Igneous Rock Notes

- **Geology** the study of the solid earth

- **Rock** – solid material that is made up of one or more minerals.
  - Some rocks contain the remains of once living things
  - Approximately 20 minerals are responsible for the majority of all rocks
  - There are three major groups of rocks: **igneous**, **sedimentary**, and **metamorphic**

1. **Igneous rocks are formed when magma or lava cools and hardens**
   - **Magma** – molten material INSIDE of the earth
   - **Lava** – molten material that reaches the earth’s SURFACE

- Igneous rocks are classified by their texture

- **Texture** – the size, shape, and arrangement of a rock’s grains

- **Grain** – one of the particles that make up a rock
  - **Coarse grained** – rock with large grains
  - **Fine grained** – rock with small grains

- **Intrusive Igneous Rocks** - igneous rocks that are formed by magma cooling INSIDE the earth.
  - These rocks have a longer time to cool so they are *coarse grained*
  - most common = granite

- **Extrusive Igneous Rock** – igneous rocks that are formed by lava cooling at the earth’s SURFACE.
  - These rocks cool very fast so they are *fine grained*
  - most common = basalt