Grade 6 Earth Science: Earthquakes and Volcanoes

Science Matters:

Earthquakes and Volcanoes are natural phenomena formed by the movement of the Earth's crust. Earthquakes occur along plate boundaries where the Earth's crust is being pushed or pulled apart. Volcanoes occur at plate boundaries where magma rises to the surface. Earthquakes and volcanoes are related and can occur together. Seismic activity is recorded near volcanic locations.

Seismic waves travel through Earth, and energy is transferred in the form of seismic waves. The location of seismic waves is determined by the arrival time of P and S waves. Earthquakes and volcanoes are classified by the type of fault and the resulting landform.

California has a strike-slip fault on the transform boundary between the Pacific and North American plate. Earthquakes and volcanoes occur in relationship to each other. Seismographs record the intensity of an earthquake. Richer scales use a logarithmic scale increasing by ten each time. 

Earthquakes are described and recorded near earthquake locations. The Mercalli scale is used to determine the intensity of an earthquake using observable phenomena. Earthquakes and volcanoes are the result of the hot moving mantle.