

Encyclopedic Entry

continent

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A continent is one of Earth's seven main divisions of land. The continents are, from largest to smallest: Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

When geographers identify a continent, they usually include all the islands associated with it. Japan, for instance, is part of the continent of Asia. Greenland and all the islands in the Caribbean Sea are usually considered part of North America.

Together, the continents add up to about 148 million square kilometers (57 million square miles) of land. Continents make up most—but not all—of the Earth's land surface. A very small portion of the total land area is made up of islands that are not considered physical parts of continents. New Zealand, French Polynesia, and the Hawaiian Islands are examples of land areas that are considered microcontinents. These areas are usually grouped with culturally similar continents, but are geologically distinct.

The ocean, divided into four major bodies of water, covers almost three-fourths of the Earth. The area of the ocean is more than double the area of all the continents combined. All continents border at least two oceans. Asia, the largest continent, has the longest series of coastlines.<

Coastlines, however, do not indicate the actual boundaries of the continents. Continents are defined by their continental shelves. A continental shelf is a gently sloping area that extends outward from the beach far into the ocean. A continental shelf is part of the ocean, but also part of the continent. If continental shelves were included in the total land area, continents would make up more than one-third of the Earth's surface.

"Continent" has more than just a physical definition. To human geographers, the term is about <u>culture</u>. The continents of Europe and Asia, for example, are actually part of a single, <u>enormous</u> piece of land called Eurasia. But <u>linguistically</u> and ethnically, the areas of Asia and Europe are distinct. The various cultural groups of Europe have more in common with one another than they do with cultural groups in Asia. Because of this, most geographers divide Eurasia into Europe and Asia. An imaginary line, running from the northern Ural Mountains in Russia south to the Caspian and Black Seas, separates Europe, to the west, from Asia, to the east.

Building the Continents

The Earth formed 4.6 billion years ago from a great, swirling cloud of dust and gas. The continuous smashing of space debris and the pull of gravity made the inside of the Earth heat up. As the heat increased, some of the Earth's rocky materials melted and rose to the surface, where they cooled and formed a crust. Heavier material sank toward the Earth's center. Eventually, the Earth came to have three main layers: the core, the mantle, and the crust.

The crust and the top portion of the mantle form a rigid shell around the Earth that is broken up into huge sections called tectonic plates. The heat from inside the Earth causes the plates to slide around on the molten mantle. Today, tectonic plates continue to slowly slide around the surface, just as they have been doing for hundreds of millions of years. Geologists believe the interaction of the plates, a process called plate tectonics, contributed to the creation of continents.

Studies of rocks found in ancient areas of North America have revealed that the oldest known pieces of the continents began to form nearly 4 billion years ago, soon after the Earth itself formed. At that time, a primitive ocean covered Earth. Only a small fraction of the crust was made up of continental material. Scientists theorize that this material built up along the boundaries of tectonic plates during a process called <u>subduction</u>. During subduction, plates collide, and the edge of one plate slides beneath the edge of another.

When heavy oceanic crust subducted toward the mantle, it melted in the mantle's intense heat. Once melted, the rock became lighter. Called magma, it rose through the overlying plate and burst out as lava. When the lava cooled, it hardened into igneous rock.

Gradually, the igneous rock built up into small volcanic islands above the surface of the ocean. Over time, these islands grew bigger, partly as the result of more lava flows and partly from the buildup of material scraped off descending plates. When plates carrying islands subducted, the islands themselves did not descend into the mantle. Their material fused with that of islands on the neighboring plate. This made even larger landmasses—the first continents.

The building of volcanic islands and continental material through plate tectonics is a process that continues today. <u>Continental crust</u> is much lighter than oceanic crust. In <u>subduction zones</u>, where tectonic plates interact with each other, oceanic crust always subducts beneath continental crust. Oceanic crust is constantly being recycled in the mantle. For this reason, continental crust is much, much older than oceanic crust.

Wandering Continents

If you could visit the Earth as it was millions of years ago, it would look very different. The continents have not always been where they are today. About 480 million years ago, most continents were scattered chunks of land lying along or below the Equator. Millions of years of continuous tectonic activity changed their positions, and by 240 million years ago, almost all of the world's land was joined in a single, huge continent. Geologists call this supercontinent Pangaea, which means "all lands" in Greek.

