9. Lithosphere – Structure of the Earth

The Earth is approximately 5 billion years old. The Earth consists of **core**, **mantle** and **crust**.

**Lithosphere** is a geosphere created by the Earth’s Crust and the uppermost part of the Mantle which is the most solid part. It lies upon layer of plastic, molten mantle rocks called **Asthenosphere**.

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**The Earth’s Crust**

The Earth’s Crust is a thin layer created by hard rocks of different origin and age.

- **Continental Crust** (30 - 40 km thick) is the base of land mass and it is created by sedimentary, granite and basalt layers below.

- **Oceanic Crust** (thinner, 5 -12 km) is the base of the ocean floor and it is created by sedimentary and basalt layers only (granite layer is missing).

The Earth’s Crust is not continuous. It was divided into many segments – **lithospheric (tectonic) plates**. These plates are floating on the Asthenosphere and carry land mass and ocean floor.

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**Keywords**

core, mantle, continental/oceanic crust, lithosphere, rocks, asthenosphere, sedimentary/ granitic/basaltic layer, lithospheric (tectonic) plates, landmass, ocean floor
Structure of the Earth’s Crust

Litospheric (tectonic) plates of the Earth