



The Five Themes of Geography

TERMS & NAMES

absolute location
latitude
longitude
relative location
migrate

MAIN IDEA

The five themes of geography are location, place, region, movement, and human-environment interaction.

WHY IT MATTERS NOW

The five themes enable you to discuss and explain people, places, and environments of the past and present.

DATELINE EXTRA

FRANKFURT, GERMANY, JANUARY 6, 1912

Scientist Alfred Wegener sent out shock waves today when he proposed a radical new hypothesis. The continents were once joined together as one huge landmass. In time, he suggests, pieces of this landmass broke away and drifted apart.

Wegener calls this supercontinent *Pangaea*. To support his theory, Wegener points out that the continents seem to fit together.

He notes, for example, that the east coast of South America fits snugly against the west coast of Africa. Mountain ranges continue across both continents as smoothly as the lines of print across torn pieces of a newspaper.

Other scientists reject Wegener's claim. They say that they know of no force strong enough to cause continents to move.

Movement • Seven continents were once one continent. ▲



Region • Alfred Wegener was born in Germany in 1880. ▲

The Five Themes

Eventually, the scientific community accepted Alfred Wegener's theory. Scientists discovered that giant slabs of Earth's surface, called tectonic plates, move, causing the continents to drift. This creates earthquakes, volcanoes, and mountains. Geographers study the processes that cause changes like these. To help you understand how geographers think about the world, consider geography's five themes—location, place, region, movement, and human-environment interaction.

Vocabulary

tectonic plates: huge slabs of Earth's surface

GEOGRAPHY SKILLBUILDER:

Interpreting a Map

1. **Location** • What is the latitude of Adelaide?
2. **Location** • What island is almost entirely enclosed by the lines 40° and 45° south latitude and 145° and 150° east longitude?



The Galápagos Islands The Galápagos Islands are an archipelago, or group of islands, 600 miles off the coast of South America. These islands, which contain many forms of plant and animal life found nowhere else in the world, are a unique "living museum."

Scientists and tourists are fascinated by the islands' creatures, such as Galápagos hawks, land iguanas, waved albatrosses, and blue-footed boobies. The islands are also home to giant tortoises, which can weigh up to 650 pounds and can live to be 200 years old. One of the 11 subspecies of giant tortoises has only one member left. Lonesome George, shown below, is about 80 years old.



Location

Often, the first thing you want to know about a place is where it is located in space. Geography helps you think about things spatially—where they are located and how they got there. Location allows you to discuss places in the world in terms everyone can understand.

Absolute Location If someone asks you where your school is, you might say, "At the corner of Fifth Street and Second Avenue." Ask a geographer where Melbourne, Australia, is located, and you may get the answer "38° south latitude, 145° east longitude." This is the absolute location of the city of Melbourne. **Absolute location** is the exact spot on Earth where a place can be found.

Using a system of imaginary lines drawn on its surface, geographers can locate any place on Earth. Lines that run parallel to the equator are called **latitude** lines. They measure distance north and south of the equator. Lines that run between the North and South Poles are called **longitude** lines. They measure distance east and west of the prime meridian.

Reading
Social Studies

A. Contrasting
Contrast absolute location with relative location.

Relative Location Another way to define the location of a place is to describe its relation to other places. You might say your school is “near the fire station” or “two blocks west of the pet store.” If someone asks you where Canada is, you might say, “North of the United States.” The location of one place in relation to other places is called its **relative location**.



Place • Thousands of years ago, this part of Southwest Asia, then called Mesopotamia, was green and fertile. Today, as you can see, this area is mostly desert. ▲

Place

Another useful theme of geography is place. If you go to a new place, the first thing you want to know is what it is like. Is it crowded or is there a lot of open space? How is the climate? What language do people speak? Every place on Earth has a distinct group of physical features, such as its climate, landforms and bodies of water, and plant and animal life. Places can also have human characteristics, or features that human beings have created, such as cities and towns, governments, and cultural traditions.