By about 200 million years ago, the forces that helped form Pangaea caused the supercontinent to begin to break apart. The pieces of Pangaea that began to move apart were the beginnings of the continents that we know today.

A giant landmass that would become Europe, Asia, and North America separated from another mass that would split up into other continents. In time, Antarctica and Australia, still joined together, broke away and drifted south. The small piece of land that would become the <u>peninsula</u> of India broke away and for millions of years moved north as a large island. It eventually collided with Asia. Gradually, the different landmasses moved to their present locations.

The positions of the continents are always changing. North America and Europe are moving away from each other at the rate of about 2.5 centimeters (1 inch) per year. If you could visit the planet in the future, you might find that part of the U.S. state of California had separated from North America and become an island. Africa might have split in two along the Great Rift Valley. It is even possible that another supercontinent may form some day.

Continental Features

The surface of the continents has changed many times because of mountain building, weathering, erosion, and build-up of sediment. Continuous, slow movement of tectonic plates also changes surface features.

The rocks that form the continents have been shaped and reshaped many times. Great mountain ranges have risen and then have been worn away. Ocean waters have flooded huge areas and then gradually dried up. Massive ice sheets have come and gone, sculpting the landscape in the process.

Today, all continents have great mountain ranges, vast plains, extensive plateaus, and complex river systems. The landmasses' average elevation above sea level is about 838 meters (2,750 feet).

Although each is <u>unique</u>, all the continents share two basic features: old, geologically <u>stable</u> regions, and younger, somewhat more active regions. In the younger regions, the process of mountain building has happened recently and often continues to happen.

The power for mountain building, or <u>orogeny</u>, comes from plate tectonics. One way mountains form is through the collision of two tectonic plates. The impact creates wrinkles in the crust, just as a rug wrinkles when you push against one end of it. Such a collision created Asia's Himalaya Mountains several million years ago. The plate carrying India slowly and forcefully shoved the landmass of India into Asia, which was riding on another plate. The collision continues today, causing the Himalayas to grow taller every year.

Recently formed mountains, called coastal ranges, rise near the western coasts of North and South America. Older, more stable mountain ranges are found in the interior of continents. The Appalachians of North America and the Urals, on the border between Europe and Asia, are older mountain ranges that are not geologically active.

Even older than these ancient, eroded mountain ranges are flatter, more stable areas of the continents called cratons. A craton is an area of ancient crust that formed during the Earth's early history. Every continent has a craton. Microcontinents, like New Zealand, lack cratons.

Cratons have two forms: shields and platforms. Shields are bare rocks that may be the roots or cores of ancient mountain ranges that have completely eroded away. Platforms are cratons with sediment and sedimentary rock lying on top.

The Canadian Shield makes up about a quarter of North America. For hundreds of thousands of years, sheets of ice up to 3.2 kilometers (2 miles) thick coated the Canadian Shield. The moving ice wore away material on top of ancient rock layers, exposing some of the oldest formations on Earth. When you stand on the oldest part of the Canadian Shield, you stand directly on rocks that formed more than 3.5 billion years ago.

North America

North America, the third-largest continent, extends from the tiny Aleutian Islands in the northwest to the Isthmus of Panama in the south. The continent includes the enormous island of Greenland in the northeast. In the far north, the continent stretches halfway around the world, from Greenland to the Aleutians. But at Panama's narrowest part, the continent is just 50 kilometers (31 miles) across.

Young mountains—including the Rockies, North America's largest chain—rise in the West. Some of the Earth's youngest mountains are found in the Cascade Range of the U.S. states of Washington, Oregon, and California. Some peaks there began to form only about a million years ago—a wink of an eye in Earth's long history. North America's older mountain ranges rise near the East Coast of the United States and Canada.

In between the mountain systems lie wide plains that contain deep, rich soil. Much of the soil was formed from material deposited during the most recent glacial period. This ice age reached its peak about 18,000 years ago. As

glaciers retreated, streams of melted ice dropped sediment on the land, building layers of fertile soil in the plains region. Grain grown in this region, called the "breadbasket of North America," feeds a large part of the world.

