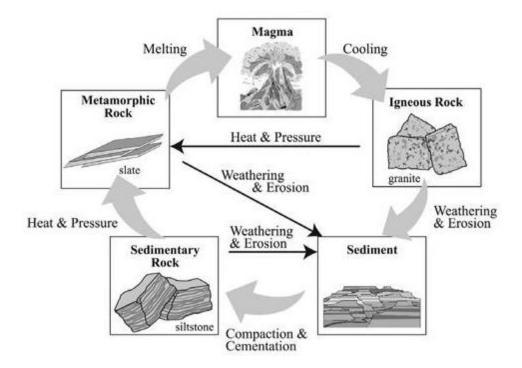
<u>The Rock Cycle</u>: Most rocks on earth began as Igneous Rocks. Let's trace a possible **rock cycle** for a newly formed Igneous Rock.



- 1) Pressure inside the earth pushes hot magma up onto the earth's surface. (top) As the magma cools it solidifies into an Igneous Rock. (right)
- 2) Over millions of years, the weather slowly breaks up this rock into small pieces of *sediment*. (*bottom right*)
- Over time, layers of sediment build up and harden, forming a Sedimentary Rock. (bottom left)
- 4) If our Sedimentary Rock stays at the surface, it can be eroded away and eventually changed into new sedimentary rock. However, if our Sedimentary Rock gets buried deep in the Earth, heat and pressure essentially bake the rock, changing it into something new. This process is called *metamorphosis*, and the new rock is called a Metamorphic Rock. (*left*) (Metamorphosis can happen to igneous rocks as well.)
- 5) Metamorphic Rocks can also be weathered and eventually changed into Sedimentary Rocks. But, if Metamorphic Rock is forced even deeper into the Earth, the rock can melt and become magma. (back to top) If the magma cools and hardens it will form into Igneous Rock. (Igneous Rocks and Sedimentary Rocks can also be forced deep into the earth where they melt into magma. Once the magma cools it forms Igneous Rocks.)