

The Tools of History

Before You Read: Knowledge Rating

Recognizing what you already know about each of these terms can help you understand the chapter.

hominid artifact fossil

In your notebook, rate how well you know each term.

3 = I know what this word means.

2 = I've seen this word before, but I don't know what it means.

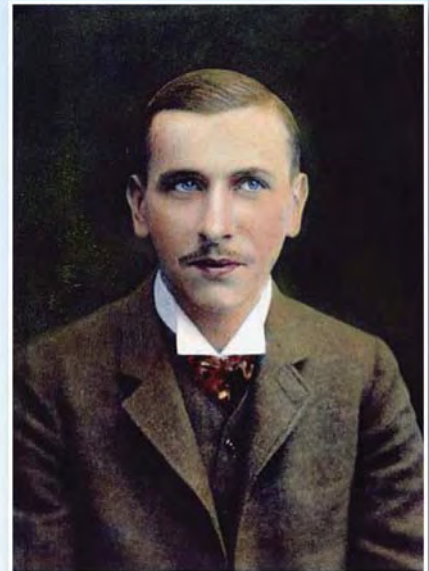
1 = I've never seen this word before.

Define each term in your notebook as you read.

Big Ideas About the Tools of History

Science and Technology New scientific discoveries change human understanding of the world.

Geographers look for new ways to help us understand our place in the world. Archaeologists make discoveries that tell us about our earliest ancestors. Their findings answer questions about the past and provide insight into our lives today.



German scientist Alfred Wegener proposed the continental drift theory in 1912. He claimed that more than 200 million years ago Earth was a single mass of land called Pangaea, meaning "all Earth." Eventually, the mass split apart, and its pieces have been moving ever since. You'll learn how this movement has affected Earth and its people in Chapter 1.

Integrated Technology

eEdition

- Interactive Maps
- Interactive Visuals
- Starting with a Story

INTERNET RESOURCES

- Go to ClassZone.com for
- WebQuest
 - Homework Helper
 - Research Links
 - Internet Activities
 - Quizzes
 - Maps
 - Test Practice
 - Current Events



4.5 million B.C.

First hominids appear.

◀ (footprint of a hominid)

1.6 million B.C.

Homo erectus appears.

WORLD

5,000,000 B.C.

1,000,000 B.C.



2.5 million B.C.

Paleolithic Age begins.

◀ (Paleolithic hand ax)

Continental Drift Theory

INTERACTIVE

200 million years ago

Earth was a single mass of land surrounded by water.



65 million years ago

The mass split apart, and the parts moved in different directions.

Today

The continents continue to drift apart.



500,000 B.C.

200,000 B.C.
Neanderthals appear.

100,000 B.C.

40,000 B.C.
Cro-Magnons appear.
◀ (Cro-Magnon skull)

8000 B.C.
Neolithic Age begins.
◀ (Neolithic clay mask)

5000 B.C.



The Discovery of the Lascaux Cave Paintings

Background: On September 12, 1940, four teenage boys explored a cave in the French countryside. It looked as if no one else had been there for years. But the walls were covered with strange paintings of animals in vivid colors of red, yellow, and brown. The boys had stumbled across a cave filled with masterpieces by prehistoric artists.

Now step inside the Lascaux (la•SKOH) Cave and discover the paintings with the teenage explorers.

[Painting in the Lascaux Cave ▶](#)



On September 8, Marcel went on a treasure hunt. For years, people had talked about a secret underground passage in the countryside around their French village. They said that the passage led to hidden treasure. The French teenager thought he had found it when he discovered the opening to a long vertical shaft. Four days later, on September 12, Marcel and three of his friends returned to explore it.

This time, Marcel brought an oil lamp to light the way. One after the other, the boys wriggled down the long passageway. Finally, they tumbled into a huge cavern, and Marcel held up the lamp. By its flickering light, they noticed a narrow, high passage. The friends entered the passage, and Marcel shone the light on its walls. What the French teenagers saw amazed them.