North America contains a variety of natural wonders. Landforms and all types of vegetation can be found within its boundaries. North America has deep canyons, such as Copper Canyon in the Mexican state of Chihuahua. Yellowstone National Park, in the U.S. state of Wyoming, has some of the world's most active geysers. Canada's Bay of Fundy has the greatest variation of tide levels in the world. The Great Lakes form the planet's largest area of freshwater. In the U.S. state of California, giant sequoias, the world's most massive trees, grow more than 76 meters (250 feet) tall and nearly 31 meters (100 feet) around.

Greenland, off the east coast of Canada, is the world's largest island. Despite its name, Greenland is mostly covered with ice. Its ice is a <u>remnant</u> of the great ice sheets that once <u>blanketed</u> much of the North American continent. Greenland is the only place besides Antarctica that still has an ice sheet.

From the freezing Arctic to the tropical jungles of Central America, North America enjoys more climate variation than any other continent. Almost every type of ecosystem is represented somewhere on the continent, from coral reefs in the Caribbean to Greenland's ice sheet to the Great Plains in the U.S. and Canada.

Today, North America is home to the citizens of Canada, the United States, Greenland, Mexico, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and the island countries and territories that dot the Caribbean Sea and the western North Atlantic Ocean.

Most of North America sits on the North American Plate. Parts of the Canadian province of British Columbia and the U.S. states of Washington, Oregon, and California sit on the tiny Juan de Fuca Plate. Parts of California and the Mexican state of Baja California sit on the enormous Pacific Plate. Parts of Baja California and the Mexican states of Baja California Sur, Sonora, Sinaloa, and Jalisco sit on the Cocos Plate. The Caribbean Plate carries most of the small islands of the Caribbean Sea (south of the island of Cuba) as well as Central America from Honduras to Panama. The Hawaiian Islands, in the middle of the Pacific Ocean on the Pacific Plate, are usually considered part of North America.

South America

South America is connected to North America by the narrow Isthmus of Panama. These two continents weren't always connected; they came together only 3 million years ago. South America is the fourth-largest continent and extends from the sunny beaches of the Caribbean Sea to the frigid waters near the Antarctic Circle.

South America's southernmost islands, called <u>Tierra del Fuego</u>, are less than 1,120 kilometers (700 miles) from Antarctica. These islands even host some Antarctic birds, such as penguins, albatrosses, and terns. Early Spanish explorers visiting the islands for the first time saw small fires dotting the land. These fires, made by indigenous people, seemed to float on the water, which is probably how the islands got their name—Tierra del Fuego means "Land of Fire."

The Andes, the Earth's longest terrestrial mountain range, stretch the entire length of South America. Many active volcances dot the range. These volcanic areas are fueled by heat generated as a large oceanic plate, called the Nazca Plate, grinds beneath the plate carrying South America.

The central-southern area of South America has pampas, or plains. These rich areas are ideal for <u>agriculture</u>. The growing of wheat is a major <u>industry</u> in the pampas. <u>Grazing animals</u>, such as <u>cattle</u> and sheep, are also raised in the pampas region.

In northern South America, the Amazon River and its tributaries flow through the world's largest tropical rain forest.

In volume, the Amazon is the largest river in the world. More water flows from it than from the next six largest rivers combined.

South America is also home to the world's tallest waterfall, Angel Falls, in the country of Venezuela. Water flows more than 979 meters (3,212 feet)—almost a mile. The falls are so high that most of the water evaporates into mist or is blown away by wind before it reaches the ground.

South American rain forests contain an enormous wealth of animal and plant life. More than 15,000 species of plants and animals are found only in the Amazon River basin. Many Amazonian plant species are sources of food and medicine for the rest of the world. Scientists are trying to find ways to preserve this precious and fragile environment as people move into the Amazon basin and clear land for settlements and agriculture.

Twelve independent countries make up South America: Brazil, Colombia, Argentina, Peru, Venezuela, Chile, Ecuador, Bolivia, Paraguay, Uruguay, Guyana, and Suriname. The territories of French Guiana, part of France, and the Falkland Islands, part of the United Kingdom, are also part of South America.

Almost all of South America sits on top of the South American Plate.

Europe

Europe, the sixth-largest continent, contains just 7 percent of the world's land. In total area, the continent of Europe is only slightly larger than the country of Canada. However, the population of Europe is more than twice that of South America. Europe has more than 40 countries and many of the world's major cities, including London, England; Paris, France; Berlin, Germany; Rome, Italy; Madrid, Spain; and Moscow, Russia.

