

Name _____



Andes Mountains

The Andes are the longest mountain system in the world, stretching 5,500 miles (8,851 km) from northern South America almost to the southern tip of the continent. They are also the second-highest mountain system in the world. At 22,834 feet (6,960 m), Mount Aconcagua in Argentina is the tallest mountain in the Andes.

Formation

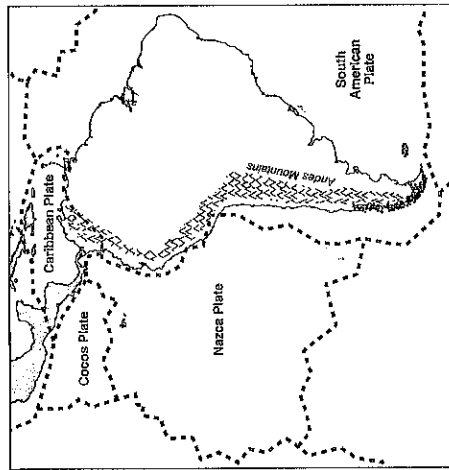
The Andes were formed millions of years ago by movements of *tectonic plates*, or large sections of Earth's crust. The mountains formed when the Nazca Plate collided with the South American Plate. The Nazca Plate was *subducted*, meaning it sank below the South American Plate, and Earth's surface was pushed up, forming the Andes. Today, when these plates move, they can cause violent earthquakes and volcanic eruptions.

The Andes Mountains are part of the Ring of Fire. The Ring of Fire is a huge area that encircles much of the Pacific Ocean, where a large number of earthquakes and volcanic eruptions take place. In fact, almost all of the world's volcanoes are located along the Ring of Fire. Over 200 of these volcanoes are in the Andes.

Landscape and Wildlife

The Andes mountain system is actually made up of several mountain ranges. In the far south, the mountains are smaller and do not rise above 10,000 feet (3,048 m). Farther north, the mountains are much taller. In Peru and Bolivia, the mountain system widens, consisting of two different ranges with *plateaus*, or high, flat plains, between them. The chain narrows again in the north where the mountains are still quite high, but not as high as in the middle of the system.

The climate in the Andes Mountains is cold and harsh. Yet many animals survive in this environment. Alpacas and vicuñas, which are related to llamas, live on the high plateaus. These animals have thick coats to keep them warm. Rodents called chinchillas make their homes in the rocky crevices and are known for their soft, thick fur. The Andean condor, a type of vulture, is the largest land bird in the Western Hemisphere. It feeds on *carrion* (dead animals) in the high mountain areas.



Name _____



Andes Mountains

Tallest Mountains in the Andes

	Mountain Peak	Location	Height
1	Aconcagua	Argentina	22,834 feet (6,960 m)
2	Ojos del Salado	Argentina/Chile	22,615 feet (6,893 m)
3	Pissis	Argentina	22,293 feet (6,795 m)
4	Cerro Bonete	Argentina	22,175 feet (6,769 m)
5	Lullillaco	Argentina/Chile	22,110 feet (6,739 m)
6	El Libertador	Argentina	22,047 feet (6,720 m)
	Mercedario	Argentina/Chile	22,047 feet (6,720 m)
8	Huascarán	Peru	22,025 feet (6,713 m)
9	Tupungato	Argentina/Chile	21,555 feet (6,570 m)
10	Cachi	Argentina	20,932 feet (6,380 m)

Circle the correct answer for each clue. Use the information on the other page and the chart above to help you.

- the length of the Andes mountain system 5,500 miles 7,200 miles
- the tallest mountain in the Andes Cerro Bonete Aconcagua
- a mountain located in Peru Huascarán Cachi
- a rodent that lives in the Andes chinchilla vicuña
- the third-highest mountain in the Andes Mercedario Pissis
- a type of vulture carrion condor
- an animal related to llamas vicuña chinchilla
- the second-tallest mountain in the Andes Aconcagua Ojos del Salado
- a subducted tectonic plate South American Nazca
- the area around the Pacific Ocean Ring of Volcanoes Ring of Fire

Name _____

Atacama Desert

The Atacama Desert stretches 600 miles (966 km) through northern Chile. The desert is a high plateau that extends from the Pacific Ocean into the base of the Andes Mountains.

Driest Place on Earth

Unlike most deserts, the Atacama is not hot. The average temperature is only about 65°F (19°C). However, the region is considered a desert because it gets very little rain. In fact, the Atacama is thought to be the driest place on Earth. It gets less than a half inch (1.25 cm) of rain a year. Many parts of the desert go for years without a single drop of rain. In fact, there are areas of the Atacama where rainfall has never been recorded!

Why is the Atacama Desert so dry? The answer has to do with its location between the Andes Mountains and the Pacific Ocean.

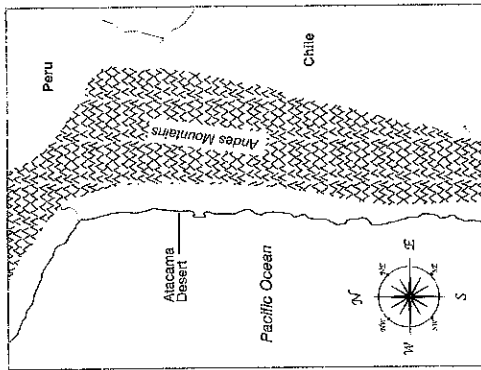
The Atacama is located on the Pacific coast. Currents in the Pacific Ocean cause cold water from the depths of the ocean to move up to the surface. This cold water causes the air to be cold as well. The cold air creates fog and clouds, but no rain.

At the same time, moisture from warm, tropical air coming from the eastern part of the continent does not make it over the mountains to the Atacama. Instead, the air cools over the Andes. As it cools, moisture is released onto the eastern side of the mountains in the form of rain or snow. By the time the air reaches the desert on the other side of the mountains, it has lost most of its moisture. So the mountains that cause the Amazon Basin to collect so much rainfall are also responsible for keeping the Atacama so dry.

Desert Terrain

Although it almost never rains, the fog in some parts of the Atacama provides enough moisture for algae, lichens, and even some cacti to grow. There is some water stored underground, and there are also salty lakes. Flocks of flamingos live in and around the salt lakes. They feed on red algae that grow in the water.

Other than a few plants and animals, there are very few living things in the Atacama Desert. The terrain is mostly gravel, sand, salt basins, and volcanic rock. The desert also contains rich deposits of copper and other metals.



Name _____

Atacama Desert

A. Fill in the blanks to complete the paragraph about the Atacama Desert. Use the information on the other page to help you.

The Atacama Desert is located in northern Chile between the Pacific

Ocean and the _____ Mountains. The desert is the

_____ place on Earth. Some places in the Atacama do not

get any _____ for many years. Even though it rarely rains,

the desert does get moisture from _____.

Water can also be found stored _____ and in salt lakes.

The terrain of the Atacama is mostly gravel, _____ rock,

sand, and salt basins. In addition, there are deposits of _____

as well as other metals in the desert.

B. Explain in your own words why the Atacama Desert is so dry.
