

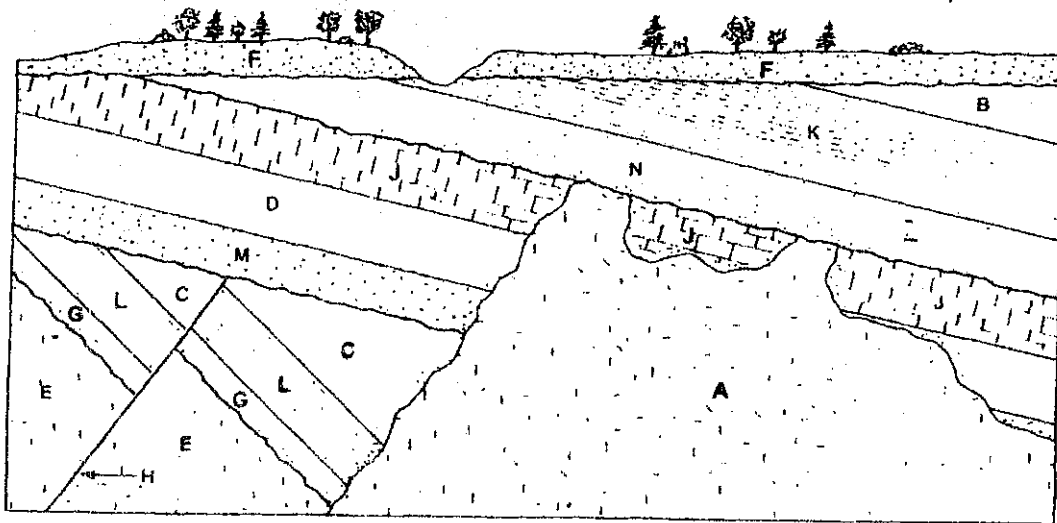
**Reading the Layers**

Date \_\_\_\_\_

Stratigraphy is a branch of geology which studies Earth history as revealed in sedimentary rock layers. Sedimentary rock is a type of rock that is formed by sedimentation of materials at the Earth's surface and within bodies of water and makes up about three quarters of the Earth's surface.

**Directions:** Study the below diagram and try to interpret the geologic history of this area. Use the below principles that geologists use in relative dating of rock to explain the reasoning for your answers to the following questions:

- i. The **OLDEST** rock is on the bottom if the layers have not been disturbed.
- ii. An **intrusion** is **YOUNGER** than the rock layers it cuts through.
- iii. A **fault** is **YOUNGER** than the layers that it breaks.
- iv. An **UNCOMORMITY** is an area where erosion has removed some of the rock layers.



1. The oldest fossils would be found in rock labeled: F, E, J, D? \_\_\_\_\_ Which principle? \_\_\_\_\_
2. The youngest rock is labeled? K, E, A, F \_\_\_\_\_ Which principle? \_\_\_\_\_
3. Which is older; igneous intrusion A or fault H? \_\_\_\_\_ Which principle? \_\_\_\_\_
4. The surface at J is a : fault, disaster, unconformity, intrusion? \_\_\_\_\_ Which principle? \_\_\_\_\_
5. Which is older; fault H or rock layer C? \_\_\_\_\_ Which principle? \_\_\_\_\_

List the order of rocks in this diagram from oldest to youngest.

oldest----->youngest

Which law does this support? (Explain)