Most European countries have access to the ocean. The continent is bordered by the Arctic Ocean in the north, the Atlantic Ocean in the west, the Caspian Sea in the southeast, and the Mediterranean and Black Seas in the south. The nearness of these bodies of water and the <u>navigation</u> of many of Europe's rivers played a major role in the continent's history. Early Europeans learned the river systems of the Volga, Danube, Don, Rhine, and Po, and could successfully travel the length and width of the small continent for trade, communication, or conquest.

Navigation and exploration outside of Europe was an important part of the development of the continent's economic, social, linguistic, and political legacy. European explorers were responsible for colonizing land on every continent except Antarctica. This colonization process had a drastic impact on the economic and political development of those continents, as well as Europe.

In the east, the Ural Mountains separate Europe from Asia. The nations of Russia and Kazakhstan straddle both continents. Another range, the Kjølen Mountains, extends along the northern part of the border between Sweden and Norway. To the south, the Alps form an arc stretching from Albania to Austria, then across Switzerland and northern Italy into France. As the youngest and steepest of Europe's mountains, the Alps geologically resemble the Rockies of North America, another young range.

A large area of gently rolling plains extends from northern France eastward to the Urals. A climate of warm summers, cold winters, and plentiful rain helps make much of this European farmland very productive.

The climate of Western Europe, especially around the Mediterranean Sea, makes it one of the world's leading tourism destinations.

Almost all of Europe sits on the massive Eurasian Plate.

Africa

Africa, the second-largest continent, covers an area more than three times that of the United States. From north to south, Africa stretches about 8,000 kilometers (5,000 miles). It is connected to Asia by the Isthmus of Suez in Egypt.

The Sahara, which covers much of North Africa, is the world's largest hot desert. The world's longest river, the Nile, flows more than 6,560 kilometers (4,100 miles) from its most remote headwaters in Lake Victoria to the Mediterranean Sea in the north. A series of falls and rapids along the southern part of the river makes navigation difficult. The Nile has played an important role in the history of Africa. In ancient Egyptian civilization, it was a source of life for food, water, and transportation.

The top half of Africa is mostly dry, hot desert. The middle area has <u>savannas</u>, or flat, grassy plains. This region is home to wild animals such as lions, giraffes, elephants, hyenas, cheetahs, and wildebeests. The central and southern areas of Africa are <u>dominated</u> by rain forests. Many of these forests thrive around Africa's other great rivers, the Zambezi, the Congo, and the Niger. However, trees are being cut down in Africa's rain forests for many of the same reasons <u>deforestation</u> is taking place in the rain forests of South America and Asia: <u>development</u> for businesses, homes, and agriculture.

Much of Africa is a high plateau surrounded by narrow strips of coastal lowlands. Hilly uplands and mountains rise in some areas of the interior. Glaciers on Mount Kilimanjaro in Tanzania sit just miles from the tropical jungles below. Even though Kilimanjaro is not far from the Equator, snow covers its summit all year long.

In eastern Africa, a giant depression called the Great Rift Valley runs from the Red Sea to the country of Mozambique. (The <u>rift valley</u> actually starts in southwestern Asia.) The Great Rift Valley is a site of major tectonic activity, where the continent of Africa is splitting into two. Geologists have already named the two parts of the African Plate. The Nubian Plate will carry most of the continent, to the west of the rift; the Somali Plate will carry the far eastern part of the continent, including the so-called "Horn of Africa." The Horn of Africa is a peninsula that resembles the upturned horn of a rhinoceros. The countries of Eritrea, Ethiopia, Djibouti, and Somalia sit on the Horn of Africa and the Somali Plate.

Africa is home to 56 countries but only 14 percent of the world's total population. The area of central-eastern Africa is important to scientists who study evolution and the earliest origins of humanity. This area is thought to be the place where hominids began to evolve.

The entire continent of Africa sits on the African Plate.

Asia

Asia, the largest continent, stretches from the eastern Mediterranean Sea to the western Pacific Ocean. There are more than 40 countries in Asia. Some are among the most-populated countries in the world, including China, India, and Indonesia. Sixty percent of the Earth's population lives in Asia. More than a third of the world's people live in China and India alone.

The continent of Asia includes many islands, some of them countries. The Philippines, Indonesia, Japan, and Taiwan are major island nations in Asia.

