

Using the Rubric for Writing Scientific Arguments

Directions: Read through each student writing sample and rate it's quality in each of the three categories of the rubric.

Student A

I think the location of the mountain range is what causes little or no rain in the Atacama Desert. I know this because the Atacama Desert is located near the mountains. It does not rain a lot near mountain ranges, like in the Atacama Desert, so it's very dry. I know this because one time I went to visit tall mountains on vacation with my family and it did not rain at all for an entire week. This is why I think the location of the mountain range is what causes little or no rain in the Atacama Desert.

Student B

The location of the mountain range causes little or no rain in the Atacama Desert. My evidence is that the map shows the west side of the mountains only gets 8 inches or less of rain, but there is between 16 and 24 inches of rain per year on the east side of the mountains. The map shows that the Atacama Desert is located on the west side of the mountains where it is drier. It is also located on the west coast of South America where the surface temperature of the water is between 14 and 20 degrees Celsius. The map also shows the wind is cold near the Atacama Desert.

Student C

The location of the mountain ranges causes very little rain in the Atacama Desert. The Atacama Desert is dry because of the rain shadow effect. The rain shadow effect happens when winds hit a mountain range and are pushed up over the mountain. It is colder at the top of the mountain. Cold air cannot hold as much water so it rains as the air rises over the mountain range. Once the wind reaches the other side of the mountain, there is very little water left leaving only dry air for the other side of the mountain, so it does not rain very much in the Atacama Desert.

Student D

The location of the mountain range causes very little rain in the Atacama Desert. My evidence is that the map shows the west side of the mountains only gets 8 inches or less of rain, but there is between 16 and 24 inches of rain per year on the east side of the mountains. My reasoning is the clouds that hold the rain cannot get over the mountains because there is too much gravity at the top. Another reason is the sun is stronger at the top of the mountain so the temperature is hotter, which makes it dry. This is why I think the location of the mountain range is what causes less rain in the Atacama Desert.