Name: _____ Date: _____

The Desert Where Clouds Rarely Drop Rain

Circle group

The Atacama Desert is in northern Chile. It lies between the ocean and the mountains. It is one of the driest places on Earth. In some spots, years go by with almost no rain. The sea is right next door. So why is it so dry?

There are two reasons. The first is the Andes. These are tall mountains to the east. Wet air from the other side of the land has to climb over them. The air loses most of its water on the way up. So the land on the far side stays dry.

The second reason is the ocean. A cold current flows north along the coast. It chills the air over the water. Cold air cannot hold much water. So the air stays low and makes fog, not rain.

The fog helps. Some small plants and animals drink it. In a few villages, people hang big nets to catch the tiny drops. The water runs into tanks. People use it to drink and to grow plants.

Questions

1. Where is the Atacama Desert?

_____

_____

2. What are the Andes?

_____

_____

3. What does the cold ocean current do to the air?

_____

_____

4. How do some villages get water from the fog?

_____

_____

5. Why does wet air lose its water on the mountains?

_____

_____

6. Why is it surprising that the desert is so dry?

_____

_____

Words to know

desert: a place that gets very little rain
current: a stream of water that moves through the ocean

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

The Desert Where Clouds Rarely Drop Rain

Triangle group

The Atacama Desert lies in northern Chile, between the ocean and the mountains. It is one of the driest places on Earth. In some spots, years can pass with hardly any rain. Why is it so dry when the sea is right next door?

There are two main reasons. The first is the Andes, a long line of tall mountains to the east. Wet air that blows in from the other side of the continent has to climb over them. It loses most of its water on the way up, so the land on the far side stays dry.

The second reason is the ocean itself. A cold current flows north along the coast. It chills the air above the water, and cold air cannot hold much moisture. So the air hangs low and makes fog instead of rain.

That fog is a gift. Some small plants and animals drink the moisture that drifts in. In a few villages, people hang up big nets that catch the tiny drops. The water runs into tanks, and it is used for drinking and growing plants.

Questions

1. Where is the Atacama Desert?

_____

_____

2. What are the Andes?

_____

_____

3. What does the cold ocean current do to the air above it?

_____

_____

4. How do some villages get water from the fog?

_____

_____

5. Why does wet air lose its water when it climbs the mountains?

_____

_____

6. Why is it surprising that the desert is so dry?

_____

_____

Words to know

desert: a place that gets very little rain
continent: one of the Earth's seven very large land masses
current: a stream of water that moves through the ocean
moisture: a small amount of water in the air or on a surface

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

The Desert Where Clouds Rarely Drop Rain

Square group

The Atacama Desert stretches across northern Chile, squeezed between the Pacific Ocean and a wall of mountains. It ranks among the driest places on Earth, and in certain spots whole years can pass with hardly any rain. That seems strange, because the sea is so close by.

Two main causes explain the dryness. The first is the Andes, a long chain of towering mountains to the east. Moist air arriving from the far side of the continent must climb up and over them, and it sheds most of its water on the way. By the time the air descends toward the desert, little moisture remains.

The second cause is the ocean itself. A cold current flows northward along the coast and chills the air above the water. Cold air cannot hold much moisture, so instead of rising into rain clouds, the air hangs low and forms fog.

That fog turns out to be valuable. Some small plants and animals survive by drinking the moisture that drifts in. In a few villages, people stretch large nets in the path of the fog to catch the tiny droplets. The water trickles into tanks and is used for drinking and for growing plants.

Questions

1. Where is the Atacama Desert?

_____

_____

2. What are the Andes?

_____

_____

3. How does the cold current affect the air above the water?

_____

_____

4. How do some villages collect water from the fog?

_____

_____

5. Why does moist air lose its water when it crosses the mountains?

_____

_____

6. Why is the dryness of the desert surprising?

_____

_____

Words to know

desert: a place that gets very little rain
continent: one of the Earth's seven very large land masses
current: a stream of water that moves through the ocean
moisture: a small amount of water in the air or on a surface

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: The Desert Where Clouds Rarely Drop Rain

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: The Desert Where Clouds Rarely Drop Rain

Easier · 170 words · Flesch-Kincaid grade 1.8

1. In northern Chile, between the ocean and the mountains.
2. Tall mountains to the east of the desert.
3. It chills the air, so the air holds little water and makes fog.
4. They hang big nets to catch the drops, and the water runs into tanks.
5. Rising air gets cold and drops its water on the way up.
6. It is next to the sea, and you might expect lots of rain near an ocean.

Triangle: The Desert Where Clouds Rarely Drop Rain

This passage · 183 words · Flesch-Kincaid grade 3.4

1. In northern Chile, between the ocean and the mountains.
2. A long line of tall mountains to the east of the desert.
3. It chills the air, so the air holds little moisture and makes fog.
4. They hang big nets that catch the tiny drops, and the water runs into tanks.
5. Rising air cools and drops its water on the way up, so little is left for the far side.
6. It is right next to the sea, and you might expect plenty of rain near an ocean.

Square: The Desert Where Clouds Rarely Drop Rain

Harder · 200 words · Flesch-Kincaid grade 5.9

1. In northern Chile, between the Pacific Ocean and the mountains.
2. A long chain of towering mountains to the east of the desert.
3. It chills the air, so the air holds little moisture and forms fog.
4. They stretch large nets to catch the droplets, and the water trickles into tanks.
5. Rising air cools and sheds its water on the way up, leaving little for the far side.
6. It lies beside the sea, and plenty of rain might be expected near an ocean.