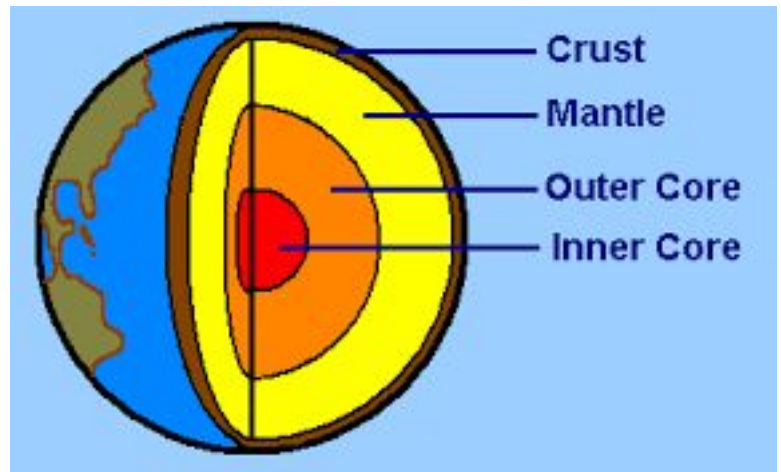
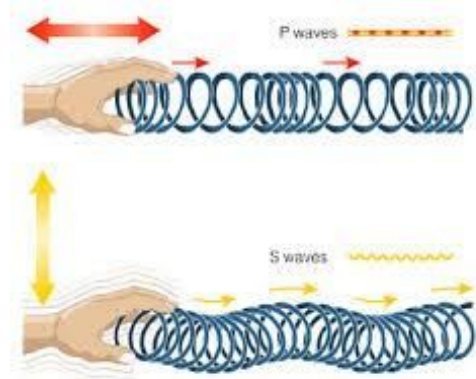


6th Grade Science Key Concepts

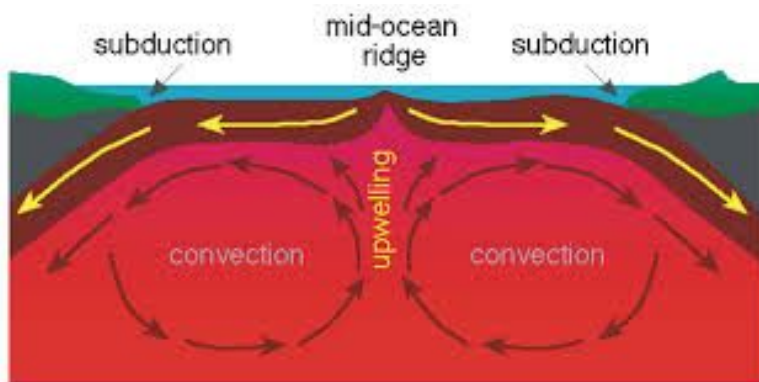
Earth's Systems, Structures & Processes (6.E.2)

6.E.2.1. The Earth is made up of layers: crust, mantle, outer core, and inner core.

- The surface of the Earth is mostly (71%) covered by water
- The Earth is surrounded by a thin layer of gas called the **atmosphere**
- The Earth is made of rock and is layered
 - ❖ The Earth's **core** is composed mostly of iron. The **inner core** is solid and the **outer core** is liquid
 - ❖ The Earth's **mantle** is the thickest layer. It is hot and convective.
 - ❖ The Earth's **crust** is composed of **continental plates**. Continental plates are made of granite, so they are less dense than **oceanic plates**, which are made of dense basalt.



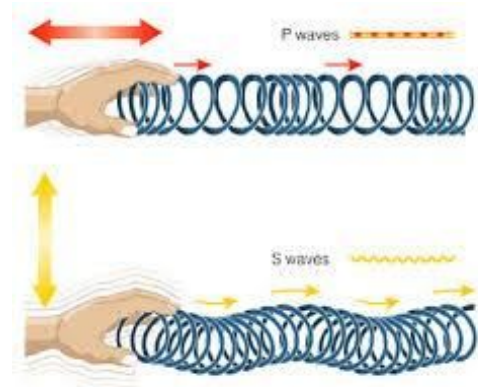
6.E.2.2 The surface of the earth is made of plates which move. This movement causes earthquakes, mountain formation, volcanoes, and hot spots.



- The Earth's plates move around on very slow large convection currents in the mantle
- Mountains, volcanoes and Earthquakes normally occur at plate boundaries where plates are either colliding (**convergent**) or pulling apart (**divergent**)
- Ocean crust is thinner than continental crust and is created at mid-ocean rift zones where convection currents are pushing plates apart creating new crust.

6th Grade Science Key Concepts Earth's Systems, Structures & Processes (6.E.2)

- **Earthquakes** create waves that travel through the Earth including **P Waves** (side to side motion) and **S Waves** (up and down motion).



6.E.2.3

Parent rock is broken down to form a major component of the soil. Organic material is also an important part of soil.

- **Soil** is mostly made of weathered rock and organic debris.
- The upper layer of the continent is mostly covered with soil.
- Soils differ in their properties including as texture, particle size, pH, fertility and ability to hold moisture.

6.E.2.4

Humans impact the soil and have a role in stewardship of this resource.

- Humans can manage their impact on soil by using techniques like planting vegetative cover, contour plowing, managing land use, and crop rotation
- Soil erosion is a natural process that can be hastened by unplanned or unmanaged land use practices