

From the Beginning



iron and nickel
continental drift
bulking
basins
continental
Appalachians

Colorado
molten ball
Pangaea
sedimentary
Precambrian
oil

faulted
solid
mantle
glaciers
crust
rivers

lakes
volcanoes
Native
plates
core
folding

igneous
gas and dust
bulldozers
conveyor belts

The earth and the whole universe were formed several billion years ago from a swirling form of _____. Slowly planets began to form. Earth was formed from a _____ that cooled and a _____ crust began to form 4.5 billion years ago. A white, hot _____ of _____ formed in the center where tremendous pressure keeps it in a solid state. Between the core and the crust exists a semi-liquid called the _____ that is covered by a hard crust.

As the earth cooled gradually, the temperature of the surface fell below the boiling point. Rain began falling in gaps and crevices till what remained were _____ and _____ that eroded the surface rock and left deposits in different areas. The oldest rock dates back 3.5 billion years old from the _____ Era. Earthquakes and volcanoes began causing upheaval; _____, bending, _____ and splitting apart to form large land masses.

The temperature of the surface was relatively the same or stable, but from time to time, it cooled so that ice sheets and _____ spread out like giant _____ to form deep valleys and mountains faces from rock debris. The Precambrian mountains had been worn down and most of the planet was covered by water. As time passed, the land split apart and came back together while the ocean floor was pushed upwards forming the _____.

Life forms appeared with plants, trees, amphibians, reptiles, and dinosaurs. Continents we know today were once grouped together as one large land mass known as _____ . Approximately 180 million years ago it began to split up. Continents are part of large plates of rock that move like _____ over the mantle. This movement is known as plate tectonics or _____. The plates move at a rate of a few centimetres per year. Earthquakes and volcanic eruptions occur along plate boundaries. It is also along these boundaries, that mountains form when _____ collide and the _____ tilts causing the land to be uplifted. Movement of shifting plates causes erupting molten lava to form _____ .

The Canadian Shield is made of _____ rock containing various minerals such as copper, nickel, and iron. The Appalachians is composed of _____ rock from the ancient sea floor producing vast amounts of coal, _____, and natural gas. The Rockies contain a mixture of both igneous and sedimentary rock that has been folded and _____. Water, wind and ice carved out the Western Cordillera forming high plateaus and desert _____ .

To complete the geological picture, lakes and river basins were established. The Great Lakes watershed formed approximately 13,000 years ago from the last Ice Age, followed by the Mississippi, Mackenzie, _____, Rio Grande, Columbian, and the Saskatchewan-Nelson river systems. This was the face of North America when the first _____ people arrived some 40,000 years ago. Since then, humans have changed the landscape for the good and bad. Yet nature's cycle of drift, upheaval, and erosion of the _____ crust continues building up and wearing down, slipping, sliding, bulking, and erupting the land.