CHAPTER 2

Lesson 1

Studying Geography

Geography helps us understand our place in the world.

Displaying the Earth's Surface


**What methods do geographers use to show the Earth's surface?**

Hearing reports from explorers who had sailed the oceans, geographers realized the Earth was not flat. A new model for the Earth had to be found. A globe, a spherical scale model of the planet, became the most accurate way to show the Earth. A globe of the Earth best shows the sizes of continents and the shapes of landmasses and bodies of water. Globes also show true distance and direction.

Globes have their limitations. A globe is not as easy to carry as a map. Maps are flat drawings of all or part of the Earth's surface. Maps can show small areas in great detail. Maps can show many things—political borders, population densities, or even voting results. Plus, maps can be folded and carried in a pocket or placed in a car.

Maps, however, cannot show true size, shape, distance, and direction at the same time. The reason for this is they are flat drawings of a round object, the Earth.

Globes and maps have some features in common. Both are marked with imaginary lines that geographers use to locate places on Earth's surface. These lines divide the Earth into halves called hemispheres.

**Hemispheres**

To find a place on the Earth, geographers use a system of imaginary lines that crisscross the globe. The Equator (ih • KWAY • tuhr) is one of these lines. It circles the middle of the Earth like a belt. It divides the Earth into "half spheres," or hemispheres (HEH • muh • sfhrz). Everything north of the Equator is in the Northern Hemisphere. Everything south of the Equator is in the Southern Hemisphere. In which of these hemispheres do you live?

Another imaginary line divides the Earth into Eastern and Western Hemispheres. This line is called the Prime Meridian. Generally, the area east of the Prime Meridian is in the Eastern Hemisphere. Everything west of the Prime Meridian is in the Western Hemisphere.

**Finding Places on the Earth**

The Equator and Prime Meridian are two of the lines on maps and globes that help you find places on the Earth. All the lines together are called latitude and longitude. Latitude and longitude lines cross one another, forming a pattern called a grid system.

Lines of **latitude** (LA • tuh • tood) circle the Earth parallel to the Equator. They measure distance north or south of the Equator in degrees. The Equator is at 0° (zero degrees) latitude, while the North Pole is at latitude 90° N (90 degrees north).
Lines of **longitude** (LAHN • juh • too) circle the Earth from Pole to Pole. These lines measure distances east or west of the Prime Meridian, which is at 0° longitude.

The grid system formed by lines of latitude and longitude makes it possible to find the absolute location of a place. This is the exact spot where a line of latitude crosses a line of longitude. An absolute location is written in special symbols called degrees (°) and minutes (′) (points between degrees). For example, the Empire State Building in New York City is located at a latitude of 40° 44′ North and a longitude of 73° 59′ West (40 degrees 44 minutes North and 73 degrees 59 minutes West).

**From Globes to Maps**

When the curves of a globe become straight lines on a map, the size, shape, distance, or area can change. Imagine taking an orange peel and trying to flatten it on a table. You would either have to cut it or distort, or stretch, parts of it. Mapmakers face a similar problem in showing the surface of the Earth on a map. Using mathematics, they have created different types of map **projections** (pruh • JÈK • shuhnz), or ways of showing the Earth on a flat sheet of paper. Each kind of projection shows the Earth's surface in a slightly different way.

**Flattening Out the Planet**

When you take an image of the Earth and flatten it, big gaps open up. To fill in the gaps, mapmakers stretch parts of the Earth. They show either the correct shapes of places or their correct sizes. It is impossible to show both. As a result, mapmakers use different map projections depending on their goals.

**Map Projections**

Take another look at that flattened orange peel. You might see something that looks like a map based on Goode's Interrupted Equal-Area projection. A map made using this projection shows continents close to their true shapes and sizes. This projection is helpful for comparing land areas among continents.

The map on the top right was made using the Mercator projection. It shows true direction and land shapes fairly accurately. However, it does not show correct size or distance. Areas located far from the Equator are distorted on this projection. Alaska, for example, appears much larger on a Mercator map than it does on a globe.

A map using the Robinson projection is less distorted. Land on the western and eastern sides of the Robinson map appears much as it does on a globe. Areas near the North and South Poles are distorted the most on this projection.