Herds of horses, oxen, and deer stampeded across the curving cave wall. The colorful animals seemed to leap off the walls. Excitedly, the teenagers ran through the cave and found room after room of paintings. They had found the real treasure of Lascaux.

At first the four teenagers promised to keep their great discovery a secret. But this secret was too hard to keep. They told their teacher, who contacted an expert. The expert said that the boys were probably the first modern people to lay eyes on this art. The paintings had been sealed in the Lascaux Cave for at least 17,000 years.

The cave walls are covered with more than 1,500 pictures of animals. Many of the animals include those that the early people of Lascaux hunted. Historians believe that the people told stories about the animals and sang as the artists painted them. But these oral stories are lost forever.

What do these cave paintings tell you about the people who painted them?

Reading & Writing

- 1. READING: Speaker** This story is told by a third-person narrator. How would the story be different if Marcel or one of his friends told it?
- 2. WRITING: Explanation** Research to find out what has happened to the Lascaux Cave, and write a paragraph explaining your findings.

MAIN IDEAS

- 1 **Geography** Continents, landforms, and bodies of water shape our planet.
- 2 **Geography** Geographers organize information into five themes.
- 3 **Geography** Where people live has an impact on how they live.

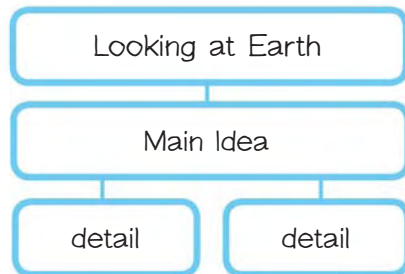


▲ **Earth** This “blue marble” image of Earth was put together using a collection of satellite pictures taken in 2001. It is the most detailed true-color image ever produced of Earth.

TAKING NOTES

Reading Skill: Summarizing

When you summarize, you supply only main ideas and important details. Identify the main ideas and important details in each section of Lesson 1. Then put them in your own words and record them in a diagram like the one below.



 Skillbuilder Handbook, page R3

Words to Know

Understanding the following words will help you read this lesson:

theme topics of discussion (page 11)

*The **themes** students addressed in their first class were all related to geography.*

precise very definite or exact (page 11)

*She used a special map to identify the **precise** location of the valley.*

interaction when two or more things affect each other (page 11)

*Clothing styles sometimes reflect the **interaction** between humans and their environment.*

influence to have an effect or impact on something (page 12)