Places Change If you could go back to the days when dinosaurs roamed Earth, you would see a world much different from the one you know. Much of Earth had a moist, warm climate, and the continents were not located where they are today. Rivers, forests, wetlands, glaciers, oceans—the physical features of Earth—continue to change. Some changes are dramatic, caused by erupting volcanoes, earthquakes, and hurricanes. Others happen slowly, such as the movement of glaciers or the formation of a delta.

Place • This satellite photo shows the Ganges River delta. It was formed from sediment and mud carried by the river to its mouth. ▼

Region

Geographers group places into regions. A region is a group of places that have physical features or human characteristics, or both, in common. A geographer interested in languages, for example, might divide the world into language regions. All the countries where Spanish is the major language would form one Spanish-speaking language region. Geographers compare regions to understand the differences and similarities among them.



Click to Activate

Natural Regions of the World

Region	Climate	Plant Life
Tropical Rain Forest	Hot and wet all year	Thick trees, broad leaves Trees stay green all year
Tropical Grassland	Hot all year Wet and dry seasons	Tall grasses Some trees
Mediterranean	Hot, dry summers Cool-to-mild winters	Open forests Some clumps of trees Many shrubs, herbs, grasses
Temperate Forest	Warm summers Cold-to-cool winters	Mixed forests; some trees lose leaves in winter, others stay green all year
Cool Forest	Cool-to-mild summers Long, cold winters	Mostly trees with needles; stay green all year; some trees lose leaves in winter
Cool Grassland	Warm summers Cool winters Drier than forest regions	Prairies: Tall, thick grass Higher lands: Shorter grass
Desert	Hot all year Very little rain	Sand or bare soil, few plants May have cactus, some grass and bushes
Tundra	Short, cool summers Long, cold winters Little rain or snow	Rolling plains: No trees Some patches of moss, short grass, flowering plants
Arctic	Very cold Covered in ice all year	None
High Mountain	Varies, depending on altitude	Varies, depending on altitude



Natural Regions The world can be divided into ten natural regions. A natural region has its own unique combination of plant and animal life and climate. Tropical rain forest regions are in Central and South America, Africa south of the Sahara, Southeast Asia, Australia, and the Pacific Islands. Where are desert regions located?

Region • The tundra is one of the ten natural regions of the world. ▲

Movement

People, goods, and ideas move from one place to another. So do animals, plants, and other physical features of Earth. Movement is the fourth geographic theme. The Internet is a good tool for the movement of ideas. Sometimes

SKILLBUILDER: Interpreting a Chart

- Region** • How are desert regions and tropical grasslands alike and how are they different?
- Region** • In which type of climate are trees most likely to stay green all year?

people move within a country. For example, vast numbers of people have migrated from farms to cities. **Migrate** means to move from one area to settle in another. You may have ancestors who immigrated to the United States—perhaps from Africa, Europe, Latin America, or Asia. When people emigrate, they take their ideas and customs with them. They may also adopt new ideas from their new home.

Reasons for Moving Migration is a result of push and pull factors. Problems in one place push people out. Advantages in another place pull people in. Poverty, overcrowding, lack of jobs and schooling, prejudice, war, and political oppression are push factors. Pull factors include a higher standard of living, employment and educational opportunities, rights, freedom, peace, and safety.

