

# WELCOME TO SOCIAL SCIENCE

**SUBJECT : (GEOGRAPHY)**  
**CHAPTER NUMBER: 2**  
**CHAPTER NAME : INTERIOR OF EARTH**

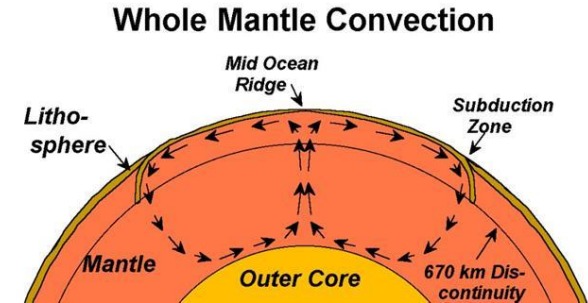
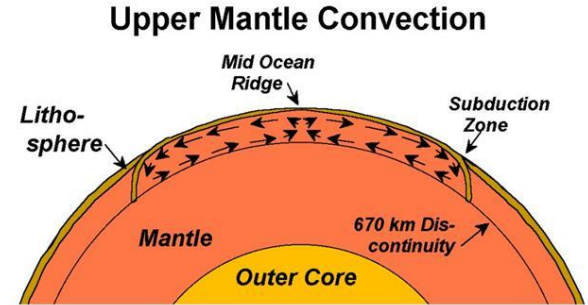
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**CHANGING YOUR TOMORROW**

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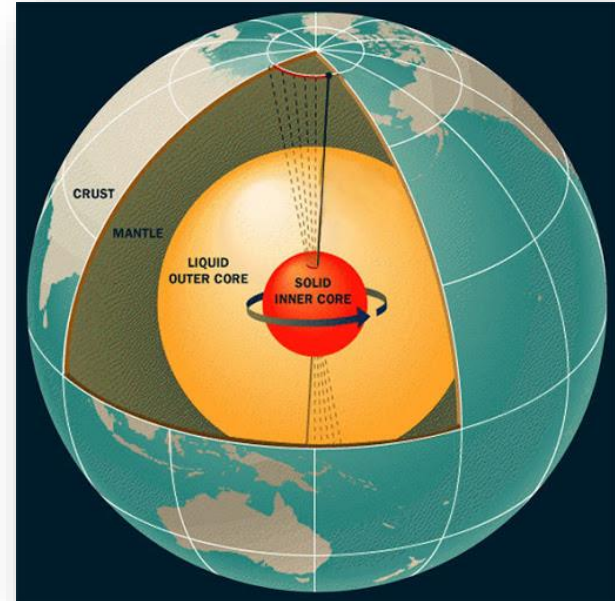
# THE MANTLE

- The portion of the interior beyond the crust is called as the mantle.
- The discontinuity between the **crust and mantle** is called as the **Moho discontinuity**.
- The mantle is about 2900kms in thickness.
- The major constituent elements of the mantle are Silicon and Magnesium and hence it is also termed as **SIMA**.
- The density of the layer is higher than the crust and varies from 3.3 – 5.4g/cm<sup>3</sup>.
- The uppermost solid part of the mantle and the entire crust constitute the **Lithosphere**.
- The **asthenosphere** (in between 80-200km) is a highly viscous, mechanically weak and ductile, deforming region of the upper mantle which lies just below the lithosphere.
- The asthenosphere is the main source of magma and it is the layer over which the lithospheric plates/ continental plates move (plate tectonics).



# The Core

- It is the innermost layer surrounding the earth's centre.
- The **core is separated from the mantle by Guttenberg's Discontinuity.**
- It is composed mainly of iron (Fe) and nickel (Ni) and hence it is also called as **NIFE**.
- The Core consists of two sub-layers: the inner core and the outer core.
- The inner core is in solid state and the outer core is in the liquid state (or semi-liquid).



# Assignment for today

- Describe the interior of the earth.
- What are the main mineral constituents of the continental mass?
- We cannot go to the centre of the earth. Give reasons.
- Describe the main constituents of the core. Give the radius of the core.
- Name the uppermost layer of the Earth. What is it made up of?
- What are the differences between sial and sima?



**THANKING YOU**  
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