Name: _____ **Rocks**

Types of Rocks

Scientists classify rocks by how they were formed. There are three major types of rocks: Igneous, Sedimentary, and Metamorphic.

Igneous rocks are formed from magma. Magma is the hot liquid rock found in the earth's mantle. Sometimes, this thick 'mineral soup' gets pushed up into the earth's crust (or even onto the earth's surface). Igneous rocks form as this super-heated magma cools. Earth's oldest rocks are igneous rocks. Granite and Basalt (the rocks that make up earth's continents and crust) are igneous rocks.

Sedimentary rocks are rocks formed *on the earth's surface* from pieces of other older rocks. Over the course of millions of years, the igneous rocks are weathered down—by wind and water—into small particles of rock and minerals. These small particles are called sediments. Over time, layers of sediment can harden and form into a new rock. Rocks formed in this way are called sedimentary rocks.

Metamorphic rocks are formed from *other rocks* (*not* from rock particles) by great heat and pressure. Unlike sedimentary rocks, metamorphic rocks are *not* formed on the earth's surface, but *deep inside the earth's crust* where there is just enough heat and pressure to do the job.

The Rock Cycle

Each of the 3 types of rocks is formed in a different way, and each type of rock can be changed into each of the other types. Geologists (scientists who study the earth) call this process of constant change the **Rock Cycle**. Essentially the rock cycle is the process that makes and recycles rocks. The process takes millions of years.