**Fossils & The Laws of Superposition and Cross-Cutting Relationships**

Relative & Absolute Ages

* **Relative Age** The age of a rock compared to the ages of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

* **Absolute Age** The age of a rock given as the number of years \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* **LAW OF SUPERPOSITION:** in *horizontal* sedimentary rock layers, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ layer is at the \_\_\_\_\_\_\_\_\_\_\_\_. Each higher layer is younger than the layers below it.

1. Clues from Igneous Rocks:

* Lava that hardens on the surface is called an **\_\_\_\_\_\_\_\_\_\_\_\_\_** (Also called a **\_\_\_\_\_\_\_\_\_\_\_**.)
* Rock layers \_\_\_\_\_\_\_\_\_\_ an extrusion are **always** \_\_\_\_\_\_\_\_\_\_\_ than the extrusion.
* Magma that cools and pushes into bodies of rock and hardens is called an **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* An intrusion is always **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** than the rock layers around and beneath it.
* Law of Cross-Cutting Relationships: Any feature that *cuts* across a rock or layer of sediment is *\_\_\_\_\_\_\_\_\_\_\_*than the rock or layer it cuts

1. Clues from Faults:
   1. **\_\_\_\_\_\_\_\_\_\_\_\_\_**: is a break in the Earth’s crust.
   2. Forces inside the Earth cause movement of the rock on opposite sides of a fault.
   3. Fault is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** than the rock it cuts through.
2. Law of Included Fragments: Sediments are \_\_\_\_\_\_\_\_\_\_ than the cement and rock they are part of
3. Gaps in the Geologic Record:
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – is a gap in the geologic record. An unconformity shows where some rock layers have been lost because of erosion.
4. Using Fossils to Date Rocks:
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – Fossils of widely distributed organisms that lived during only one short period.
   2. Index fossils must:
      1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_