**Inner core**-

Located at the center of the Earth and is composed of nickel and iron. It is 2,400 Km thick and about 7,000 - 8,000 degrees Celsius.

**Outer Core-**

A fluid layer about 2,300 km (1,400 mi)[1] thick and composed of iron and nickel that lies above Earth's solid inner core and below its mantle. Its outer boundary lies 2,890 km (1,800 mi) beneath Earth's surface. The transition between the inner core and outer core is located approximately 5,150 km (3,200 mi) beneath the Earth's surface.

**Lower Mantle**

Contains 49.2 % of the Earth's mass and is about 50% of the total mass of the planet. The lower mantle contains 72.9% of the mantle-crust mass and is composed of silicon, magnesium, oxygen, iron, calcium, and aluminum. The lower mantle extends from 670 to 2900km. the part of the mantle closest to the outer core

**Upper Mantle**

A highly viscous layer, with a capacity up to 600 kilometers, which lies between the crust and lower mantle of the Earth.

**Asthenosphere**

The region below the lithosphere, variously estimated as being from fifty to several hundred miles (eighty-five to several hundred kilometers) thick, in which the rock is less rigid than that above and below but rigid enough to transmit transverse seismic waves.

**Lithosphere**

The outer part of the earth, consisting of the crust and upper mantle, about 100 kilometers (62 miles) thick

**Crust**

It is very thin in comparison to the other three layers. The crust is only about 3-5 miles (8 kilometers) thick under the oceans (oceanic crust) and about 25 miles (32 kilometers) thick under the continents (continental crust).

**Convection Currents**

Hot material rises to the top, cools and falls back to the bottom creating a circular currents

**Continental Crust**

The part of the crust that is about 40-70 Km thick and makes up the continents. The temperature varies depending on location and depth.

**Oceanic Crust**

The part of the crust that is about 7Km thick and forms the ocean floor. The temperature varies depending on location and depth.