The Winkel Tripel projection gives a good overall view of the continents' shapes and sizes. You can see that land areas in this projection are not as distorted near the Poles.

**Analyzing** What are an advantage and a disadvantage to using a map rather than a globe to study the Earth's geography?

**Five Themes and Six Essential Elements of Geography**

**SS.6.G.6.1**

*How do geographers use the five themes and six essential elements of geography?*

To understand how our world is connected, some geographers have broken the study of geography into five themes or six essential elements.
Five Themes of Geography

The Five Themes of Geography are (1) location, (2) place, (3) human-environment interaction, (4) movement, and (5) regions. You will see these themes highlighted in the geography skills questions throughout the book.

Six Essential Elements

Recently, geographers have begun to divide the study of geography into Six Essential Elements. Understanding these elements will help you build your knowledge of geography.

THE WORLD IN SPATIAL TERMS What do geographers do when studying a certain place? They first take a look at where the place is located. Location is a useful starting point. By asking "Where is it?" you begin to develop an awareness of the world around you.

PLACES AND REGIONS Place has a special meaning in geography. It refers to more than where a place is. It also describes what a place is like. It might describe physical characteristics such as landforms, climate, and plant or animal life. Or it might describe human characteristics, such as language and way of life.

To help organize their study, geographers often group places into regions. Regions are united by one or more common characteristics.

PHYSICAL SYSTEMS When geographers study places and regions, they analyze how physical systems—such as hurricanes, volcanoes, and glaciers—shape the Earth's surface. They also look at the communities of living things. The populations of plants and animals depend upon one another and their surroundings for survival.

HUMAN SYSTEMS Geographers are interested in human systems. Human systems refer to how people have shaped our world. Geographers look at how borders are decided and why people settle in certain places and not in others. A basic theme in geography is the movement of people, ideas, and goods.

ENVIRONMENT AND SOCIETY How does the relationship between people and their natural surroundings influence the way we live? The theme of human-environment interaction investigates this. It also shows how people use the environment and how their actions affect the environment.

THE USES OF GEOGRAPHY Geography helps us understand the relationships among people, places, and environments. Mastering the tools and technology used for studying geography can also help us in our daily lives.

Identifying Which Essential Elements of Geography might be involved in the study of an area’s landforms and how they affect people living there?

Connections to TODAY

GIS/GPS

Technology has changed the way we make maps. Most mapmakers use software programs called geographic information systems (GIS). This software combines information from satellite images, printed text, and statistics. A Global Positioning System (GPS) helps people locate places based on data broadcast by satellites.

Types of Maps

What are some of the key ways that maps are used?

Geographers use many different types of maps. Maps that show a wide range of information are called general-purpose maps. These maps are often collected into one book called an atlas. An atlas may be a collection of special area maps—such as North America maps—or general maps of the entire world. Two of the most common general-purpose maps found in an atlas are physical and political maps.

**Physical maps** show land and water features. The colors used on physical maps include brown or green for land and blue for water. Physical maps may also use colors to show elevation. Elevation is the height of an area above sea level. A key explains the meaning of each color. **Political maps** show the names and borders of countries. They also show the location of cities and other human-made features of a place. Often they identify major physical features of a land area.

**Special-Purpose Maps**

Some maps show specific kinds of information. These are called **special-purpose maps**. They usually show patterns such as climate, natural resources, or population. A road map is another example of a special-purpose map. Like this map of Alexander’s empire, special-purpose maps may also display historical information, such as battles or territorial changes.

**Reading Maps**

An important step in reading a map is to study the map key. The key explains the lines and colors used on a map. It also explains any **symbols**, or signs and pictures, used on a map. For example, the map of Alexander’s empire details the size of the empire, the route of Alexander’s conquest, and some important battles. Cities are usually shown as a solid circle (•), like the one for Athens.

The map **scale** is a measuring line that tells you the distances represented on the map. Suppose you wanted to know the approximate distance from Tampa, Florida to New York City. Using the scale bar will help you calculate this distance.

A map has a symbol called a compass rose that tells you the position of the cardinal directions—north, south, east, and west. **Cardinal directions** help you explain the relative location of any place on Earth. Some maps also have a locator map, a small inset map. This shows where the region on the large map is located.

