Understanding the Earth and Its Peoples

ESSENTIAL QUESTION

In what ways does geography help us understand our world?

CONNECT Geography & History

Use the satellite image and the time line to answer the following questions.

1. The large continent in the center of the image is Africa. How would you describe the land?
2. Which of the events listed on the time line made this image possible?

A.D. 1

Culture

c. A.D. 1st century
Strabo describes the world known to the Greeks and Romans in his 17-volume Geography.

Geography

c. A.D. 2nd century
Greek geographer Ptolemy writes his 8-volume Geography on mapmaking.

Geography

△ 1100 Chinese begin using the magnetic compass.
**Satellite View of the Earth**

**Amazon Rain Forest** The Amazon rain forest in South America is the largest rain forest in the world.

**Sahara Desert** The Sahara is the largest desert in the world.

**History**
- **1730** John Hadley creates the basic design for a sextant.
- **1972** First Landsat satellite is launched.

**History**
- **1960s** Geographic Information Systems (GIS) development begins.

**Geography**
- **1983** The Global Positioning System (GPS) becomes operational.
Key Ideas

BEFORE YOU READ
Think about what you already know about the Earth's physical geography.

NOW YOU WILL LEARN
Geographers have specialized ways to view and interpret information about the world.

Vocabulary

TERMS & NAMES

geography the study of people, places, and environments
environment the physical surroundings of a location
spatial where a place is located and its physical relationship to other places, people, or environments
location an exact position using latitude and longitude, or a description of a place in relation to places around it
place a geographical term that describes the physical and human characteristics of a location

region an area that has one or more common characteristics that unite or connect it with other areas

BACKGROUND VOCABULARY

three-dimensional an image in which there is a sense of depth and perspective

Visual Vocabulary Three-dimensional shapes

Reading Strategy

Re-create the web diagram shown at right. As you read and respond to the KEY QUESTIONS, use the diagram to help you find main ideas about the themes and elements of geography.

Skillbuilder Handbook, page R4

FIND MAIN IDEAS

THEMES & ELEMENTS OF GEOGRAPHY

GRAPHIC ORGANIZERS

Go to Interactive Review @ClassZone.com
Themes and Elements of Geography

Connecting to Your World

Have you ever drawn a map to show someone how to get to your house? Or have you described your hometown to someone who doesn’t live there? If you answered yes to these questions, you were doing what geographers do. Geographers try to answer the questions, “Where are things located?” and “Why are they there?” Basic questions like these form the framework for the subject called geography. Geography is the study of people, places, and environments. An environment is the physical surroundings of a location.

Ways of Thinking About Geography

KEY QUESTION What are the themes and elements of geography?

Geographers study the world in spatial terms. This means they look at the space where a place is located and its physical relationship to other places, people, and environments. Geographers—and students of geography—use two different methods to organize geographic information: the five themes and the six essential elements of geography. The categories vary slightly, but the graphic on the next two pages will help you learn how to apply these ideas as you read this text.
The Five Themes of Geography

The world is a big place and studying it is a complicated task. You can make that job easier by learning five core themes of geography. These themes can help you answer geographic questions.

1. LOCATION

Where are things located?

**Location** means either an exact position using latitude or longitude, or a description of a place in relation to places around it.

![Rio de Janeiro, Brazil](image1)

2. PLACE

What is a particular location like?

**Place** describes physical characteristics such as mountains or rivers, as well as human characteristics such as the people who live there.

![Beijing, China](image2)

3. REGION

How are places similar or different?

**Regions** have physical or human characteristics that unite them and make them different from or similar to other regions.

![Gobi Desert](image3)

4. MOVEMENT

How do people, goods, and ideas move from one location to another?

Movement of people, goods, and ideas changes places and regions and the people who live there.

![Interstate Cloverleaf](image4)

5. HUMAN-ENVIRONMENT INTERACTION

How do people relate to the physical world?

Humans adapt to their environment and change elements of it.

![Pacific Ocean Windsurfing](image5)
Geographers use six key ideas or elements to help them understand people, places, and environments on the Earth.