Most of Asia's people live in cities or fertile farming areas near river valleys, plains, and coasts. The plateaus in central Asia are largely unsuitable for farming and are thinly populated.

Asia accounts for almost a third of the world's land. The continent has a wide range of climate regions, from polar in the Siberian Arctic to tropical in equatorial Indonesia. Parts of central Asia, including the Gobi Desert in China

and Mongolia, are dry year-round. Southeast Asia, on the other hand, depends on the annual monsoons, which bring rain and make agriculture possible.

Monsoon rains and snowmelt feed Asian rivers such as the Ganges, the Yellow, the Mekong, the Indus, and the Yangtze. The rich valley between the Tigris and Euphrates rivers in western Asia is called the "Fertile Crescent" for its place in the development of agriculture and human civilization.

Asia is the most mountainous of all the continents. More than 50 of the highest peaks in the world are in Asia. Mount Everest, which reaches more than 8,700 meters (29,000 feet) high in the Himalaya range, is the highest point on Earth. These mountains have become major destination spots for adventurous travelers.

Plate tectonics continuously push the mountains higher. As the landmass of India pushes northward into the landmass of Eurasia, parts of the Himalayas rise at a rate of about 2.5 centimeters (1 inch) every five years.

Asia contains not only the Earth's highest elevation, but also its lowest place on land: the shores of the Dead Sea in the countries of Israel and Jordan. The land there lies more than 390 meters (1,300 feet) below sea level.

Although the Eurasian Plate carries most of Asia, it is not the only one supporting major parts of the large continent. The Arabian Peninsula, in the continent's southwest, is carried by the Arabian Plate. The Indian Plate supports the Indian peninsula, sometimes called the Indian subcontinent. The Australian Plate carries some islands in Indonesia. The North American Plate carries eastern Siberia and the northern islands of Japan.

Australia

In addition to being the smallest continent, Australia is the flattest and the second-driest, after Antarctica. The continent is sometimes called Oceania, to include the thousands of tiny islands of the Central and South Pacific, most notably Melanesia, Micronesia, and Polynesia (including the U.S. state of Hawaii). However, the continent of Australi itself includes only the nation of Australia, the eastern portion of the island of New Guinea (the nation of Papua New Guinea) and the island nation of New Zealand.

Australia covers just fewer than 8.5 million square kilometers (about 3.5 million square miles). Its population is about 31 million. It is the most sparsely populated continent, after Antarctica.

A plateau in the middle of mainland Australia makes up most of the continent's total area. Rainfall is light on the plateau, and not many people have settled there. The Great Dividing Range, a long mountain range, rises near the east coast and extends from the northern part of the territory of Queensland through the territories of New South Wales and Victoria. Mainland Australia is known for the Outback, a desert area in the interior. This area is so dry, hot, and barren that few people live there.

In addition to the hot plateaus and deserts in mainland Australia, the continent also features lush equatorial rain forests on the island of New Guinea, tropical beaches, and high mountain peaks and glaciers in New Zealand.

Most of Australia's people live in cities along the southern and eastern coasts of the mainland. Major cities include Perth, Sydney, Brisbane, Melbourne, and Adelaide, all in Australia.

Biologists who study animals consider Australia a living laboratory. When the continent began to break away from Antarctica more than 60 million years ago, it carried a <u>cargo</u> of animals with it. Isolated from life on other continents, the animals developed into creatures unique to Australia, such as the koala, the platypus, and the Tasmanian devil.

The Great Barrier Reef, off mainland Australia's northeast coast, is another living laboratory. The world's largest

coral reef ecosystem, it is home to thousands of species of fish, sponges, marine mammals, corals, and crustaceans. The reef itself is 1,920 kilometers (1,200 miles) of living coral communities. By some estimates, it is the world's largest living organism.

Most of Australia sits on the Australian Plate. The southern part of the South Island of New Zealand sits on the Pacific Plate.

Antarctica

Antarctica is the windiest, driest, and iciest place on Earth. Antarctica is larger than Europe or Australia, but unlike those continents, it has no permanent population. People who work there are scientific researchers and support staff, such as pilots and cooks.

The climate of Antarctica makes it impossible to support agriculture or a permanent civilization. Temperatures in Antarctica, much lower than Arctic temperatures, plunge lower than -73 degrees Celsius (-100 degrees Fahrenheit).

