

The Formation of the Hawaiian Islands

by Liana Mahoney

Hawaii is one of the fifty states of the United States of America. It is unique, however, in that it is not part of the U.S. mainland. Hawaii is located in the Pacific Ocean. It is an archipelago, which means that it's made up of many islands. While many U.S. states have more than one island, only one that is made up of many islands.

With its warm temperatures and beautiful beaches, Hawaii is a popular place for vacation. In addition, these islands are also home to some of the deepest volcanoes on Earth, formed deep within the earth.

Scientists who study the Hawaiian Islands were formed around a hotspot in the Pacific Ocean. The islands were formed around a hotspot where magma (hot, molten rock) rises from the Earth's mantle into the Pacific Ocean. The magma then cooled and hardened into a volcanic rock, called lava. Over time, as magma continued to ooze from the earth, the lava built up. Layer after layer accumulated over the hotspot. The layers of lava grew higher and higher, eventually forming a volcano.

Have you ever seen a conveyor belt, like the ones used at grocery stores to move your items toward the cashier? The surface upon which your items are sitting moves under them and takes them to a new place. Now, can you imagine a huge conveyor belt



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Hawaiian Islands are a volcanic "hotspot." But the heat that comes from the hotspot is what the Hawaiian Islands were formed from.

The Hawaiian Islands were formed over an area of the Earth's mantle where magma rises and onto the floor of the ocean. The magma then cooled and hardened into a volcanic rock, called lava. Over time, as magma continued to ooze from the earth, the lava built up. Layer after layer accumulated over the hotspot. The layers of lava grew higher and higher, eventually forming a volcano.

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that slowly relocates a volcano? This is similar to what happened to the volcanoes that formed at the hotspot in the Pacific Ocean. In this case, a large area of the earth's crust, called the Pacific Plate, acted as the conveyor belt. At the same time that the volcanoes were being formed, the ocean floor of the Pacific Plate gradually moved and shifted toward the northwest. This movement of the ocean floor pulled the first volcano away from the hotspot. Magma continued to ooze from the hotspot, cooled and hardened, and formed a new volcano above it. This process repeated itself over and over for millions of years, creating a string of volcanoes that each, in turn, appeared above the surface of the ocean.

It's very difficult to imagine a world that not even exist! Geological change, even today, is entirely different than it was completely over time of years. So, in the millions of years - a gorgeous archipelago of places on earth!

as we know it now did not exist. Due to gradually changing tectonic plates, Hawaii may look like it has disappeared. It would take millions of years for the "Hawaiian Islands" of Hawaii just as it is the most beautiful

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The Formation of the Hawaiian Islands

1) Why are the Hawaiian Islands unique?

2) What are the two different contexts the word "hotspot" is used in the passage?

3) What is the extr _____ last paragraph?

4) Why are the Pac _____

5) What does the author encourage readers to do in the final paragraph?

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