

The outer layer of Earth is called the crust. It is made of **rocks**. The rocks themselves are made of **minerals**, and some minerals are made of smaller parts called **crystals**. Minerals are natural compounds of elements like calcium, iron, and aluminum. Crystals are solids that have a regular, geometric shape.

Rocks are solid, but they are also constantly changing. This change forms a cycle, the **rock cycle**. The rock cycle helps scientists to classify rocks according to the way rocks are formed:

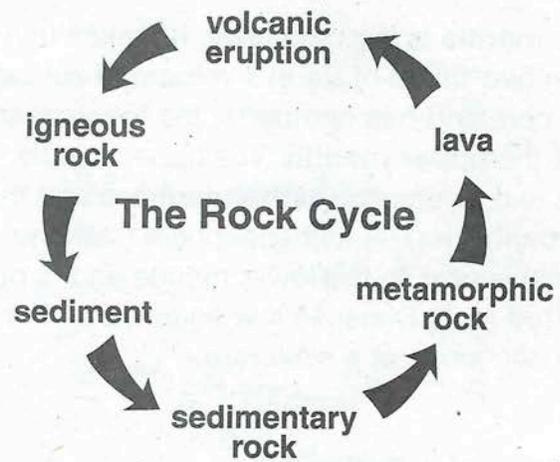
(1) When a volcano erupts, molten rock (called **lava**) flows onto the earth's surface. After the lava cools and hardens, it is called **igneous rock** (igneous = fire, like the word "ignite"). Igneous rock is also formed underground by cooling **magma** (lava that is underground). As erosion (wearing away by weather) occurs, the igneous rock formed from magma reaches the surface of Earth.

(2) As igneous rock on the earth's surface is eroded over many years, pieces of the eroded rock are carried by water (such as streams and rivers) to the ocean. The pieces settle on the ocean floor and are called sediment

(sedi = sit or settle). As more pieces settle on top of older pieces, layers of rock are created. The weight of newer layers turns the older, lower levels into **sedimentary rock**.

(3) When both igneous and sedimentary rocks experience great pressure or heat, the minerals in the rocks can change the rocks into **metamorphic rocks** (morph = change).

One example of igneous rock is granite, which is a very hard rock. Limestone is an example of sedimentary rock, and chalk is a very soft type of limestone. Marble is metamorphic. Because the inside of the earth is so hot, some rocks are melted and become lava, and the rock cycle starts over.



Answer the Following

1. Name the three types of rock. _____
2. What is igneous rock, and how is it formed? _____

3. How does igneous rock form sedimentary rock? _____

4. How is metamorphic rock formed? _____