*The climate **influenced** the types of shelters people built.*

geography
continent
landform
climate
vegetation

The World's Geography

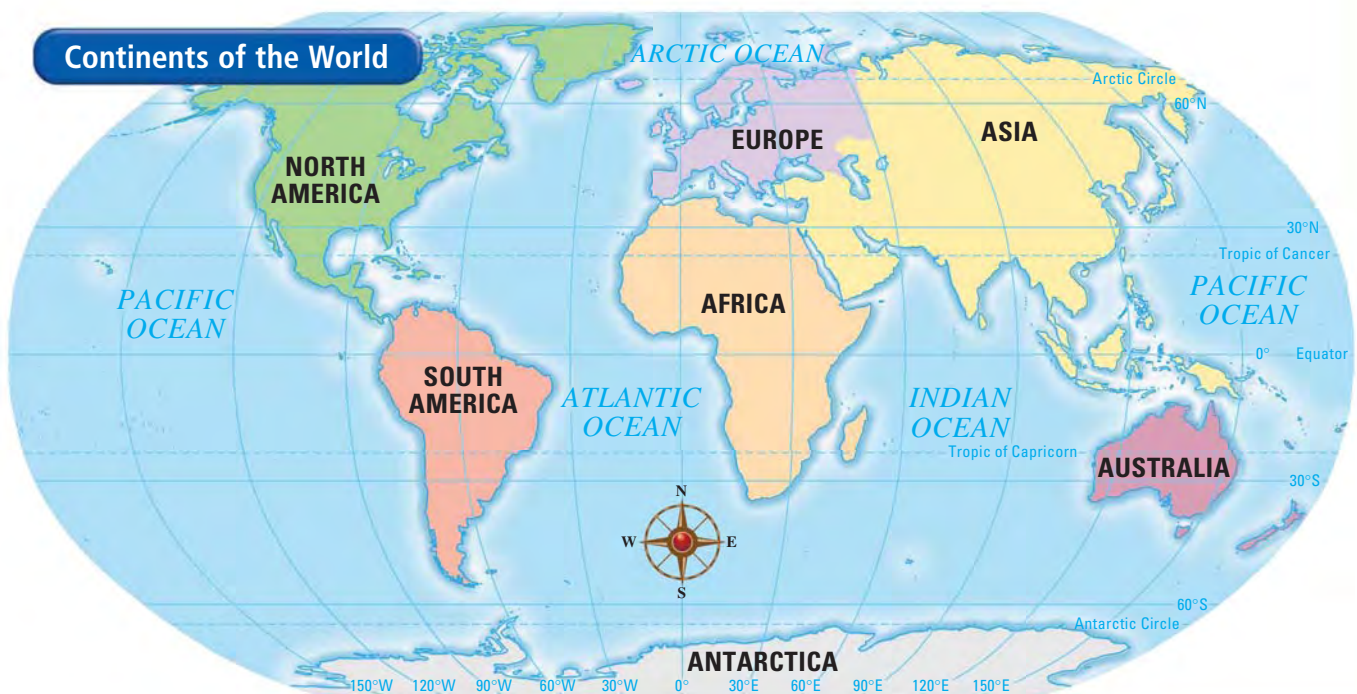
Build on What You Know How would you describe your town? Is the land flat or hilly? Does a river run nearby? Who lives in your town? When you answer these questions, you describe your town's geography. Your town is part of the world's geography.

Looking at Earth

1 ESSENTIAL QUESTION What do geographers study?

Scientists study the land and water that cover Earth. They also study how people live on Earth. The study of Earth and its people is called **geography**.

Continents Earth is divided into seven large landmasses called **continents**. You can see the continents on the map below. From largest to smallest, the continents are Asia, Africa, North America, South America, Antarctica, Europe, and Australia.



Earthquakes

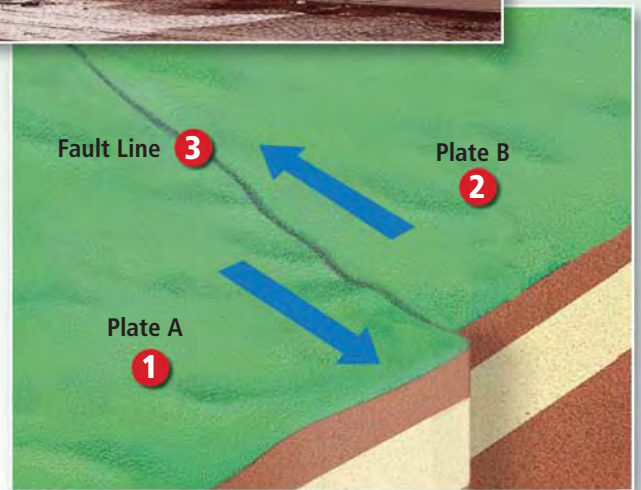
At about 5:12 A.M. on April 18, 1906, the ground shook along the west coast of the United States. The earthquake was centered around San Francisco and destroyed much of the city, as shown in the photograph on the upper right.

The San Francisco earthquake was caused by plates sliding along a fault line, or break in Earth's crust. The diagram on the lower right shows their movement.

- 1 Plate A slides in one direction.
- 2 Plate B slides in the opposite direction.
- 3 The plates move past each other at the fault line, causing an earthquake.

GEOGRAPHY SKILLBUILDER

INTERPRETING VISUALS Human-Environment Interaction Based on the photograph above, what are some of the effects of earthquakes?



