Name: _____ Date: _____

Why Deserts Get Cold at Night

Circle group

A desert is hot in the day. The sun shines on the sand and rocks. They get warm. But at night, the desert gets chilly. Why?

It is the air. A desert is dry. There is not much water vapor in the air. There are not many clouds.

Clouds work like a blanket. They hold warmth near the ground. A desert has no blanket. When the sun goes down, the heat floats up to the sky.

So a traveler needs a hat in the day. A traveler needs a warm jacket at night.

Questions

1. Why is a desert warm in the day?

_____

_____

2. What is missing from the desert air?

_____

_____

3. What do clouds do like a blanket?

_____

_____

4. Where does the heat go at night?

_____

_____

5. Why does a traveler need a warm jacket?

_____

_____

Words to know

desert: a dry place that gets very little rain
chilly: cold enough to feel uncomfortable
traveler: a person who goes on a trip to far places

blanket: a thick cover that keeps you warm

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: _____

Why Deserts Get Cold at Night

Triangle group

A desert can feel very hot in the daytime. The sun shines down on the sand and the rocks, and they get warm. But when night comes, the desert can turn chilly. Why?

The reason is the air. A desert is very dry. That means there is not much water vapor in the air. There are not many clouds, either.

Clouds and damp air work like a blanket. They help hold in the warmth near the ground. A desert has no such blanket. When the sun goes down, the heat rises up and floats off into the sky. Nothing stops it.

So a traveler in the desert needs two kinds of clothes. A hat and a cool shirt help during the day. A warm jacket is a good idea after dark.

Questions

1. Why does a desert get warm in the daytime?

_____

_____

2. What is missing from the air in a desert?

_____

_____

3. What do clouds do, like a blanket?

_____

_____

4. Where does the heat go after the sun sets?

_____

_____

5. Why should a traveler pack a warm jacket for the desert?

_____

_____

Words to know

desert: a dry place that gets very little rain
chilly: cold enough to feel uncomfortable
traveler: a person who goes on a trip to far places
blanket: a thick cover that keeps you warm

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: _____

Why Deserts Get Cold at Night

Square group

During the daytime, a desert can feel scorching hot. The sun beats down on the sand and the rocks, and they soak up the warmth. However, once night arrives, the desert can become surprisingly chilly. What causes this change?

The answer lies in the air. A desert is extremely dry, which means there is very little water vapor in the air, and there are hardly any clouds in the sky either.

Clouds and damp air act like a blanket, helping to hold warmth in near the ground. Without that blanket, the desert cannot keep its heat. When the sun sets, the warmth rises into the sky, and nothing is there to stop it.

For that reason, a traveler in the desert should pack two kinds of clothing: a hat and a cool shirt for the day, and a warm jacket for after dark.

Questions

1. Why does the desert become hot during the daytime?

_____

_____

2. What does the desert air lack?

_____

_____

3. How do clouds act like a blanket?

_____

_____

4. What happens to the warmth after the sun sets?

_____

_____

5. Why would a traveler be wise to bring a warm jacket to the desert?

_____

_____

Words to know

desert: a dry place that gets very little rain
chilly: cold enough to feel uncomfortable
traveler: a person who goes on a trip to far places
blanket: a thick cover that keeps you warm

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: Why Deserts Get Cold at Night

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

Circle: Why Deserts Get Cold at Night

Easier · 93 words · Flesch-Kincaid grade 0.5

1. The sun shines on the sand and rocks.
2. Water vapor and clouds.
3. They hold warmth near the ground.
4. Up into the sky.
5. The desert is chilly at night.

Triangle: Why Deserts Get Cold at Night

This passage · 131 words · Flesch-Kincaid grade 1.7

1. The sun shines down on the sand and rocks.
2. Water vapor and clouds.
3. They help hold in warmth near the ground.
4. It rises up into the sky.
5. The desert gets chilly at night.

Square: Why Deserts Get Cold at Night

Harder · 143 words · Flesch-Kincaid grade 5.2

1. The sun beats down on the sand and rocks and warms them.
2. Water vapor and clouds.
3. They help hold warmth in near the ground.
4. It rises up into the sky.
5. The desert turns chilly at night.