Name _____

Continental Drift: A Puzzle of Earth's Past

Short Answer Key

1. Continental drift is the theory that Earth's continents were once part of a supercontinent called Pangaea and have since drifted apart to their current positions on the planet's surface.
2. Alfred Wegener used the fit of the continents (jigsaw puzzle-like matching coastlines), fossil evidence (similar fossils found on continents now separated by oceans), and geological evidence (matching rock layers and mountain ranges) to support his theory.
3. Wegener's theory faced resistance because he lacked a clear mechanism to explain how continents could move. Many scientists believed that continents were too massive to be capable of drifting.
4. The theory of plate tectonics, developed in the mid-20th century, provided the mechanism for continental drift. It explained that Earth's lithospheric plates, including the continents, float on the semi-fluid asthenosphere and can move due to the convection currents in the mantle.
5. The theory of continental drift is significant because it has helped us understand the Earth's changing surface over millions of years. It also plays a crucial role in explaining geological phenomena such as earthquakes, volcanic activity, and the formation of mountain ranges.