Scientific bases and laboratories have been established in Antarctica for studies in fields that include geology, oceanography, and meteorology. The freezing temperatures of Antarctica make it an excellent place to study the history of Earth's atmosphere and climate. Ice cores from the massive Antarctic ice sheet have recorded changes in Earth's temperature and atmospheric gases for thousands of years. Antarctica is also an ideal place for discovering meteorites, or stony objects that have impacted the Earth from outer space. The dark meteorites, often made of metals like iron, stand out from the white landscape of most of the continent.

Antarctica is almost completely covered with ice, sometimes as thick as 3.2 kilometers (2 miles). In winter, Antarctica's surface area may double as pack ice builds up in the ocean around the continent.

Like all other continents, Antarctica has volcanic activity. The most active volcano is Mount Erebus, which is less than 1,392 kilometers (870 miles) from the South Pole. Its frequent eruptions are evidence of hot, molten rock beneath the continent's icy surface.

Antarctica does not have any countries. However, scientific groups from different countries inhabit the research stations. A multinational treaty negotiated in 1959 and reviewed in 1991 states that research in Antarctica can only be used for peaceful purposes. McMurdo Station, the largest community in Antarctica, is operated by the United States. Vostok Station, where the coldest temperature on Earth was recorded, is operated by Russia.

All of Antarctica sits on the Antarctic Plate.

VOCABULARY

Term	Part of Speech	Definition
agriculture	noun	the art and science of cultivating the land for growing crops (farming) or raising livestock (ranching).
ancient	adjective	very old.
Antarctic Circle	noun	line of latitude at 66.5 degrees south that encircles the continent of Antarctica.
arc	noun	part of the outline of a circle.
atmosphere	noun	layers of gases surrounding a planet or other celestial body.

barren	adjective	unproductive.
basin	noun	a dip or depression in the surface of the land or ocean floor.
bay	noun	body of water partially surrounded by land, usually with a wide mouth to a larger body of water.
beach	noun	narrow strip of land that lies along a body of water.
blanket	verb	to cover entirely.
canyon	noun	deep, narrow valley with steep sides.
cargo	noun	goods carried by a ship, plane, or other vehicle.
cattle	noun	cows and oxen.
Central America	noun	region that connects North America and South America, including the Isthmus of Panama.
civilization	noun	complex way of life that developed as humans began to develop urban settlements.
climate	noun	all weather conditions for a given location over a period of time.
coastal range	noun	recently formed mountains found near the coast of continents, especially the western coasts of the Americas.
coastline	noun	outer boundary of a shore.
colonize	verb	to establish control of a foreign land and culture.
communication	noun	sharing of information and ideas.
complex	adjective	complicated.
complex conquest	adjective noun	complicated. victory.
complex conquest continent	adjective noun noun	complicated. victory. one of the seven main land masses on Earth.
complex conquest continent continental crust	adjective noun noun noun	complicated. victory. one of the seven main land masses on Earth. thick layer of Earth that sits beneath continents.
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descend	verb	to go from a higher to a lower place.
desert	noun	area of land that receives no more than 25 centimeters (10 inches) of precipitation a year.
development	noun	construction or preparation of land for housing, industry, or agriculture.
distinct	adjective	unique or identifiable.
dominate	verb	to overpower or control.
drastic	adjective	severe or extreme.
dust	noun	microscopic particles of rocks or minerals drifting in space. Also called cosmic dust or space dust.
economic	adjective	having to do with money.
ecosystem	noun	community and interactions of living and nonliving things in an area.
elevation	noun	height above or below sea level.
enormous	adjective	very large.
Equator	noun	imaginary line around the Earth, another planet, or star running east-west, 0 degrees latitude.
erosion	noun	act in which earth is worn away, often by water, wind, or ice.
Eurasia	noun	landmass including the continents of Europe and Asia.
evaporate	verb	to change from a liquid to a gas or vapor.
evolution	noun	process of how present types of organisms developed from earlier forms of life.
exploration	noun	study and investigation of unknown places, concepts, or issues.
explorer	noun	person who studies unknown areas.
extensive	adjective	very large.
farmland	noun	area used for agriculture.
fertile	adjective	able to produce crops or sustain agriculture.
Fertile Crescent	noun	region extending from the eastern Mediterranean coast through Southwest Asia to the Persian Gulf.
flood	noun	overflow of a body of water onto land.
food	noun	material, usually of plant or animal origin, that living organisms use to obtain nutrients.
fragile	noun	delicate or easily broken.
frequent	adjective	often.
freshwater	noun	water that is not salty.
frigid	adjective	very cold.
fuse	verb	to combine or meld together.
gas	noun	state of matter with no fixed shape that will fill any container uniformly. Gas molecules are in constant, random motion.

