**Geological Processes**

1. **Internal Geologic Processes-** build up the earth’s surface EX: volcanoes
2. **External Geologic Processes-** wear down the earth’s surface
3. *Weathering* - Physical, Chemical, Biological
4. *Erosion-* Wind, Flowing water, human activities, Glaciers

**2 Types of Weathering**

1. **Physical Weathering**- a change that affects the structure of a rock but not its composition. Sometimes called mechanical weathering.

*Examples: forces that shatter rocks, rub away rock surfaces or form cracks within the rock*

**2. Chemical weathering**- the breakdown of rocks and minerals by chemical reactions, the

dissolving of chemical elements from rocks or both

**Erosion-** the processes that removes soil, rock or material from one location on the Earth’s crust and then transports it away to another.

 **\****Usually a result of two processes: 1.* Wind, water and ice move materials downslope.

 2. Living organisms burrow under the soil

**\*Weathering vs Erosion**

****

**Rock Cycle**

* An ongoing series of processes inside Earth and on the surface
* Slowly changing rocks from one kind to another



**3 Types of Rock**

**Igneous-** forms when molten rock (magma) cools and hardens. (crystallization)

1. Intrusive- cooling takes place slowly beneath earth’s surface
2. Extrusive- cooling takes place rapidly on Earth’s surface

\**classified by where they form and crystal size*

**Sedimentary-** forms from the compaction and/or cementation of sediments. (lithification)

* Can also form from the chemical depositing of materials that were once dissolved in water. When water evaporates minerals are left behind and form rock.

*Ex: Limestone*

**Metamorphic-** forms when any rock type is changed into a different kind of rock

* Changes due to great heat and pressure

*Ex: Marble*