The Geography of Your State

How has geography influenced life in your state?

Introduction

Suppose that you are flying in an airplane over your state. When you look down, what do you see? Do you see mountains or flat plains, a desert or a sandy coast? Are there lots of trees, lakes, and rivers? Is it cloudy, or is the sun shining brightly on your state? These features of land, water, and sky are all part of your state's physical geography.

Studying the physical geography of a place is very important. It helps us understand why and how people live in a place. Geographers may use maps, tables, graphs, and other tools to study the physical geography of a place.

What else do you see when you look out of your plane's window? You may also see cities and towns, roads and highways, bridges and dams. Geography includes the study of human features as well. Human geography explores how people have altered, or changed, their environment to make life more comfortable. Geographers use tools to study human geography, too.

Now suppose that you are a geographer. What can you find out about the physical and human geography of your state? What tools will you use to study the geography of your state? And how do you think geography has influenced life in your state? Answering these questions will help you better understand the geography in your state.

Social Studies Vocabulary

demographics

geographic inquiry process

◀ You can see the physical and human geography of an area by looking down from an airplane. A geographer's job is to study these different features and learn how they affect life in your state.

Geography

1. Tools Geographers Use

Geographers use many tools to learn about places and the people who live there. These tools, such as maps, tables, and graphs, help organize facts and information. Physical, political, and special-purpose maps may help you discover facts about your state's geography. What could you learn about your state from a physical map or a political map? What could you discover from a special-purpose map that shows the growing seasons in different areas of your state?

You can also get interesting facts from tables and graphs. A table might give information about industries in your state. These facts might give you clues about the natural resources in your area. Or you might find a graph showing the average monthly temperatures and rainfall in your state. What could these facts tell you about how people work and play in your state?

demographics the facts you can study about a certain group of people, such as their ages, genders, or jobs

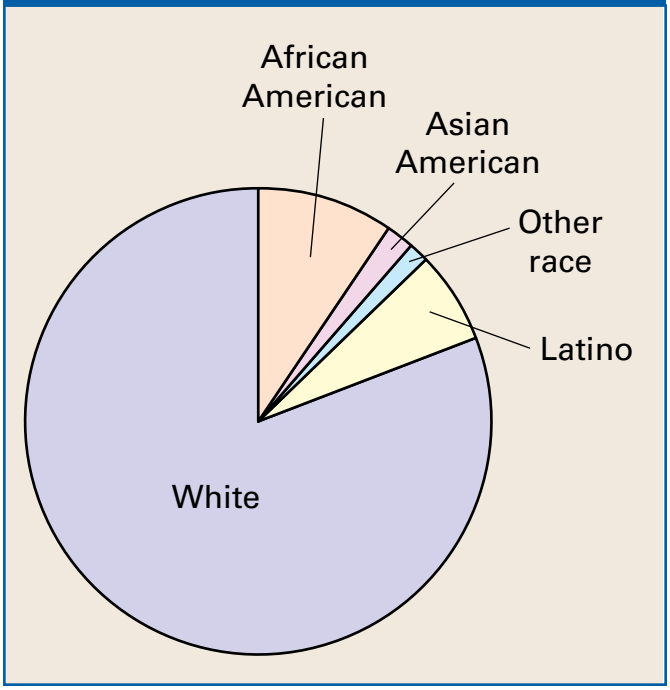
The facts you can study about a group of people are called **demographics**. Such facts might include the average age of people in a state. They might compare the number of men to the number of women living in a state. This information often appears on tables and graphs, too.

Geographers use tables and graphs to organize information. What do these tools tell you about Indiana?

Major Products of Indiana

Manufactured Products	Farm Product
Transportation equipment	Corn
Metals and metal goods	Soybeans
Plastics	Hogs
Food processing	Eggs
Machinery	Dairy
	Cattle

The Population of Indiana, 2013



Source: U.S. Census Bureau, 2013 Population Estimates

The Arch at St. Louis, Missouri, is a monument to western expansion. The Missouri and Mississippi Rivers near St. Louis were, and still are, important transportation routes.

2. Connecting Geography and History

When you study geography, you unlock lots of information. The history of a place is closely linked to its geography. The land and its features help tell the story of a place. The physical geography of a place shapes how people live and how communities grow. Think about Jamestown. This was the first permanent English settlement in America. The site that the Jamestown settlers chose caused problems. The land was swampy, and many people got sick and died. But the land and climate were good for growing tobacco. Growing this crop helped the colony survive.

