Remember—the imaginary lines of longitude and latitude crisscross to create a **grid** on the globe. The graphic below is an example of a grid. By clicking on it, you can play a simple game to see how the lines are used to pinpoint specific locations.

**Click on the graphic below to  
play the Coordinates Game**



Lines of longitude run from pole to pole beginning at the Prime Meridian. Lines of latitude circle the globe fanning out from the Equator. The absolute location of any place on the planet can be identified by the position where a parallel of latitude and a meridian of longitude meet.

The numbers of these lines make up the **geographic coordinates** that identify specific locations on maps and globes. In other words, they represent addresses and direct us to exact sites, just as house numbers and zip codes do. Geographic coordinates begin with the number of a parallel followed by N for north or S for south. The other half of the coordinate is the number of a meridian followed by E for east or W for west. Study the examples below.



Now, let's look at some examples on a map that displays oceans and continents along with lines of longitude and latitude. If you wanted to swim in the Pacific Ocean, which of these coordinates on the map below indicate the better location-- $40^{\circ}\text{S } 140^{\circ}\text{W}$  or  $40^{\circ}\text{N } 100^{\circ}\text{E}$ ? If you said  $40^{\circ}\text{S } 140^{\circ}\text{W}$ , you are correct! The other coordinates would be a good choice if you wanted to hike across the continent of Asia. How about a swim in the Atlantic Ocean— $40^{\circ}\text{N } 60^{\circ}\text{W}$  or  $0^{\circ} 60^{\circ}\text{E}$ ? If you chose the first coordinates, you are right! You would find yourself swimming in the Indian Ocean if you chose the second pair. If you travel to  $80^{\circ}\text{S } 80^{\circ}\text{E}$ , should you take coats and boots or shorts and flip-flops? Since these coordinates place you in Antarctica, you definitely want your cold-weather gear here. Save the beach wear for  $20^{\circ}\text{N } 80^{\circ}\text{W}$ !





Learn more about relative and absolute location by watching the videos listed below.



## Time for a Quick Review

Before moving on to Unit 2, take a few minutes to review the terms found in Unit 1. Be sure that you are also able to answer the “Can I” questions listed below with a loud “yes”!

**Can I**

- ...identify the four hemispheres?
- ...explain the purpose of a globe?
- ...use cardinal directions to describe relative location?
- ...identify lines of latitude and longitude on a globe?
- ...define absolute location?



## Additional Activities and Resources

[Unit 1 Organizer](#)

[Unit 1 Labeling the Globe](#)