

Notes: Plate Tectonics

name: _____

When did Pangea exist? from about _____ until about _____

What are the four main points of the Theory of Plate Tectonics?

1. Earth's crust is made of pieces called plates (aka _____).

2. The plates are moving _____ per year.

3. This movement of plates is responsible for most of the world's . . .

4. The movement of plates is caused by

Who is credited with coming up with the idea, and what was his theory called?

Wegener

After Wegener

Timeline for development of the Theory

1912:

1924:

1930:

1940s:

1950s:

1961:

1960s:

1968:

Assignment: Read this article about Wegener's death. (from Wikipedia)

Wegener's last Greenland expedition was in 1930. The 14 participants under his leadership were to establish three permanent stations from which the thickness of the Greenland ice sheet could be measured and year-round Arctic weather observations made. Wegener felt personally responsible for the expedition's success, as the German government contributed \$120,000 (\$1.5 million in 2007 dollars) at a time when Germans were starving to death owing to post-war shortages. Success depended on enough provisions being transferred from West camp to *Eismitte* ("mid-ice") for two men to winter there, and this was a factor in the decision that led to his death. Owing to a late thaw, the expedition was six weeks behind schedule and, as summer ended, the men at *Eismitte* sent a message that they had insufficient fuel and so would return on October 20.

On September 24, although the route markers were by now largely buried under snow, Wegener set out with thirteen Greenlanders and his meteorologist Fritz Loewe to supply the camp by dog sled. During the journey the temperature reached -60°C (-76°F) and Loewe's toes became so frostbitten they had to be amputated with a penknife without anesthetic. Twelve of the Greenlanders returned to West camp. On October 19, the remaining three members of the expedition reached *Eismitte*. There being only enough supplies for three at *Eismitte*, Wegener and Rasmus Villumsen took two dog sleds and made for West camp. They took no food for the dogs and killed them one by one to feed the rest until they could run only one sled. While Villumsen rode the sled, Wegener had to use skis. They never reached the camp. The expedition was completed by his brother, Kurt Wegener.

Six months later, on May 12, 1931, Wegener's body was found halfway between *Eismitte* and West camp. It had been buried (by Villumsen) with great care and a pair of skis marked the grave site. Wegener had been fifty years of age and a heavy smoker and it was believed that he had died of heart failure brought on by overexertion. His body was reburied in the same spot by the team that found him and the grave was marked with a large cross. After burying Wegener, Villumsen had resumed his journey to West camp but was never seen again.