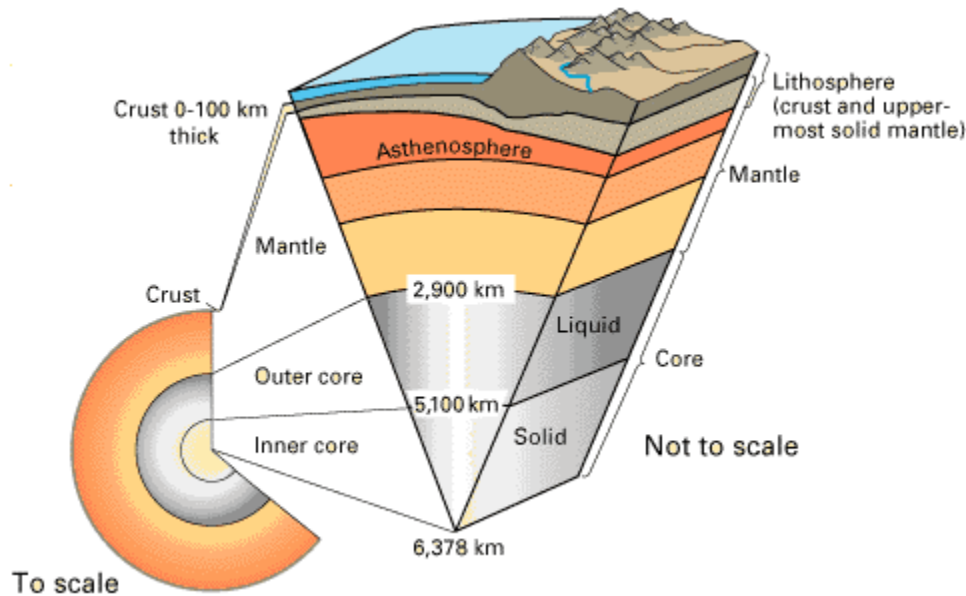


## UPSC Civil Services Examination

### UPSC Notes [GS-I]

#### Topic: Structure of the Earth [Geography Notes for UPSC]

##### Structure of the Earth



- The Crust
- The Mantle
- The Core

##### The Crust

- The crust is the outermost solid part of the earth.
- It is fragile in nature.
- The thickness of the crust varies under the oceanic and continental areas.
- Oceanic crust is thinner as compared to the continental crust.
- The continental crust is thicker in the areas of major mountain systems.
- The crust made up of heavier rocks having a density of 3 g/cm<sup>3</sup>.
- The kind of rock seen in the oceanic crust is basalt.
- The mean density of material in the oceanic crust is 2.7 g/cm<sup>3</sup>.

## The Mantle

- The portion of the interior beyond the crust is called the mantle.
- It is in a solid state.
- It has a density higher than the crust portion.
- The thickness ranges from 10-200 km.
- The mantle extends from Moho's discontinuity to a depth of 2,900 km.
- The asthenosphere is the upper portion of Mantle.
- It is the chief source of magma that finds its way to the surface during volcanic eruptions.
- The crust and the uppermost part of the mantle are called lithosphere.

## The Core

- The core-mantle boundary is positioned at the depth of 2,900 km.
- The inner core is in the solid state whereas the outer core is in the liquid state.
- The core is made up of very heavy material mostly constituted by nickel and iron. Hence it is also called the "nife" layer.