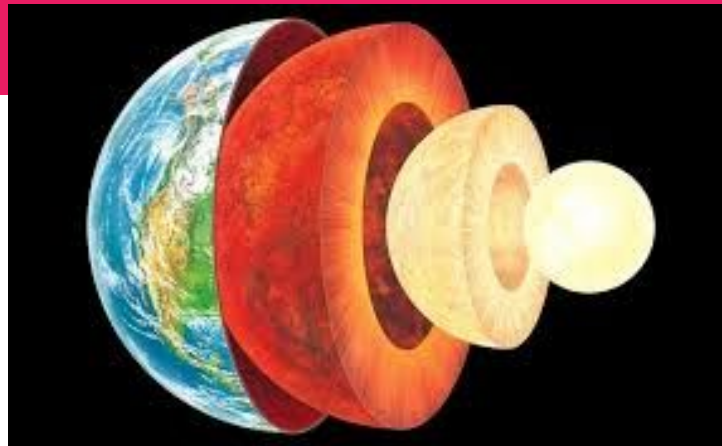


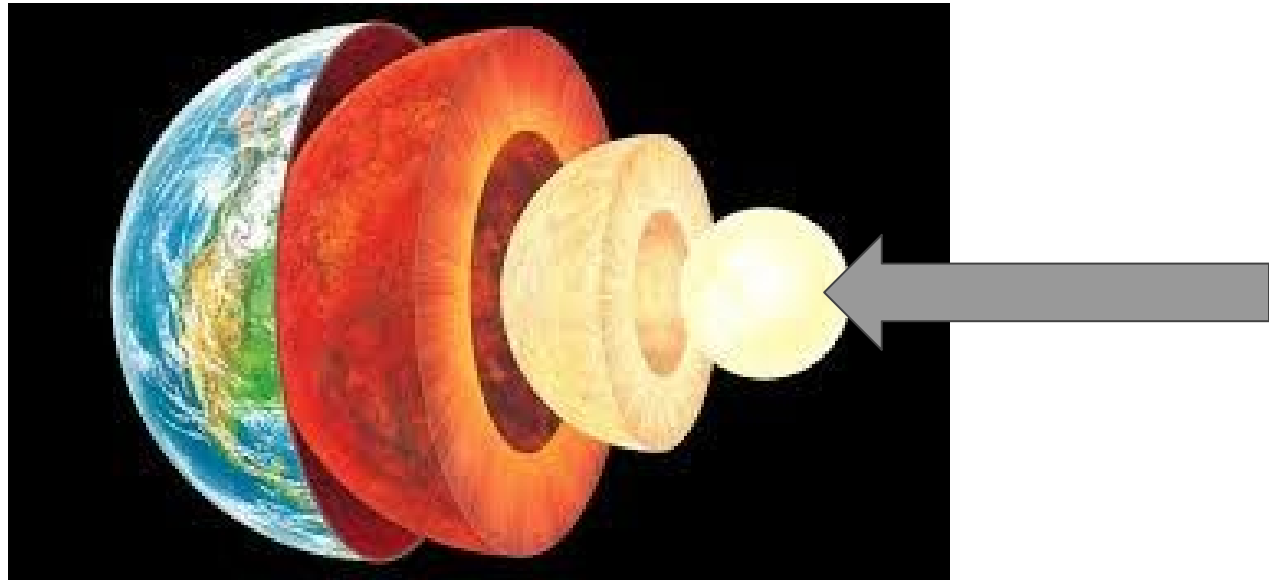
# Layers Vocab #1



# Inner Core

---

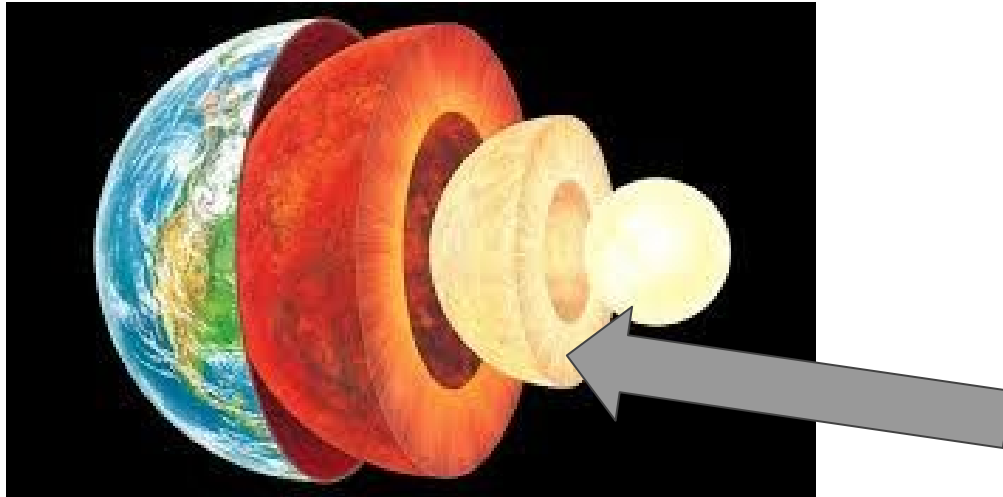
- Ball of hot, solid metal at Earth's center
- Very high pressure causes it to be solid