**Drawing Conclusions** Why is reading the map key important when looking at a special-purpose map?

Florida CONNECTION

**Florida Waterways**

Did you know that Florida has more than 11,000 miles of rivers, streams, and other waterways? This is more than the Amazon and Nile Rivers combined.

**Using Charts, Graphs, and Diagrams**

**SS.6.G.1.4**

**What are the uses of charts, graphs, and diagrams?**

Charts, graphs, and diagrams are tools for showing information. The first step to understanding these visual aids is to read the title. This tells you the subject.
Charts show facts in an organized way. They arrange information in rows and columns. To read a chart, look at the labels at the top of each column and on the left side of the chart. The labels explain what the chart is showing.

Graphs come in different types. Bar graphs use thick, wide lines to compare data. They are useful for comparing amounts. Line graphs show changes over a particular period of time. A climate graph, or climograph (KLY • muh • graf), combines a line graph and a bar graph. It shows the long-term weather patterns in a place.

To read a bar graph, line graph, or climograph, look at the labels along the side and bottom. The vertical line along the left side of the graph is the y-axis. The horizontal line along the bottom is the x-axis. One axis tells you what is being measured. The other axis tells what units of measurement are being used.

Pie graphs are circular graphs that show how the whole of something is divided into parts. Each "slice" shows a part or percentage of the whole "pie." The entire pie totals 100 percent.

Diagrams are special drawings. They show steps in a process, point out the parts of an object, or explain how something works. An elevation profile is a diagram that shows a piece of land as if it were sliced open. This shows changes in height.

**Identifying** What type of graph shows changes over time?

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**Population and Culture**

*SS.6.G.2.6, SS.6.G.2.7*

**How do geographers study population and culture?**

Like geographers, historians study population, culture, and the movement of people, ideas, and goods. Historians are interested in how these things change over time.

**Population Shifts**

Population refers to how many people live in a specific area or place. Geographers study this in great detail. They look at what sorts of people make up a population. They examine how fast a population grows or shrinks over time. They also measure population density. This is the average number of people living in a square mile or square kilometer. A choropleth (KAWR • uh • plehth) uses colors to show population density.

Populations can also change location. The movement of people from one place to settle in another place is called migration (my • GRAY • shuhn). Throughout history there have been many migrations of human beings.

**Culture and Change**

*Culture* is the set of beliefs, behaviors, and traits shared by the members of a group. Scholars study cultures by examining the language, religion, government, and customs of different groups.

Throughout history, different peoples have met through exploration, migration, and trade. These meetings often lead to cultural diffusion. In cultural diffusion, each group shares part of its culture with the other. Sometimes a completely new culture is formed. Many historians believe this happened in India as a result of the Aryan migrations.

**Analyzing** Why are geographers interested in contact between cultures?
LESSON 1 REVIEW

Review Vocabulary

1. How do latitude and longitude help identify your exact location on the Earth?
   SS.6.G.1.1, LA.6.1.6.1

2. Why would a scale be helpful when trying to determine distances on a physical map?
   LA.6.1.6.1

Answer the Guiding Questions

3. Identifying What type of map would you choose to find the borders between countries? Why?
   SS.6.G.1.2

4. Finding the Main Idea Why do mapmakers have to choose between showing the correct land shapes or distances on the Earth?
   SS.6.G.1.2

5. Contrasting What is the difference between a chart and a diagram?
   SS.6.G.1.4
6. **Making Inferences** How might migration lead to the spread and mixing of cultures?

SS.6.G.2.6

7. **EXPOSITORY WRITING** Write a paragraph explaining which Essential Elements of Geography you would use to study the weather in an area.

SS.6.G.6.1

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**LESSON 2**

**Exploring Economics**

Most people in our society buy or sell goods and services every day. Trade has also shaped the course of history in major ways.

**What Is Economics?**


*What are the basic ideas of economics?*

There are three key questions to ask about any economy: What goods and services should we offer? How should we create and distribute these goods and services? Who will use these goods and services?