geographer	noun	person who studies places and the relationships between people and their environments.
geologic	adjective	having to do with the physical formations of the Earth.
geologist	noun	person who studies the physical formations of the Earth.
geology	noun	study of the physical history of the Earth, its composition, its structure, and the processes that form and change it.
geyser	noun	natural hot spring that sometimes erupts with water or steam.
giant sequoia	noun	largest species of tree on Earth.
glacial period	noun	time of long-term lowering of temperatures on Earth. Also known as an ice age.
glacier	noun	mass of ice that moves slowly over land.
grain	noun	harvested seed of such grasses as wheat, oats, and rice.
gravity	noun	physical force by which objects attract, or pull toward, each other.
grazing animal	noun	animal that feeds on grasses, trees, and shrubs.
Great Lakes	noun	largest freshwater bodies in the world, located in the United States and Canada. Lake Huron, Lake Ontario, Lake Michigan, Lake Erie, and Lake Superior make up the Great Lakes.
Great Plains	noun	grassland region of North America, between the Rocky Mountains and the Mississippi River.
headwater	noun	source of a river.
hominid	noun	biological family of primates, including humans, chimpanzees, gorillas, and orangutans, and their ancestors.
Horn of Africa	noun	large peninsula in northeast Africa, including the countries of Somalia, Djibouti, Eritrea, and Ethiopia. Also called the Somali Peninsula.
ice age	noun	long period of cold climate where glaciers cover large parts of the Earth. The last ice age peaked about 20,000 years ago. Also called glacial age.
ice core	noun	sample of ice taken to demonstrate changes in climate over many years.
ice sheet	noun	thick layer of glacial ice that covers a large area of land.
igneous rock	noun	rock formed by the cooling of magma or lava.
Indian subcontinent	noun	landmass in south-central Asia carried by the Indian tectonic plate, including the peninsula of India.
indicate	verb	to display or show.
indigenous	adjective	native to or characteristic of a specific place.
industry	noun	activity that produces goods and services.
iron	noun	chemical element with the symbol Fe.
island	noun	body of land surrounded by water.
isolate	verb	to set one thing or organism apart from others.
isthmus	noun	narrow strip of land connecting two larger land masses.

jungle	noun	tropical ecosystem filled with trees and underbrush.
laboratory	noun	place where scientific experiments are performed. Also called a lab.
landform	noun	specific natural feature on the Earth's surface.
landscape	noun	the geographic features of a region.
lava	noun	molten rock, or magma, that erupts from volcanoes or fissures in the Earth's surface.
legacy	noun	material, ideas, or history passed down or communicated by a person or community from the past.
linguistic	adjective	having to do with language or speech.
magma	noun	molten, or partially melted, rock beneath the Earth's surface.
mantle	noun	middle layer of the Earth, made of mostly solid rock.
medicine	noun	substance used for treating illness or disease.
metal	noun	category of elements that are usually solid and shiny at room temperature.
meteorite	noun	type of rock that has crashed into Earth from outside the atmosphere.
meteorology	noun	study of weather and atmosphere.
microcontinent	noun	a type of large continental island.
mist	noun	clouds at ground-level, but with greater visibility than fog.
molten	adjective	solid material turned to liquid by heat.
monsoon	noun	seasonal change in the direction of the prevailing winds of a region. Monsoon usually refers to the winds of the Indian Ocean and South Asia, which often bring heavy rains.
mountain	noun	landmass that forms as tectonic plates interact with each other.
mountain range	noun	series or chain of mountains that are close together.
navigation	noun	art and science of determining an object's position, course, and distance traveled.
Nubian Plate	noun	tectonic plate currently being formed in western Africa as the African Plate splits in two.
ocean	noun	large body of salt water that covers most of the Earth.
Oceania	noun	region including island groups in the South Pacific.
oceanic crust	noun	thin layer of the Earth that sits beneath ocean basins.
oceanography	noun	study of the ocean.
orogeny	noun	the way mountains are formed.
Outback	noun	remote, sparsely populated interior region of Australia.
pack ice	noun	large area of drift ice, or ice not attached to a shoreline.
Pampas	noun	flat grasslands of South America.
Pangaea	noun	supercontinent of all the Earth's landmass that existed about 250 million years ago.
peninsula	noun	piece of land jutting into a body of water.