# Outer Core

---

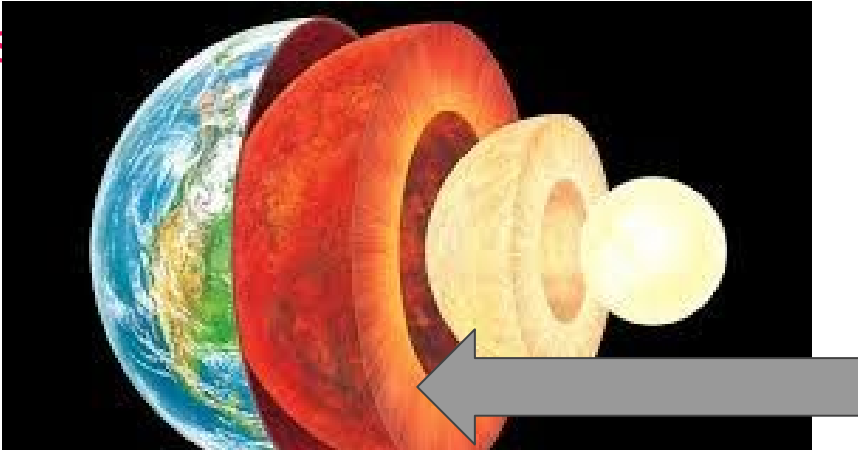
- Layer of liquid metal surrounding the inner core
- Less pressure and lower temperature than inner core



# Mantle

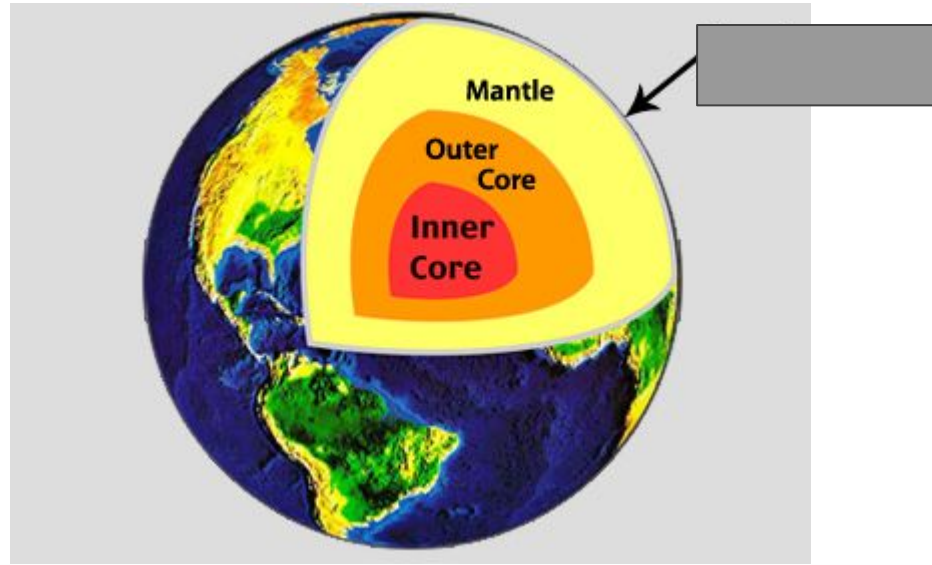
---

- Thickest layer of Earth made up of hot rock; less dense than core
- Uppermost part of mantle is cool and rigid. Just below that, the rock is hot and soft enough to move like a thick paste



# Crust

---

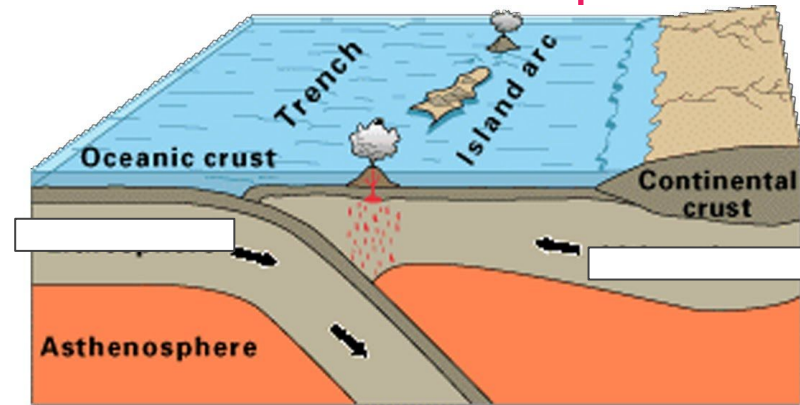


-Thin layer of cool rock that surrounds Earth like an eggshell; 2 types

- Continental crust includes all continents (less dense; mostly composed of granite)
- Oceanic includes all the ocean floors (more dense; mostly composed of basalt)