**Resources and Production**

In order to make goods and offer services, people need resources. There are four major kinds of resources: land, labor, capital, and entrepreneurship. Land includes the surface of the Earth and its natural resources, such as minerals and water. Labor is the ability of people to do work. You need labor to make goods and provide services. Capital is money and goods used to help people make or do things. You need capital to run a business. Entrepreneurship (ahn • truh • pruh • NUHR • shihp) is the act of running a business and taking on the risks of that business. Entrepreneurship usually describes individual or small businesses. Another kind of resource is technology. Technology is using knowledge in a practical way to accomplish a task. Technology can make it easier and cheaper to create goods.
All of these resources were important to early civilizations. Good land and freshwater were very important to farmers. Early rulers needed many workers for large projects. They gathered capital by collecting taxes. Merchants showed entrepreneurship. They traded goods to earn a profit, or an increase in the value of what they owned.

**Supply and Demand**

Getting the resources needed to offer a good or service is a first step to providing that good or service. Next, you need to know how much of that good or service to offer. You will also want to decide how much money to charge for the good or service. These choices are affected by the laws of supply and demand.

Supply is the amount of a good or service that a producer wants to sell. The law of supply says that the higher the price you can charge for a good or service, the more of it you will want to sell. Demand is the amount of something that a consumer wants to buy. The law of demand says that the lower the price of a good or service, the more of it people will want to buy.

You can see the supply and demand curves in the graph on this page. Look at the supply curve. It shows that people want to make more goods when the price is high. The demand curve shows that buyers want to buy less when the price is high. In a free market, these forces balance each other over time. The seller and buyer will agree on a price and amount that satisfies both.

There are other things that affect supply and demand. One is scarcity (SKEHR • suh • tee), or lack of a resource. When not much of a needed resource is available, then the demand for it will grow. The higher demand will raise the price. This may force people to seek replacements for that resource. Another factor is opportunity cost. The opportunity cost of something is what you give up to make it or buy it. Suppose you are a farmer. You choose to grow wheat on your land. You spend time and resources to grow the wheat. While you are growing wheat, you cannot use the land to grow beans. You are giving up the chance to grow something else when you grow wheat. The time, resources, and choices that you gave up are all part of the opportunity cost of growing wheat. People are always weighing the opportunity costs of their choices about what to make or buy.

**Predicting** How will the people who make goods and those who buy the goods react if the price goes down?

**Managing and Measuring Economies**

SS.6.W.1.3, SS.6.E.1.2

What are the different types of economic systems?

Dealing with resources, supply, and demand can be very hard. Each society organizes its economy using an economic system.

**Economic Systems**

A traditional economy is based on custom. In such an economy, children often do the same work as their parents. Members of a family or tribe make goods for the rest of their group. In this way, everyone’s needs are met. Many hunter-gatherer groups had traditional economies.

In a command economy, a central government decides what goods will be made and who will receive them. The ancient civilizations of Egypt and Mesopotamia began as command economies. Rulers gathered the resources of their people. They used these resources to build large projects or raise powerful armies. Today, Cuba and North Korea have command economies.
In a market economy, each person, or individual, makes choices about what to make, sell, and buy. He or she buys and sells goods and services on an open market. The United States has a market economy.

In a mixed economy, the government has some control over what and how much is made. Individuals make the rest of the economic choices. Some countries in Europe are mixed economies.

**Measuring Economies**

Economies grow and shrink over time. This pattern is called the business cycle. When the economy grows quickly, it is often called a boom. When the economy grows very slowly or shrinks, it is called a *recession* (rih • SEH • shuhn). In a recession, companies often close and people lose their jobs. The United States entered a recession in December 2007.

Governments try to keep their economies growing and avoid recessions. One way they do this is by watching prices. Rising prices are a sign of *inflation* (ihn • FLAY • shuhn). High inflation means that money buys less. This raises the cost of living. Say the yearly rate of inflation is 10 percent. This means that something that cost you $10 last year costs you $11 this year. Sometimes inflation can get very high. In Argentina in the 1980s, the yearly rate of inflation hit 1,000 percent. The same goods and services cost 10 times more than they did the year before.

Governments want to avoid having too much inflation. However, experts who study economics disagree about what causes inflation. So finding the right government policies is difficult.

