Name: _____ Class: _____

Igneous Rocks Reference Sheet – glue this into your science notebook

What are Igneous Rocks?

Igneous Rocks are rocks that form when molten (melted) material cools and hardens.

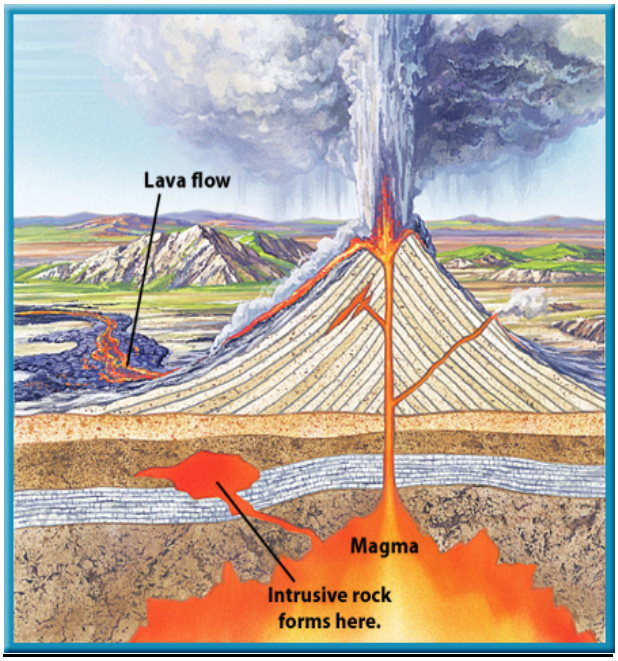
Igneous Rocks are classified by how they form.

Volcanoes and magma chambers are important to the formation of Igneous Rocks.

Common Igneous Rocks: Basalt, Granite, Gabbro, Rhyolite, Andesite

New Vocabulary

1) **Lava -** molten material that is found outside the volcano (after a volcanic eruption)
2) **Magma –** molten material that remains inside the Earth.
3) **Extrusive Igneous Rocks** – Igneous rocks that form when they cool on the Earth's surface and produce fine grain minerals or no mineral grains.
4) **Intrusive Igneous Rocks:** Igneous rocks that form when they cool inside the Earth's surface and produce coarse grain minerals
5) **Coarse grain texture:** large crystals/minerals
6) **Fine grain texture:** small crystals/minerals
7) **Glassy texture:** no visible crystals/minerals



This is an image of a volcano.

Igneous Rocks that cool inside the volcano are called INTRUSIVE IGNEOUS ROCKS. They cool very SLOWLY inside the Earth. They cool slowly which allows time for minerals to "grow" larger than if they were to cool outside the Earth.

Examples of Intrusive Igneous Rocks: Gabbro and Granite

Igneous Rocks that cool outside the volcano are called EXTRUSIVE IGNEOUS ROCKS. They cool quickly. They cool quickly on Earth's surface so minerals do not have time to form large crystals.

Examples of Extrusive Igneous Rocks: Basalt and

Additional Facts about Igneous Rocks

1) Pumice, Obsidian and Scoria are all Extrusive Igneous Rocks. They cool so fast, no minerals form at all. Obsidian is so smooth it is often called volcanic glass. Pumice and Scoria are so light, they float in water!

2) The ocean floor is made mostly of an extrusive igneous rock called **BASALT**.

3) **GRANITE** is one of the most common Igneous rock type making up the continents.

4) **Mafic Igneous rocks** are dark or black in color (LOW in the mineral Silica), **Felsic Igneous rocks** are light in color (HIGH in the mineral Silica).

5) Fossils are not found in Igneous Rocks because any living or dead organism would be destroyed by the molten matereial (lava or magma).