# Lithosphere

- Made up of the crust and the cool, rigid part of the upper mantle.
- It is broken into tectonic plates and sits on top of the asthenosphere

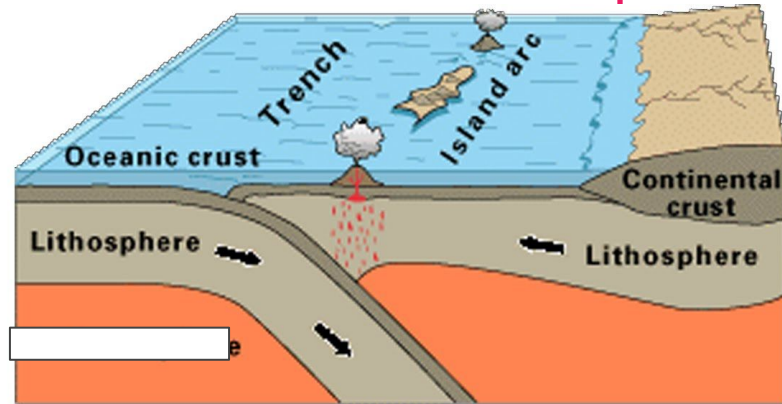


***Lithospheric Plates***

# Asthenosphere

---

- Layer of hotter, softer rock in Earth's upper mantle; flows like tar
- Lithosphere (tectonic plates) sits on the asthenosphere



***Lithospheric Plates***

# Relative Position

---

The location of something in comparison to its surroundings



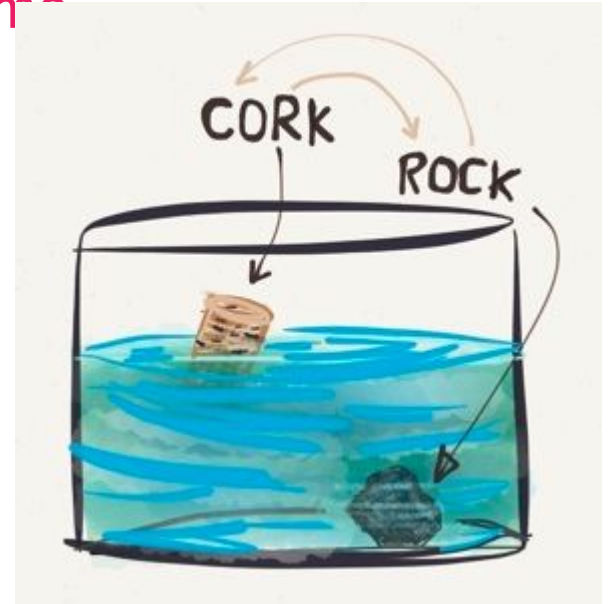
# Composition

---

The makeup of a substance; the composition of carbon dioxide ( $\text{CO}_2$ ) is one carbon atom and 2 oxygen atoms

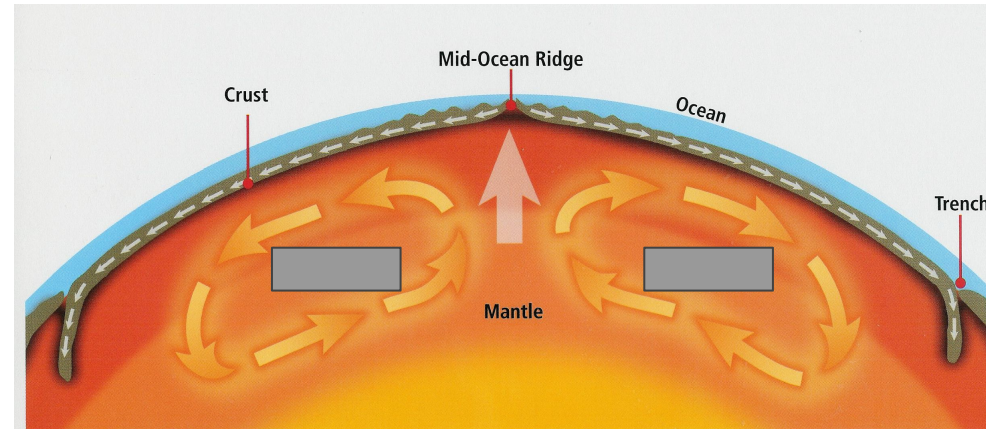
# Density

---  
-The amount of “stuff” present (mass) in a certain amount of space (volume);  $\text{Density} = \text{Mass}/\text{Volume}$



# Convection Currents

- Convection = heat transfer by the movement of fluids
- Hot, soft rock in the asthenosphere and the lower mantle move by convection.
- Hotter, less dense rock rises. Cooler, denser rock sinks back down, only to be heated and rise again



According to one theory, convection currents in Earth's mantle drag along tectonic plates. Here the currents move two plates apart.