**Identifying** In which type of economic system are all decisions made by a central government?

**Thinking Like a HISTORIAN**

**Analyzing Primary Sources**

In 1929, the United States and much of the world entered a long, painful depression. This period is called the Great Depression. Prices in the United States deflated by nearly one-third, and one in five Americans was unemployed. Historians still argue about the causes of this serious dip in the business cycle. Use your library to locate two primary sources dealing with the depression of the 1930s. Write a brief report analyzing the information and present your findings to the class. For more information about analyzing primary source material, read the chapter *What Does a Historian Do?* SS.6.W.1.3

**Trade in World History**

*SS.6.E.3.2, SS.6.E.3.4*

**What are the benefits and disadvantages of trade?**

Trade has been important to many different civilizations. What makes trade between different peoples so common?

**Why Do People Trade?**

Two countries trade with each other when both sides can gain something from the exchange. *Exports* are goods shipped out of a country and sold somewhere else. *Imports* are the goods and services that a country buys from other countries.

Countries want to export goods of which they have a large supply. They want to import goods that are hard to find in their own lands. For hundreds of years, Europeans traded wool, gold, and silver with Asians for rare goods such as silk and spices.
Early civilizations often traded by bartering. When people barter, goods and services are traded for other goods and services. For example, a merchant might trade fish for furs. Eventually, some ancient peoples invented money. Money had a set value, could be traded for anything, and was easier to carry.

**Barriers to Trade**

Barriers can make international trade difficult. Conflict can stop trade. Geography can make it hard to travel between two places. Sometimes a country chooses to cut off contact with other peoples. In the 1600s, Japan limited trade with European countries. The Japanese wanted to limit European influence on Japanese society.

Finally, nations may try to limit or ban trade that hurts producers in their own country. For example, in the Great Depression, U.S. farmers were worried about food imports from Europe. They feared that European farmers might drive them out of business. So they asked the U.S. government to raise taxes on imported European crops. The government did so to protect American farmers. This led other countries to tax U.S. goods to protect their own farmers and businesses.

**Global Trade**

Today, most of the world’s countries take part in some form of international trade. The process is called globalization (gloh buh luh ZAY shuhn). Countries like the United States have numerous trade partners. Many large companies also have business branches in more than one country.

Much of this growth has come from efforts to increase free trade. The goal of free trade is a world market where people are free to choose what to buy and sell. People who favor free trade say that it boosts trade. It also cuts the prices of goods. These changes help economies grow. Those against free trade say that it makes imports and foreign labor costs too cheap. They fear that a country will lose companies and jobs to other countries.

Globalization has increased the ties among the world’s economies. In 2009, the United States had the largest economy in the world. The U.S. economy was bigger than that of the next two leading countries, Japan and China, added together. Every day, Americans buy and use goods made in other countries. At the same time, American goods and services are sold around the world. When the U.S. economy struggles, it affects the entire world. The questions about what to make, how to make it, and who should buy it are no longer just national issues.

*Finding the Main Idea* Why do countries agree to trade with one another?

**LESSON 2 REVIEW**

**Review Vocabulary**

1. Why are capital and labor needed to make goods?

LA.6.1.6.1
2. How does demand relate to buyers of a good?

3. **Explaining** What is opportunity cost?

4. **Contrasting** Describe the differences between a command economy and a traditional economy.

5. **Summarizing** What types of barriers might prevent trade between countries?

6. **Expository Writing** Write a paragraph describing how countries decide what goods to export and what goods to import.

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**Principles of Government**
What are the key principles of the U.S. government?

The U.S. Constitution is the highest law in the United States. It contains the key ideas of America’s government. Many of these ideas came from ancient Greece and Rome. The United States has a representative government. This means that citizens vote for officials who serve the will of the people. The government must act in the people’s interests and protect their rights.

The Constitution created a federal system of government. The central, or federal, government is the highest authority. However, it also shares some powers with the state governments.

The federal government is split into three equal parts, or branches. Each branch has its own specific powers, an idea called separation of powers. This concept was adopted so that no one branch could become too powerful. An overly powerful government could harm its citizens. Each branch limits the power of the other branches. The diagram shows this system of checks and balances.

What do the three branches of government do? The legislative branch (LEH • juhs • lay • thv) is known as the U.S. Congress. It passes laws for the whole country. The executive branch includes the office of the U.S. president. The president and other members of the executive branch ensure that the nation’s laws are carried out.

