

Depending on their origin or formation, rocks can be categorized into one of the three types:

1. igneous, 2. sedimentary, and 3. metamorphic

Igneous rocks are formed through the cooling of magma or lava. The term "igneous" is based from the Latin **ignis**, meaning **fire**.

*** Magma or lava may be solidified in one of three ways:

1. Below the surface:

~ from a slow-cooling magma - rocks formed have good crystallization (coarse-grained), may become plutonic rocks or intrusive igneous, such as **granite, diorite, and syenite**

2. On the surface, from fast-cooling lava - rocks formed have no visible crystals (fine-grained), may become volcanic rocks or extrusive igneous, such as **basalt and andesite**

3. On the surface, from the consolidation of particles erupted by explosive volcanic activity - may become pyroclastic rocks like **ignimbrite, scoria, and pumice**.



Sedimentary rocks accumulate on Earth's surface in a process called **deposition**. The materials that make up sedimentary rocks are a combination of the products of