Earth History Study Guide

Vocabulary:

Volcano
Earthquake
Plate
Plate Boundary
Subduction
Continental crust
Oceanic crust
Lithosphere
Asthenosphere
Mantle
Core
Convection Current
Convergent boundaries
Divergent boundaries
Transform boundaries
Igneous
Intrusive
Extrusive
Dike
Crystal
Melting
Solidification
Metamorphic
Heat Pressure
Sedimentary
Sandstone
Shale
Limestone
Calcite
Weathering
Erosion
Deposition
Current (river)
Meander
Rock layer
Rock column
Canyon
Relative Age
Absolute Age

I can statements based on standards:

1. I can identify locations where volcanoes and earthquakes would likely occur
2. I know what causes plates to move.
3. I can explain how earth materials cycle, forming different rock types
4. I know that sediment patterns are caused by the speed of water flow in a meandering river
5. I can use a model of a rock column to identify the sequence of rock-layer formation
6. I can argue from evidence how a rock layer was formed
7. I can explain what geological process is causing Mount Everest to grow taller.
8. I can use evidence to explain how patterns in the rock record identify change over a long period of time
9. I can construct explanations about the formation of canyons based on patterns in data from models that represent large systems of rock layers.
10. I can interpret diagrams to correlate patterns in rock layers.

Specific concepts to know:

- Know what the Ring of Fire is and why it gets its name.
- Know the three types of plate boundaries and their features.
- Know what causes plates to move.
- Know the layers of the Earth
- Know what causes convection cells to form in the mantle.
- Know evidence for Continental Drift.
- Know how one rock can turn into another rock – Rock Cycle
- Know the processes that form each rock type
- Know how to identify an intrusive igneous rock from an extrusive igneous rock.
- Know the three main types of sedimentary rocks and their environments of deposition

- Know where erosion and deposition occur on a stream meander.
- Know how water velocity (speed) impacts deposition and erosion on a stream meander.
- Know how to determine relative age of rocks.
- Know the Principle of Superposition
- Know the Principle of Original Horizontality
- Know the Principle of Cross-Cutting Relationships