The judicial branch (joo • DIH • shuhl) includes the U.S. Supreme Court and various lesser courts. The judges in the judicial branch use the Constitution to interpret laws. They can strike down laws that violate the Constitution.

Identifying What type of government does the United States have?
What Is Citizenship?

SS.6.C.1.2, SS.6.C.2.1

What are the civic rights, duties, and responsibilities of U.S. citizens?

The system of government in the United States provides many freedoms. However, it also needs citizens to carry out certain duties and responsibilities. This idea, called civic participation, comes from ancient Greece and Rome. Good citizenship helps our government and communities work as well as possible.

Rights of Citizenship

All Americans have the right to seek life, liberty, and happiness. All Americans have the right to freedom of expression. This means that they can speak and write openly. They can attend peaceful gatherings. They can petition the government to address their needs. The Constitution also protects the right of people to worship as they choose. People who are accused of a crime have the right to receive a fair trial by a jury of their peers.

Citizens also have the right to vote for public officials and to serve in public office. The right to vote allows citizens to choose their leaders, while the right to serve lets them represent their fellow citizens in government.

Duties and Responsibilities of Citizenship

By law, citizens must carry out some duties. Obeying all federal, state, and local laws is one of the first duties of citizenship. Citizens also have a duty to pay their taxes to federal, state, and local governments. These taxes pay for the services provided by government to the American people.

Citizens must serve on a jury if the government asks them to. This service is needed in order to honor people’s right to a fair trial by jury. Finally, citizens must be ready to defend the United States and the Constitution.

People born in other countries can also become U.S. citizens. First, they must go through naturalization. This is a process of applying for, and being granted, citizenship. To qualify, they have to have lived in the United States for a certain amount of time. They also need to show good moral character. They must be able to use basic English and must know about U.S. history and government. In addition, they must swear to uphold all duties of citizenship.

In addition to their duties, citizens also have responsibilities. Citizens should stay informed about important issues, or topics. An awareness of critical issues—such as concern for the global environment—will help them make wise choices when they vote in federal, state, and local elections. Voting is a powerful right and a key responsibility of citizenship. If people do not vote, they give away part of their voice in government.

Citizens should also respect the rights and views of other people. The United States welcomes people of many different backgrounds. They all share the same freedoms. Before you deny a right to someone else, put yourself in that person’s place. Think how you would feel if someone tried to take away your rights.

Finally, citizens should take part in their local community. By working with one another, we help make our neighborhoods and towns better places to live. There are different ways to keep our communities strong. We can volunteer our time. We can join neighborhood groups, and we can serve in public office.

Summarizing What duties do citizens have?
What does it mean to be a global citizen?

Today the world faces many problems that go beyond the borders of any one country. Threats to the health of the environment, such as pollution or the destruction of a tropical rain forest, affect people living in many different places. Many countries also have close economic ties to other nations. Because of these ties, economic problems in one country affect other countries. In addition, the idea is growing around the world that all people should have certain basic human rights. World leaders must often work together to deal with these issues.

Being a global citizen means learning about the different issues that affect the world as a whole. It means taking care of the environment. It also means understanding how people live in other countries. We are all affected by drought and hunger or economic troubles in other countries. Once we understand one another’s ways of life, we can work together more easily to solve big problems.

Being a global citizen does not mean giving up your duties and responsibilities as a citizen of the United States. It means thinking about how you can make the world a better place by your actions. Making the effort to stay informed and to respect the views of others helps all Americans. Through that same effort, you can also help the rest of the world.

Finding the Main Idea

What are some of the ways in which you could become a better global citizen?

LESSON 3 REVIEW

Review Vocabulary

1. What is a federal system of government?

2. How are checks and balances related to the idea of separation of powers?
Answer the Guiding Questions

3. **Finding the Main Idea** What is the main purpose of a representative government?
   SS.6.C.1.2

4. **Drawing Conclusions** Why do citizens have duties and responsibilities as well as rights?
   SS.6.C.1.2, SS.6.C.2.1

5. **Making Inferences** What are some of the challenges of being a global citizen?
   SS.6.C.2.1

6. **Descriptive Writing** Write a paragraph describing how you can fulfill two of the responsibilities of citizenship in your daily life.
   SS.6.C.2.1