Consider the Southeast's coastal plain where the edge of the Piedmont drops sharply and rivers form waterfalls. Ships navigating rivers at this point must stop at the fall line. As English settlement spread, many settlers chose this point to live. They used falling water to power mills and set up trading posts for farmers. Over time, cities were built along the fall line.

The land shaped the history of other parts of the country, too. St. Louis, Missouri, was founded near where two great rivers meet. This spot was a good departure point for western pioneers.

The history of the Southwest follows the path of the Colorado River. This waterway supported the region's first people and helped attract modern-day settlers. People still depend on the river. What is the physical geography of your state? How might the land have helped shape your state's history?

Some industries develop in unlikely places. In dry parts of Utah, sprinklers move in a circle to water fields.

3. Connecting Geography and Economics

Geography also helps us understand economics. Geography helps explain how certain industries have grown as well as how and why people work the way they do. Think about the Midwest, for example. This region is perfect for farming because the land is very flat and the soil is fertile. Rivers help farmers ship crops to market. It is no surprise that agriculture is a major industry there.

Some parts of the country are rich in resources such as coal, oil, or silver. Others have pleasant climates or scenery. In the Northeast, harbors provide access to the sea. No wonder people use these resources to make a living or that these industries help define these regions.

Geographers also study how people change the land. For example, people in Michigan built the Soo Locks to connect two of the Great Lakes. The locks allow ships to carry goods from one lake to another. Elsewhere, people built canals and constructed dams. These modifications have changed the way people live and work.

Think about the geography of your state. What natural features exist? How have people made changes to the land? What does the human geography tell you about the economy there?

4. Finding Out About the Geography of Your State

There are many ways to research the geography of your state. Try these sources of information:

Atlases and encyclopedias. An atlas is a book of maps. An encyclopedia is a book of facts about all kinds of topics. Find a map of your state in an atlas. Look up your state in an encyclopedia.

The Internet. The Internet is a fast way to find information. First, connect to the Internet on a computer. Then, type in the name of your state plus a word such as *geography* or *climate*. Read the list of Web sites that appears on the screen and click on any that sound interesting.

Libraries. Start your research in the reference section of the library. Look for books, newspaper and magazine articles, journals, and diaries about your state. Maps, drawings, and photographs might be interesting, too. Ask a librarian for help.

Chambers of commerce. Most cities and towns have an office called the chamber of commerce. You can visit yours to find brochures, maps, postcards, and books about your state's geography and attractions.

State departments of tourism. Try writing to your state's department of tourism for information or visiting its Web site on the Internet. The state department of tourism has information about your state's parks, cities, and attractions.

These students use the Internet to research the geography of their state. You can also find information at libraries as well as city or state offices.

5. Using the Geographic Inquiry Process

geographic inquiry process a five-step process that helps answer geographic questions

Knowing good sources of information can help you learn about your state. It also helps to have a process, or a set of steps, you can follow to achieve a goal. By following the **geographic inquiry process,** you can enjoy a more rewarding study of your state.

Step 1 is asking geographic questions. These are questions about what your state and its people are like. Say you live in Pennsylvania. You could ask: Where do people live in my state? Why do people live there?

Step 2 is acquiring geographic information. Once you have asked geographic questions, you need to look for information that will give you answers. Using a geographer's tools and sources of information like maps, atlases, the Internet, and libraries will help.

Step 3 is organizing geographic information. You have collected data about your state. Now you need to put it into a useful form.

Tables and maps are ways of organizing information. Suppose you found information about Pennsylvania's largest cities. You might make a table and then use your table to make a population map.

Step 4 is analyzing geographic information. The goal is to find patterns in what you have organized. Suppose you are making a map to show Pennsylvania's cities. You would see that many large ones are along waterways: rivers or Lake Erie.

How can you learn more about your state? Asking geographic questions is the first step.

Many of Pennsylvania's largest cities are on waterways. Why do you think that people want to live there?

Step 5 is answering geographic questions. Let's say you had asked, "Where do people live in my state?" By following Steps 1–4, you will find your answer. For Pennsylvania, you would find that many people live near waterways.

This is the end of the inquiry process. However, one answer will often lead to new questions. Next you may wonder why so many cities were built along the coast. The process of learning never ends.

Lesson Summary

Geography helps explain the history and economy of a place. Geographers use many tools and good sources of information to learn about a place and its people.

You can act like a geographer to study your state by following the geographic inquiry process:

1. Ask a geographic question.
2. Acquire geographic information.
3. Organize the geographic information.
4. Analyze the geographic information.
5. Answer your geographic question.

