**“Land Beneath Our Feet” Essential Vocabulary**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Earthquakes -** a sudden and violent shaking of the ground as a result of movements within the earth's crust or volcanic action.

**Rock Cycle -** cycle of processes undergone by rocks in the earth's crust, involving igneous intrusion, uplift, erosion, transportation, deposition as sedimentary rock, metamorphism, remelting, and further igneous intrusion**.**

**Soil -** the upper layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.

**Plate Tectonics -** a theory explaining the structure of the earth's crust and many associated phenomena as resulting from the interaction of rigid lithospheric plates that move slowly over the underlying mantle.

**Rock Groups -** rocks can be categorized into 3 groups based on how they were formed (igneous, metamorphic, and sedimentary).

**Soil Stewardship -** taking care of the land.

**Layers of the Earth -** layers of the earth are defined by their composition and density which impacts their position in the earth (crust, mantle, outer core, inner core).

**Volcano -** a mountain or hill that has a crater or vent through which lava, rock fragments, hot vapor, and gas are being or have been erupted from the earth's crust.

**Convection Currents -** the movement caused within a fluid by the tendency of hotter and therefore less dense material to rise, and colder, denser material to sink under the influence of gravity, which consequently results in transfer of heat.

**Geology -** the study of Earth’s physical structure and substance.

**Asthenosphere** - a layer of the earth that includes the upper part of the mantle (below the lithosphere) which has the ability to flow due to convection currents and is responsible for plate movement.

**Lithosphere** - a layer of the earth that includes the crust and the upper mantle.

**Tectonic Plates -** large pieces of the lithosphere.

**Subduction Zone -** an area where one plate sinks beneath another plate due to density.

**Seismic Waves -** energy that is produced by the vibrations of the Earth’s crust (primary waves, secondary waves, surface waves).

**Continental Drift -** a theory that all the continents were once joined together as the supercontinent, Pangaea.

**Ring of Fire -** the area surrounding the Pacific Plate that has a large amount of volcanoes and earthquakes.

**Convergent Boundary -** when plates move *towards* each other.

**Divergent Boundary -** when plates move *away* from each other.

**Transform Boundary -** when plates *slide past* each other**.**

**Magma -** molten rock found inside the earth.

**Lava -** molten rock that reaches the earth’s surface.

**Extrusive -** igneous rocks that were formed from lava cooling and hardening.

**Intrusive -** igneous rocks that were formed from magma cooling and hardening.

**Mechanical Weathering -** the process of breaking down rock by physical means (ex. Ice wedging).

**Chemical Weathering -** the process of breaking down rock through chemical reactions (ex. oxidation).