Shifting Plates Scientists believe that the continents lie on large moving plates. Plate movements form mountains and volcanoes and cause earthquakes. The movements slowly but continually reshape Earth. (You can learn more about the plate movements that cause earthquakes in the Geography feature above.)

Landforms and Bodies of Water Two continents—Australia and Antarctica—are islands. An island is a **landform**, or naturally formed feature on Earth's surface. Mountains are also landforms. Other landforms include plateaus, which are high, flat areas, and plains, which are large, level areas of grassland.

Although Earth has many kinds of landforms, water covers about three-fourths of our planet. The largest bodies of water on Earth are called oceans. The four major oceans are the Pacific Ocean, the Atlantic Ocean, the Indian Ocean, and the Arctic Ocean. Smaller bodies of water include rivers and lakes.

REVIEW What are Earth's largest landmasses and bodies of water called?

Themes of Geography

2 ESSENTIAL QUESTION What are the five themes of geography?

Geographers use five themes of geography to describe Earth. The five themes help us understand our world and how we fit into it.

- **Location** The geographic question, Where is it? refers to location. Location can identify a precise spot or tell where one place is in relation to another.
- **Place** The question, What is it like? refers to place. Place includes physical characteristics as well as human ones, like language, religion, and politics.
- **Region** The question, How are places similar or different? refers to region. Region compares physical and human characteristics.
- **Movement** The question, How do people, goods, and ideas move from one location to another? refers to movement.
- **Human-Environment Interaction** The question, How do people relate to the physical world? refers to human-environment interaction. People learn to use and change what the environment offers them.

REVIEW Which two geographic themes are most concerned with people?

Connect to Today

Hurricanes Natural disasters have a great impact on people and their homes. This photograph shows people fleeing during a 1998 hurricane in Florida. ▼

How Environment Affects People

3 ESSENTIAL QUESTION How does climate affect people's lives?

You probably wear a coat in cold weather and dress in light clothing in warmer weather. Of course, different people may develop different ways of adapting to the same area. But your environment—particularly its climate—has a big impact on the way you live.



Climate Weather refers to the temperature and conditions in a particular place at a particular time. **Climate**, on the other hand, describes the weather conditions in a place over a long period of time. Climate can influence where people live. For example, the harsh conditions of a cold, wet climate may prevent people from settling in that region.

Climate also has a big impact on the type of **vegetation**, or plant life, that grows in a location. For instance, thick jungle vegetation grows well in a tropical climate with heavy rainfall, while crops may be difficult to grow in a hot, dry climate.

REVIEW How does environment affect people?

Lesson Summary

- Earth's largest landmasses, called continents, are surrounded by oceans.
- The five themes of geography help us explain our place in the world.
- Climate can affect how and where people live.

Why It Matters Now . . .

Geography helps us learn more about our neighbors and the ways we affect the world we share.

1 Lesson Review

 **Homework Helper**
ClassZone.com

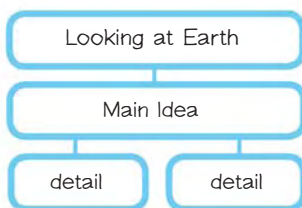
Terms & Names

1. Explain the importance of
- | | | |
|-----------|----------|------------|
| geography | landform | vegetation |
| continent | climate | |

Using Your Notes

Summarizing Use your completed diagram to answer the following question:

2. What are Earth's main geographic features?



Main Ideas

3. Name three examples of landforms and three examples of bodies of water.
4. How do the five themes of geography help geographers?
5. How does the climate where you live affect your life?

Critical Thinking

6. **Understanding Cause and Effect** What might be the result if the climate of a region suddenly became much colder?
7. **Making Inferences** Since more people live on Asia than on any other continent, what can you infer about Asia's environment?

Activity

Planning a Mural Work with a group of classmates to plan a mural that represents the physical features, climate, and vegetation in your town.