

Double Column Notes

Earth Systems – Rock Cycle #2: Describe the methods used to estimate geologic time and the age of the Earth (e.g. techniques used to date rocks and rock layers, presence of fossils).

Fossils (pg. 110) – The preserved remains or traces of living things.

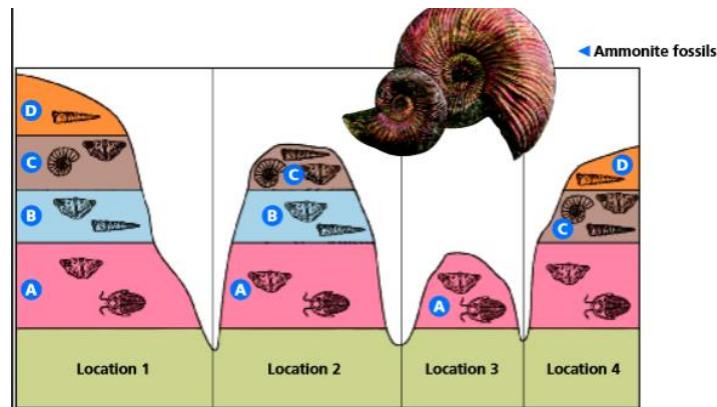
Most fossils form when living things die and are buried by sediments. The sediments slowly harden into rock and preserve the shapes of the organisms.

Relative Age (pg. 117) – The age of a rock compared to the ages of rock layers.

Absolute Age (pg. 117) – The age of a rock given as the number of years since the rock formed.

Law of Superposition (pg. 118) – The geologic principle that states that in horizontal layers of sedimentary rock, each layer is older than the layer above it and younger than the layer below it.

Index Fossils (pg. 120) – Fossils of widely distributed organisms that lived during only one short period.



Radioactive Dating (pg. 125) – Geologists use radioactive dating to determine the absolute ages of rocks.

Scientists first determine the amount of a radioactive element in a rock. Then they compare that amount with the amount of the stable element into which the radioactive element decays.

Radioactive dating works well for igneous rocks, but not for sedimentary rocks. Scientists date the igneous intrusions and extrusions near the sedimentary rock layers.

Geologic Time (pg. 127) – A record of the geologic events and life forms in Earth's history.