**Continental Drift Hypothesis and Plate Tectonics Theory**

**By: Carson Stark**

Alfred Wegener came up with the Continental Drift hypothesis in the late 19 century when he noticed how the continents looked like a puzzle. While he was looking at data from glacier movement and fossil locations, he noticed how there were lines made between continents on the other sides of oceans. After he had gathered this research together, he brought his discoveries to the scientific community, and they laughed him off because he couldn’t explain how the plates moved. Dejected, he spent the rest of his career trying to prove his hypothesis, and froze to death in the arctic trying to prove Continental Drift.

In the mid 20th century, research of the ocean floor gave the evidence Wegener was missing. Using Wegener’s hypothesis as a springboard, scientists found that the floor closer to the mid ocean ridges, underwater mountain ranges, was younger than the floor further away from these mountains using magnetic reversals as a reference. This is because the mountains were caused by the oceanic plates moving away from each other, creating new crust there. The scientific community had enough evidence to prove continental drift, but they changed a few things.

Instead of Continental Drift, they renamed it to Plate Tectonics due to the continents not drifting away from each other like pieces of wood in the ocean, but instead the continents are located on slabs of rock called plates that move over time due to the mantle’s convection currents. These are caused by heat differences in the mantle, similar to a convection oven. These currents move the plates on top of them slowly over millions of years.

To recap, the Continental Drift Hypothesis was the starting point for the later revised Plate Tectonics Theory which used newer studies of the ocean floor to show the plates were moving apart, which caused Pangaea, the giant land mass consisting of all the continents, to split apart. Wegener’s work helped scientists understand the world better, and for that, we should all commend him.