

# NASA QUEST CHALLENGE: MT. TAKAHE

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6<sup>th</sup> Grade

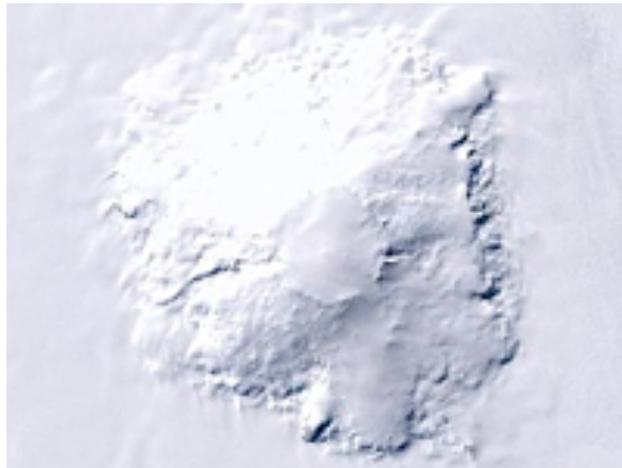
Pleasant Valley Intermediate School  
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Location: Mt. Takahe

Latitude: 76.2° S

Longitude: 112° W

Image:



Report:

This volcano, named Mt. Takahe, is scientifically interesting to visit because it is an Antarctic volcano. What would happen if the volcano were to erupt? Wouldn't the area melt? Also, how did it end up there? How could it be on the ice? Apparently, there are a lot of questions about this area. See why this is a good place to excavate?

We hypothesize that the volcano got there because it used to be an underwater volcano. Yet it may have broken through the Antarctic ice. When the volcano erupted, the lava cooled quicker than usual because of the cool water around it. As the volcano grew, due to the eruptions, the ice thawed and the volcano reached the surface. As the ice refroze it filled in the cracks that the volcano made when it breached the surface. This is how we hypothesize how Mt. Takahe came to be dormant today.

A small amount of scientific benefits for exploring Mt. Takahe will help learn in more specific details about what Antarctica was like in the time this volcano was born. It can tell us about the birth of this volcano. By examining the volcano we may be able to determine when it erupted. If we dig into the ice we may be able to tell how thick the ice is along with the size of the volcano. Also, it can tell about life in the past. Lastly, it may not be dormant, so scientists can tell if it is active. If it is active, scientists can figure out when it will erupt.

This was an exceedingly interesting project. We did our best and hope you enjoy it.