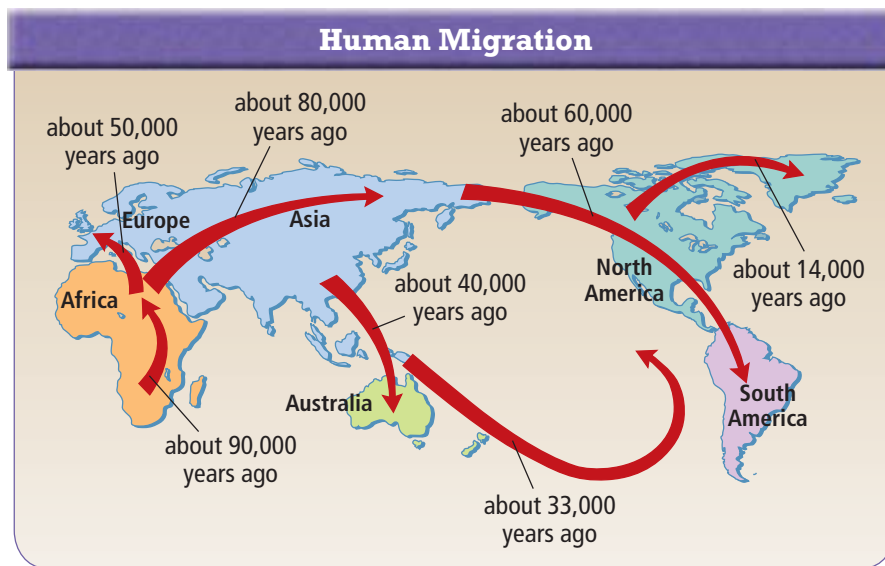
Vocabulary

immigrate:
to move to an area

emigrate:
to move away from an area

Reading Social Studies

B. Synthesizing
How do push and pull factors work together?



Movement • As you can see, people have been on the move for at least 90,000 years. ◀

Vocabulary

navigable:
deep and wide enough for boats to travel on

Barriers to Movement Natural barriers, such as mountain ranges, canyons, and raging rivers, can make migration difficult. Oceans, lakes, navigable rivers, and flat land can make it easier. Modern forms of transportation have made it easier than ever for people to move back and forth between countries.

Human-Environment Interaction

Interaction between human beings and their environment is the fifth theme of geography. Human-environment interaction occurs because humans depend on, adapt to, and modify the world around them. Human society and the environment cannot be separated. Each shapes and is shaped by the other. Earth is a unified system.

Some places are the way they are because people have changed them. For example, if an area has a lot of open meadows, this may be because early settlers cleared the land for farming.

Citizenship IN ACTION

Saving Special Places Many of the most wonderful and special places on Earth may be destroyed or ruined over time unless they are protected. To prevent this, UNESCO (the United Nations Educational, Scientific, and Cultural Organization) set up the World Heritage Committee in 1972. This group identifies human-made and natural wonders all over the world and looks for ways to protect them for the benefit of the world community. So far, the list of World Heritage Sites numbers over 690. The Grand Canyon (see photograph at right), the Galápagos Islands, the Roman Coliseum, and the Pyramids of Giza are just a few of the places protected for future generations.



Human changes may help or hurt the environment. Pollution is an example of a harmful effect. The environment can also harm people. For example, hurricanes wash away beaches and houses along the shore; earthquakes cause fire and destruction.

Adaptation Humans have often adapted their way of life to the natural resources that their local environment provided. In the past, people who lived near teeming oceans learned to fish. Those who lived near rich soil learned to farm. People built their homes out of local materials and ate the food easily grown in their surroundings. Cultural choices, such as what clothes to wear or which sports to participate in, often reflected the environment.

Because of technology, this close adaptation to the environment is not as common as it once was. Airplanes, for example, can quickly fly frozen fish from the coast to towns far inland. Even so, there are many more ice skaters in Canada and surfers in California than the other way around.

Interaction People and the environment continually interact. For example, when thousands of people in a city choose to use public transportation or ride bicycles rather than drive, less gasoline is burned. When less gasoline is burned, there is less air pollution. In other words, when the environment is healthy, the people who live in it are able to lead healthier lives.

SECTION 1 ASSESSMENT

Terms & Names

1. Identify: (a) absolute location (b) latitude (c) longitude (d) relative location (e) migrate

Taking Notes

2. Use a chart like this one to list and explain the five themes of geography.

Theme	Explanation

Main Ideas

3. (a) What physical processes can cause places to change over time?
 (b) How do push and pull factors cause migration?
 (c) What are some ways people have adapted to their environment?

Critical Thinking

4. Making Inferences

What factors make your part of the United States a region?

Think About

- ♦ similar human geography
- ♦ similar physical geography

ACTIVITY -OPTION-

Write and illustrate a **magazine advertisement** to persuade people to move to a new place. Include several pull factors for the place you are advertising.