**Faults and Intrusions**

**Relative Age of Rocks**

**Sedimentary Rock Layers**

* Sedimentary rock layers are \_\_\_\_\_\_\_\_\_ with the \_\_\_\_\_\_\_ at the bottom and the \_\_\_\_\_\_\_\_ at the top unless the layers are disturbed by a ***fault*** or **igneous intrusion**

**Faults and Igneous Intrusions**

* Sometimes sedimentary rock layers are disturbed by geological forces.
* A \_\_\_\_\_ in the rock layer is called a ***fault.***
* When \_\_\_\_\_\_\_\_ rock (volcanic lava) intrudes or cuts through layers of sedimentary rock it is called an ***igneous intrusion.***
* Sketch a picture here of a ***fault*** or *crack* through layers of sedimentary rock:

***Igneous Intrusion* in Rock Layers**

* *Which rock layer in the diagram do you think is* ***youngest****? Why?*

***\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

**Relative Age of Rock**

* Remember that the ***\_\_\_\_\_\_\_\_ Age*** of the rock can be determined by the order of the horizontal rock layers using the ***Principle of \_\_\_\_\_\_\_\_\_\_\_\_\_\_*** (oldest on the bottom and youngest at the top).

**Cross-Cutting Relationships**

* If the sedimentary rock layer has been disturbed by a ***fault*** or ***igneous intrusion,*** *the Principle of Cross-Cutting Relationships*states that the ***fault*** or ***igneous intrusion*** is always \_\_\_\_\_\_\_\_\_ than the rock it cuts across.
* Now, complete questions #8 & 10 on your homework “Finding Clues to Rock Layers” using these notes!