Hesiod Student Generated Assignment

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Directions: Read the prompt and write 250-600 word response. Once you are done, please make sure your Word document has the following label: **firstname_lastname_human**. So, if your name is **John Doe**, then rename the document to **John_doe_human**. Then, submit the document to the Microsoft Form that can be accessed by this link: https://forms.office.com/r/CbD6LQs41s

Prompt: In 1910 Alfred Wagner came up with the "Continental Drift Theory". He proposed that all the continents were once together, and over time they have drifted apart. In 250-600 words explain:

- 1. What evidence did he base his claim on?
- 2. Despite this evidence, the scientific community did not believe him, why?
- 3. What new evidence(s) changed everyone's mind, and allowed us to develop the "Theory of Plate Tectonics"?

Response: Please write your 250-600 word response below:

What evidence did he based his claim on?

First, he noticed that Africa and South America fit together like puzzle pieces. So, he went on to find other evidence to support his hypothesis that the Earth's continents were once joined in a single land mass. He noticed that the location of the fossil of the same species are found on different continents, and that the fossil's species is fount on land the living organisms cannot live on. And another evidence he finds is folded mountains, folded mountain created where two or more of Earth's tectonic plates are pushed together, and that make him think that the plate was once together.

Despite this evidence, the scientific community did not believe him, why?

The major reason that scientists do not believe him is because he cannot explain how the land move, it seems ridiculous to the scientists that the land moves (they think that the ocean floor is flat), and they think that the same species of fossil fount on multiple plate is because of land bridges, they think that the fossil's living organisms just walk on the bridges and the bridges sink or brake over time.

What new evidence(s) changed everyone's mind, and allowed us to develop the "Theory of Plate Tectonics"?

At the World War 2, after Wagne's death in Greenland, the development of sonar technology allow ship to produced more accurate map of the ocean floor. Sonar stands for Sound navigation and ranging. Scientists measure how long it takes for sound wave to come back to the source, the longer it takes, the deeper it is, it reveals that the ocean floor is not as flat as human think, it includes tall mountains and deep valleys. Many of these maps were product by a team led by Hess. according to Hess, as the new crest form, it pushed the older crust away from the ridge. The evidence suggests that the seafloor is spreading.