1. **THE WORLD IN SPATIAL TERMS**
   Geographers study the locations of places and distributions or patterns of features by using maps, data, and other geographic tools. Knowing about the world in spatial terms helps geographers understand physical and human patterns.

2. **PLACES AND REGIONS**
   Geographers look for characteristics of places and then compare their similarities and differences.

3. **PHYSICAL SYSTEMS**
   Geographers study changes in the Earth’s surface. Where and why people choose to live in certain locations may depend on Earth’s surface conditions.

4. **HUMAN SYSTEMS**
   Geographers study human settlement patterns and use of resources. This information helps explain human interactions and lifestyles.

5. **ENVIRONMENT AND SOCIETY**
   Geographers study how people interact with the environment and how they use resources.

6. **THE USES OF GEOGRAPHY**
   Geographers study patterns and processes in the world. This information helps people understand the past and plan for the future.
Five Themes of Geography  Now that you have seen the geographic themes and elements side by side, let’s look more closely at an example of one of the themes and elements as it applies to a particular place.

The theme of human-environment interaction is a good place to get an idea of how a geographer thinks. For thousands of years, people have found it valuable to settle by rivers. A river can provide food, water, transportation, and other needs of daily life. However, rivers can flood, destroying homes and villages, and taking human life. So, humans began to alter their environment by building walls called levees to protect the land from floods. Sometimes they created dams to control the flow of water and to save some water for times when they needed it. A geographer who asks the questions “Where do people choose to live?” and “Why here?” will answer that the river provides many needs for a group of people. So, people will likely be found in areas that have rivers as a resource. As it turns out, we know that early civilizations such as those in Egypt, Southwest Asia, India, and China began in river valleys.

Six Essential Elements  Using the six elements helps geographers make sense both of physical processes on the Earth and of human systems devised by the people who live there.

Let’s look at the element of physical systems. Geographers want to know how these systems work to reshape the Earth’s surface and what impact these changes have on plants, animals, and people. Volcanoes

Chicago  The skyline of Chicago towers over the shore of Lake Michigan. One of the largest cities in the United States, Chicago has long been the economic and cultural center of the region.

CRITICAL THINKING

Find Main Ideas  Look at the image of Chicago at right. Which of the five themes and six elements of geography do the captions reflect?
are an example of a physical force that changes the shape of the Earth's surface and may have a dramatic effect on human populations. A volcanic eruption may kill people, plants, and animals living in the area. Flows of lava may change the landscape, burn forests or crops, and possibly alter the course of rivers. Islands in the Pacific Ocean have been created by volcanic eruptions, and still others have disappeared between the waves when they were blown apart by eruptions. Volcanoes can also trigger earthquakes. Geographers studying physical systems point out that many volcanoes take place in certain areas of the world. Studying this pattern of volcanic action helps explain where and why people live in certain locations.

Using the five themes of geography and the six essential elements will help you to think like a geographer. The themes and elements will help you to think about particular places and the physical processes and human activities that shaped those places in the past—and continue to do so. They will also enable you to look for patterns and connections in geographic information. You will be better able to answer the two main geographic questions, "Where are things located?" and "Why are they there?" You will learn about the tools used to record and analyze geographic information in the next section.

**FIND MAIN IDEAS** Identify the five themes and six essential elements of geography.

---

### Section 1 Assessment

**TERMS & NAMES**

1. Explain the importance of:
   - geography
   - environment
   - spatial

**USE YOUR READING NOTES**

2. **Find Main Ideas** Use your completed web diagram to answer the following question:
   What are the five themes of geography?

**KEY IDEAS**

3. What two questions do geographers try to answer?
4. How do geographers use the five themes?
5. What are the six elements that geographers use to look at the world?

**CRITICAL THINKING**

6. **Summarize** What does it mean to study the world in spatial terms?
7. **Compare and Contrast** How do you think the study of geography differs from that of history?

**CONNECT to Today** How does studying geography help you understand the world in which you live?

**ART** Make a Poster Create a poster that lists the five themes and six elements of geography. For each theme or element, include the definition and a photograph or drawing to illustrate it.