

## Earth's Internal Structure

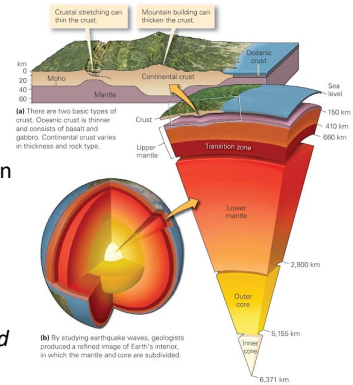
### Internal Layers of the Earth

#### Inner Core

Solid Iron (*Fe*) metallic inner layer at high temperatures approaching the sun

#### Outer Core

Thick Liquid Iron (*Fe*) and Nickel (*Ni*) layers that flow based on convection currents (*flow based on density*). The outer core produced the *magnetic field* within the earth structure.



2

## Earth's Internal Structure

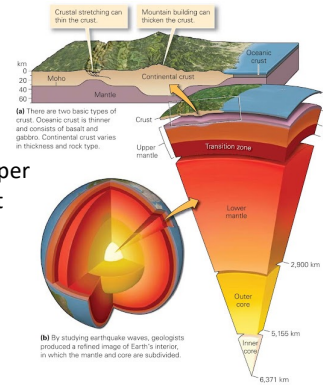
### Internal Layers of the Earth

#### Upper Mantle

*Lithosphere*, liquid upper layer made of magma made of liquid rock. The upper mantle's magma becomes lava when it leaves the mantle to the crust.

#### Lower Mantle

*Asthenosphere*, thicker liquid that supports the upper mantle into the transition to the core. Temp = 4000K



3

## Earth's Internal Structure

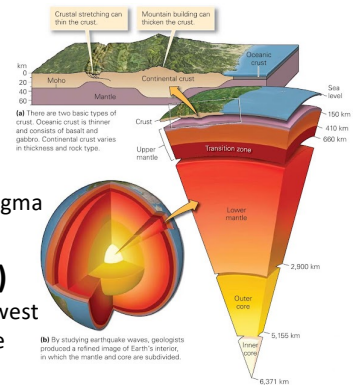
### Internal Layers of the Earth

#### Oceanic Crust (5km Thick)

Thinner rock layer above the magma below the ocean. The crust structure below the ocean commonly allows magma flows and undersea volcanos

#### Continental Crust (30 – 50km)

Thicker than oceanic crust with the lowest portions reaching 650K in temperature  
Both crusts are made mainly of rocks



4

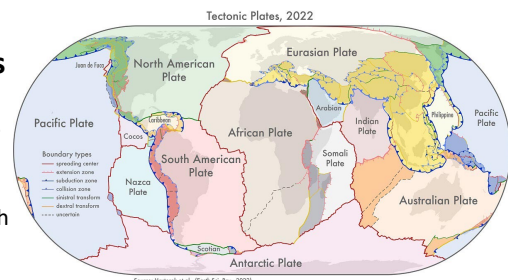
## Continental and Oceanic Crust Structure

### Tectonic Plates

Sections of the crust that interact with other parts of the crust at plate boundaries.

#### Plate Boundaries

Splits within the crust where different layers of the crust interact  
Through tectonic plates within the earth



5

## Tectonic Plates and Changes in the Crust

Plate boundaries interact with different types of plate interaction zones. Interaction zones are responsible for geological activity in the earth

The earth is under constant change due to *continental drift*, the movement of plates through the process of earthquakes and volcanos