Answers to one question may lead to more questions. And the process starts over again!

Changing the Environment in Your State

What did your state look like before settlers moved in to build their homes and businesses? Was it covered with trees? Were there miles of flat land or desert? In every state, people have changed the environment. Usually this was done to create economic opportunities -- perhaps to build farms, homes, stores, or factories.

Let's look at a place in New Jersey for example. For thousands of years, the Passaic River has flowed through the northern part of the state. Early Native Americans, the Lenape, built dams on the river to create pools for trapping fish. This was an early way that people changed the environment. In the 1790s, when the United States was newly formed, businesspeople decided to use the river's power as it rushed over the Great Falls. They wanted power to run factories to make goods. This would allow Americans to stop buying goods from Britain. For the next 150 years, factories in Paterson, New Jersey, produced cotton, silk, paper, railroad locomotives, and airplane engines.

Factory workers needed homes. Factory owners needed canals and railroads to transport their goods to customers. So, the environment along the Passaic River changed.

The Great Falls of the Passaic River have existed for thousands of years. People started building factories by the falls in the 1790s. What human-made additions do you see in this photo?

What human-made changes do you see in this photo of the Shrewsbury River in New Jersey? Why do you think the changes were made?

Changes Over Time

There are probably places near your home that have been changed over time. People may have cut down trees, dug lakes, canals, or reservoirs. They may have built bridges, dams, and buildings.

Take photos of natural settings, such as parks, rivers, forests, and farms. Be sure the photos give you an idea of what the land looked like before people changed it, as well as show human-made structures that are there now. If you can't take your own photos, print photos or satellite images from Internet sources. Display two or three photos on poster board.

Research and write an explanation for each photograph. Explain how you think people changed the natural environment. Tell why the changes were made. Perhaps it was to solve a problem or create faster transportation or opportunities for jobs. Include why the location made this a good place for these changes. Also tell if there were any problems created by the changes. Display your posters and explanations outside your classroom.

Uncovering the Secrets of Ozette

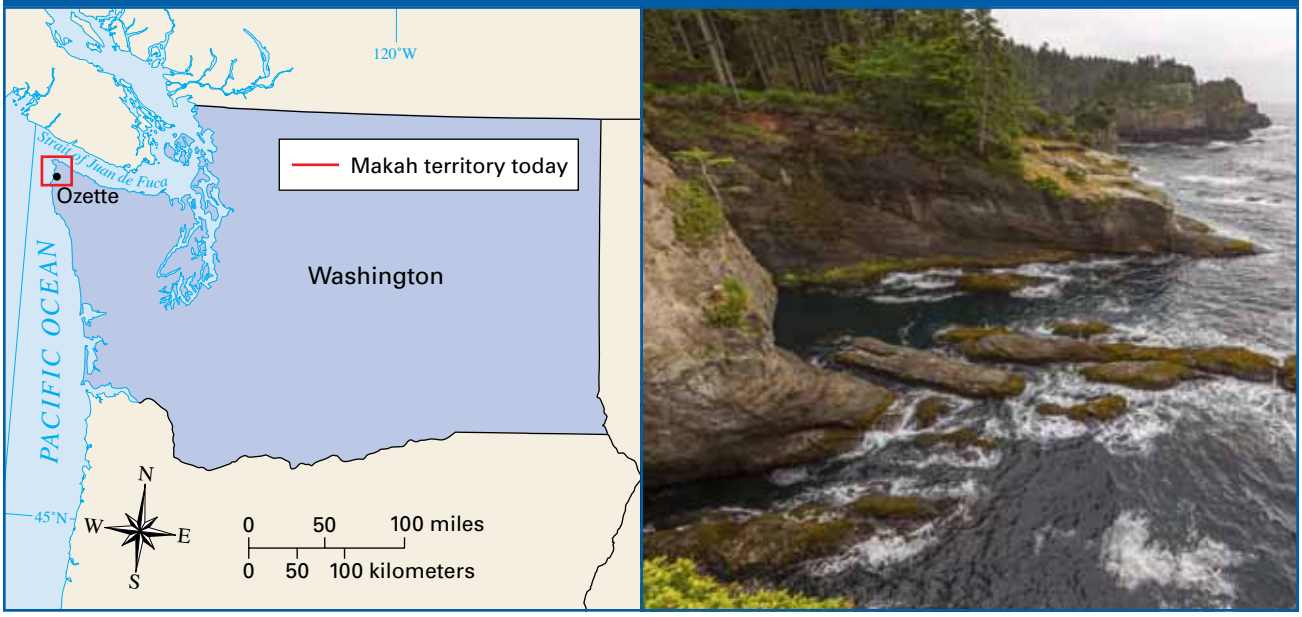
Students are not the only ones who research the geography of their states. Archaeologists in the state of Washington spent years learning about a village called Ozette. How did physical and human geography help them?

