Geography is the study of Earth and its people. Scientists who do this work are geographers. They use five main themes to describe people and places. The five themes of geography are location, place, human-environment interaction, movement, and regions.

The position of a place on Earth’s surface is its location, which can be described in two ways. Absolute location refers to the exact spot on Earth where a place or feature is found. Relative location explains where a feature is in relation to the features around it.

Place refers to the characteristics of a location that make it unique. One way to define a place is by its physical features—landforms, plants, animals, and weather patterns. A place also can be defined by its human characteristics, such as its language.

The environment is one’s natural surroundings. Human-environment interaction explores how people affect, and are affected by, their environment. People affect the environment by changing it to meet their needs. People, in turn, are influenced by environmental factors they cannot control, such as temperature and natural disasters.
The Five Themes of Geography (continued)

Moving forward, explore how and why people, ideas, and goods move from one place to another. For example, people might move to flee from a country that is at war. Movement causes cultural change.

Regions are areas of the Earth’s surface that have features in common. These features may be land, natural resources, or population. For example, the Rocky Mountain region of the United States is known for ranching and mining.

A Geographer’s Tools (pages 16–17)

Types of Geography
Geographers study Earth’s physical and human features. Physical geographers study land areas, bodies of water, plant life, and other physical features. They also examine natural resources and the ways people use them.

Human geographers study people and their activities. They examine religions, languages, and ways of life. Human geographers can focus on a specific location or look at broader areas. They often make comparisons between different places.

Places in Time
Geographers study history to learn about changes that have occurred over time. History is divided into blocks of time called periods. A decade is a period of 10 years. A century is a period of 100 years. A millennium is a period of 1,000 years.

In Western society, history is commonly grouped into four long periods. Prehistory is the time before writing was developed. This period ended about 5,500 years ago. The next period, which lasted until 1,500 years ago, is Ancient History. That period was followed by the Middle Ages, which lasted about 1,000 years. Modern History is the period from about 500 years ago through the present.

Map Systems
Geographers use maps to study different types of information about a place. Some maps are created from information collected by satellites that circle the Earth. For example, satellites provide photographs and can measure changing temperatures and pollution. A specific group of satellites makes up the Global Positioning System (GPS). This system uses radio signals to record the precise location of every place on Earth. GPS devices are installed in cars and trucks and used by hikers so they do not get lost.
Differentiating

What is the difference between GPS and GIS?

Geographic Information Systems (GIS) are computer hardware and software that collect geographic data and display the data on a screen. GIS provides more detailed information that does not usually appear on maps, such as types of soil and water quality.

Careers in Geography

Careers for geographers exist at all levels of government and in private businesses. Governments hire geographers to help determine how land and resources are best put to use. Geographers also study population trends and help plan cities. Businesses hire geographers to locate resources, decide where to set up new offices, and provide information about places and cultures that companies deal with.

Section Wrap-Up

Answer these questions to check your understanding of the entire section.

1. Distinguishing Explain the difference between place and location.

2. Making Connections Complete this chart with examples of what physical geographers and human geographers study.

<table>
<thead>
<tr>
<th>Physical Geographers</th>
<th>Human Geographers</th>
</tr>
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<tbody>
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<td></td>
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Informative Writing

Think about the different career options for geographers. On a separate sheet of paper, write a paragraph about a job in geography that you might enjoy.