permanent	adjective	constant or lasting forever.
plain	noun	flat, smooth area at a low elevation.
plateau	noun	large region that is higher than the surrounding area and relatively flat.
plate tectonics	noun	movement and interaction of the Earth's plates.
platform	noun	ancient rocks that formed as part of continental crust, now overlain with sediment and sedimentary rock, located in the interior of continents.
polar	adjective	having to do with the North and/or South Pole.
Polynesia	noun	island group in the Pacific Ocean between New Zealand, Hawaii, and Easter Island.
precious	adjective	very valuable.
primitive	adjective	simple or crude.
rain forest	noun	area of tall, mostly evergreen trees and a high amount of rainfall.
rapids	noun	areas of fast-flowing water in a river or stream that is making a slight descent.
region	noun	any area on the Earth with one or more common characteristics. Regions are the basic units of geography.
remnant	noun	something that is left over.
remote	adjective	distant or far away.
research	noun	scientific observations and investigation into a subject, usually following the scientific method: observation, hypothesis, prediction, experimentation, analysis, and conclusion.
research station	noun	structure or structures built for scientific study of the surrounding region, possibly including residential and lab facilities.
rift valley	noun	depression in the ground caused by the Earth's crust spreading apart.
rigid	adjective	stiff.
river system	noun	tributaries, mouth, source, delta, and flood plain of a river.
savanna	noun	type of tropical grassland with scattered trees.
sea level	noun	base level for measuring elevations. Sea level is determined by measurements taken over a 19-year cycle.
sediment	noun	solid material transported and deposited by water, ice, and wind.
sedimentary rock	noun	rock formed from fragments of other rocks or the remains of plants or animals.
shield	noun	ancient rocks that formed as part of continental crust and are located in the interior of continents.
Siberia	noun	region of land stretching across Russia from the Ural Mountains to the Pacific Ocean.
snow	noun	precipitation made of ice crystals.
snowmelt	noun	water supplied by snow.
soil	noun	top layer of the Earth's surface where plants can grow.

Somali plate	noun	tectonic plate currently being formed in eastern Africa as the African plate splits in two.
sparse	adjective	scattered and few in number.
stable	adjective	steady and reliable.
straddle	verb	to be on both sides of an issue, area, or object.
subduct	verb	to pull downward or beneath something.
subduction	noun	process of one tectonic plate melting or going beneath another.
subduction zone	noun	area where one tectonic plate slides under another.
summit	verb	to reach the highest point of a mountain.
supercontinent	noun	ancient, giant landmass that split apart to form all the continents we know today.
tectonic plate	noun	large, moveable segment of the Earth's crust.
terrestrial	adjective	having to do with the Earth or dry land.
theorize	verb	to formulate and propose a group of ideas to explain a scientific question.
tide	noun	rise and fall of the ocean's waters, caused by the gravitational pull of the moon and sun.
Tierra del Fuego	noun	group of islands at the southern tip of South America.
tourism	noun	the industry (including food, hotels, and entertainment) of traveling for pleasure.
trade	noun	buying, selling, or exchanging of goods and services.
tropical	adjective	existing in the tropics, the latitudes between the Tropic of Cancer in the north and the Tropic of Capricorn in the south.
unique	adjective	one of a kind.
valley	noun	depression in the Earth between hills.
vast	adjective	huge and spread out.
vegetation	noun	all the plant life of a specific place.
volcanic island	noun	land formed by a volcano rising from the ocean floor.
volcano	noun	an opening in the Earth's crust, through which lava, ash, and gases erupt, and also the cone built by eruptions.
waterfall	noun	flow of water descending steeply over a cliff. Also called a cascade.
weathering	noun	the breaking down or dissolving of the Earth's surface rocks and minerals.
wheat	noun	most widely grown cereal in the world.

For Further Exploration

Interactives

- International Education Week: Continent IQ QuizCIA: World Exploration Game