Long before Europeans came to North America, an American Indian tribe lived in the forests and along the coast of what is now Washington. They were the Makahs. The Makahs had five villages. One village was Ozette, where Makahs lived for thousands of years. But at some point, the village disappeared. Makah legend says that it was buried in an enormous mudslide several hundred years ago.

In the 1960s, an archaeologist named Richard Daugherty became interested in Ozette. He had compelling questions. What happened to Ozette? Where had it been located? To find the answers, Daugherty got permission to dig in the Makah reservation from the Makah leader. Daugherty then found some evidence of Ozette. But he didn't have the time or money to continue digging.

The Makahs live at the tip of a stretch of land called the Olympic Peninsula. The area has both forests and coastal land.

Home of the Makahs



This mudslide in Washington has moved huge amounts of rock and soil down a mountain. It has uprooted tall trees. A mudslide 300 years ago covered Ozette in deep mud.

Geographic Research Solves a Mystery

In 1970, a huge storm hit Washington. Winds, rain, and waves from the Pacific Ocean pounded the coast. When the storm finally ended, people found old wooden items, such as canoe paddles, parts of homes, and fishing tools. Daugherty felt sure they were from Ozette.

Daugherty had always wanted to return to Ozette. Now, it seemed his chance had come. With a team of scientists and students, he spent the next 11 years investigating Ozette. Each new discovery they made answered some questions—and raised others.

When the team uncovered a village buried under ten feet of mud, they knew the Makah legend was true. But where had the mud come from? And when exactly had the mudslide happened? Answers to these supporting questions would help Daugherty's research into why Ozette disappeared.

To learn about weather patterns hundreds of years ago, the team looked at books and other written records. They learned that in January of 1700, a powerful earthquake had occurred on the coast of Washington. It shook the nearby hills of Ozette and caused a huge mudslide. Mud swept down and buried the village.

Ten feet of mud covered Ozette for almost 300 years. Deep in that mud, the village was preserved just as it had once been. A wealth of information was waiting to be examined.

This old photograph shows Makah hunters catching a whale. The Makahs used whales for food and whale oil to light lamps.

Daugherty's team learned a lot about the Makahs of the past. They studied the physical geography of Ozette. They studied the constructed features found under the mud. Their discoveries gave us a detailed picture of Makah life long ago.

The sea and richly forested lands near Ozette offered the early Makahs a wealth of natural resources. They used these for food, shelter, and clothing. They knew where to hunt and gather the food and materials that helped them survive the cold and stormy coastal winters.

Many discoveries at the site showed how important the sea was to the people of Ozette. Various fish and sea animals—such as seals, otters, and whales—served as staple foods for the Makahs.

Huge cedar trees grow around the Ozette site. The people of Ozette relied heavily on cedars. They made their houses and boats from cedar wood. They pounded cedar bark into a soft material and made clothes from it. They also built a number of types of canoes from cedar wood. They used different canoes for war, hunting whales, hunting seals, fishing, and carrying large loads of goods for trade. They even made smaller canoes for children to use.

These Makah rock carvings of a whale, sun, and moon were made more than 300 years ago.

More than 55,000 artifacts have been uncovered at Ozette, making it one of the richest archaeological finds in the world. Daugherty's team uncovered artifacts from all aspects of life. There were beautifully carved boards from houses and a riding saddle made of whalebone. There were baskets and boxes. There were toys, cradleboards for carrying babies, and ceremonial items. There were metal tools, fishing and whaling equipment, and other items.

The team recognized much of what they found. But sometimes they could not identify an artifact. What was that piece of carved wood or shaped stone used for, they wondered?

They turned to the modern-day Makahs for answers. Perhaps some Makahs had seen something like it when they were young. Maybe they had heard about it from their grandparents.

The discoveries at Ozette have helped answer many questions about early coastal life. Now we know how close to the ocean people lived. We know what their houses looked like. We know how they cut down the giant trees and built their boats.

A Makah elder called the storm that uncovered Ozette "a gift from the past." For geographers, too, the site is a gift. It continues to provide details about how people have lived in the state of Washington for hundreds of years. ◆

Today, you can see some of the treasures found at Ozette at the Makah Cultural and Research Center. These artifacts give us an understanding of what life was like long ago.