

The Rock Cycle



The Earth's rocks are continually changing. This process is called the **rock cycle**. There is hot magma beneath the earth's surface. When the magma is forced to the surface, it is called lava. Lava cools and hardens forming extrusive igneous rock. Agents of erosion act on this rock.

Erosion produces sediments. Sedimentary rocks are formed from deposits of sediments. Other layers of sediments may bury these rocks. Sedimentary rock may remain buried or may reappear on the surface because of crustal movements or erosion. Once on the surface the sedimentary rock is subject to erosion.

Any rock that is buried below the surface can be changed into metamorphic rock. Crustal movements and erosion may eventually uncover metamorphic rocks. Then they may be eroded. Metamorphic rocks may remain under other rock layers and be re-melted to form new magma.

Scientists believe that rocks at the edge of the crustal plates are being recycled very quickly. Magma is coming to the surface along the mid-ocean ridges and near the trenches. Where plates collide or grind past each other heat and pressure are changing rocks. In the trenches, old rocks are constantly being forced down into the mantle. There they are melted and mixed with other rock material. This material may make its way back to the surface as lava or magma. This recycling has been going on since the earth was formed and will continue as long as the earth exists.

