

Geologic History- Relative Dating Notes

Relative Time

Ages of events are placed in _____.

Absolute Time

Ages of events are identified by _____.

Finding Age with Relative Dating

By examining _____, we can determine what events occurred and in what order.

What is a geologic Cross-section?

A diagram showing the layers of rock in a particular location.

The Law of Superposition

In a sequence of undisturbed rock, the oldest rocks are found at the _____.

The Law of Cross-Cutting Relationships

An igneous rock is _____ than the rocks that it has intruded into. (This also applies to faults)

The Law of Original Horizontality

Rocks are usually deposited _____.

The Law of Included Fragments

The individual fragments that make up a rock are _____ than the rock itself.

The Law of Folds and Tilts

Any folds or tilts (or any deformation) are _____ than the rock layers that they affect.

Things to Remember

Sedimentary rocks usually form _____.

Weathering and erosion usually occurs on _____.

Fossils are only found in _____ rocks

Unconformities

A buried erosional surface; a missing section of the rock record.

Rock Correlation

What is Correlation?

Matching rocks in one location to those in another location in order to _____.

Outcrops are areas of _____ which can be compared for similarities.

Walking an Outcrop

Observing and following a particular layer of rock over a long distance.

By observing color, texture, and other characteristics, one may follow a layer over a distance

Fossil Evidence

Most reliable method of correlation

Only found in _____ rocks

Provide clues about the environment in which the rock formed

Index Fossils

Fossils of organisms that lived over a _____, but for only a _____ period of time.

Index fossils are important tools for correlating widely separated outcrops.

Volcanic Time Markers

Volcanic eruptions may spread a _____ over the earth's surface.

It is useful because it is spread over a _____ and occurred over a _____ period of time.