



## *9<sup>th</sup> Grade Reading/Language Arts Sample Questions*

In 1915, the German geologist and meteorologist Alfred Wegener first proposed the theory of continental drift, which states that parts of the Earth's crust slowly drift atop a liquid core. Fossil records support and give credence to the theories of continental drift and plate tectonics. Perhaps Alfred Wegener's greatest contribution to the scientific world was his ability to weave seemingly dissimilar, unrelated facts into a theory, which was remarkably visionary for the time. Wegener, born in 1880, was one of the first to realize that an understanding of how the earth works required input and knowledge from all the earth sciences.

Wegener's scientific vision sharpened in 1914 as he was recuperating in a military hospital from an injury suffered as a German soldier during World War I. While bedridden, he had ample time to develop an idea that had intrigued him for years. Like others before him, Wegener had been struck by the remarkable fit of the coastlines of South America and Africa. But, unlike the others, to support his theory, Wegener sought out many other lines of geologic and paleontologic evidence that these two continents were once joined.

Wegener obtained his doctorate in planetary astronomy in 1905, but he soon became interested in meteorology. During his lifetime, he participated in several meteorological expeditions to Greenland. **Tenacious** by nature, Wegener spent much of his adult life vigorously defending his theory of continental drift, which was severely attacked from the start and never gained acceptance in his lifetime. Despite overwhelming criticism from most leading geologists, who regarded Wegener as a mere meteorologist and an outsider meddling in their field, he did not back down. Wegener worked even harder to strengthen his theory.

A couple of years before his death, Wegener finally achieved one of his lifetime goals: an academic position. After a long but unsuccessful search for a university position in his native Germany, he accepted a professorship at the University of Graz in Austria.

Ironically, shortly after achieving his academic goal, Wegener died on a meteorological expedition to Greenland. His friend, Johannes Georgi, had asked Wegener to coordinate an expedition to establish a winter weather station to study the jet stream in the upper atmosphere. Wegener reluctantly agreed. After many delays due to severe weather, Wegener and fourteen others set out for the winter station in September of 1930 with fifteen sleighs and 4,000 pounds of supplies. The extreme cold turned back all but one of the thirteen Greenlanders, but Wegener was determined to push on to the stations, where he knew the supplies were desperately needed by Georgi and the other researchers. Traveling under frigid conditions, with temperatures as low as minus 54° C, Wegener reached the station five weeks later. Wanting to return home as soon as possible, he

insisted upon starting back to the base camp the very next morning, but he never made it. His body was found the next summer.

Wegener was still an energetic, brilliant researcher when he died at the age of 50. A year before his untimely death, the fourth revised edition of his classic book, The Origin of Continents and Oceans, was published in 1929. In this edition, he had already made the significant observation that shallower oceans were geologically younger. Had he not died in 1930, Wegener would have probably pounced upon the new data just acquired by the German research vessel *Meteor* in the late 1920's. This data showed the existence of a Central Valley along much of the crest of the Mid-Atlantic Ridge. Given his fertile mind, Wegener just possibly might have recognized the shallow Mid-Atlantic Ridge as a geologically young feature resulting from thermal expansion, and the Central Valley as a rift valley, resulting from the stretching of the oceanic crust. A big thinker like Wegener would have had no trouble meshing this data with his theory of plate tectonics and continental drift.

1. The purpose of the fifth paragraph of this passage is to:
  - A. make you feel sorry for Wegener
  - B. explain how Wegener died
  - C. explain the theory of continental drift
  - D. explain the theory of plate tectonics
  
2. How many pounds of supplies were being brought to the Greenland researchers on Wegener's final expedition?
  - A. 4,000 pounds
  - B. 8,000 pounds
  - C. 2,000 pounds
  - D. The passage does not provide that information.
  
3. In the passage it reads, "**Tenacious** by nature, Wegener defended the theory of continental drift."

What does the word **tenacious** mean in the sentence above?

- A. timid
- B. violent
- C. temperamental
- D. persistent