Hesiod Student Generated Assignment

Name:	Gabi Silveira
Date:	Dec.14th 2023
Teacher:	Hemrick

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:

The evidence that Alfred Wagner based his claim on the Continental Drift Theory was that Africa and South Amarica seemed to fit together like pieces of a jigsaw puzzle, and he found animal and plant fossils in places that would be impossible for them to be/live. Despite his evidence the scientific community did not believe him and his claim because they thought that the animals simple used land bridges to get to thoughs so called impossible places, the thought he was crazy and that he was just a glorified weatherman. The evidence that changes everyone's mind and convinced them that Alfred Wanger was somewhat right was when Marie Tharp used sonar Technolgy to discover that the ocean floor was not in fact flat but consisted with deep valleys and tall mountain ranges, this was did dismissed as "girl talk" but was later "proven" to be true. Tharps profiles revealed the existence of crevices, and the emergence of a long V-shaped cleft knows as rift valleys, these rift valleys supported and helped prove Wagners continental drift theory, and suggested that if land massed moved apart, they would spit the ocean floor, forming a valley. In the 1960s plate tectonics became widely accepted and Wegner became and

still is well respected as one of the greatest scientists of his era. Later Harry H. Hess argued that new ocean crust was forming along the Mid-Atlantic Ridge. According to Hess, as new crust formed it pushed older crust away from the ridge. Robert S. Dietz named the phenomenon seafloor spreading. He later took samples of rock from along the Mid-Atlantic Ridge. He then discovered that the rocks closer to the ridge were younger than the rocks that were farther from the ridge. This evidence suggested that Hess and Dietz were correct; the seafloor is spreading.