

Lithosphere! -

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The Earth, the 3rd planet in the Solar system, is the only planet that supports life. The upper 400 km of the solid earth is called the lithosphere. Lithosphere means the mantle of rocks constituting the Earth surface.

The Lithosphere (from the Greek Lithos → "Rocky" sphaira → "sphere")

It is the rigid outermost shell of the Rocky planet → Rocks are subjected to continuous process of physical, chemical, and biological weathering. (Lichens).

The resulting primitive soil is colonized by higher plants. ~~is~~ and, in course of time, plants debris return to the soil as plants die and leaves fall to the ground. The organic matter in soil is decomposed by a host of microorganisms and the biomass is mixed by the soil fauna.

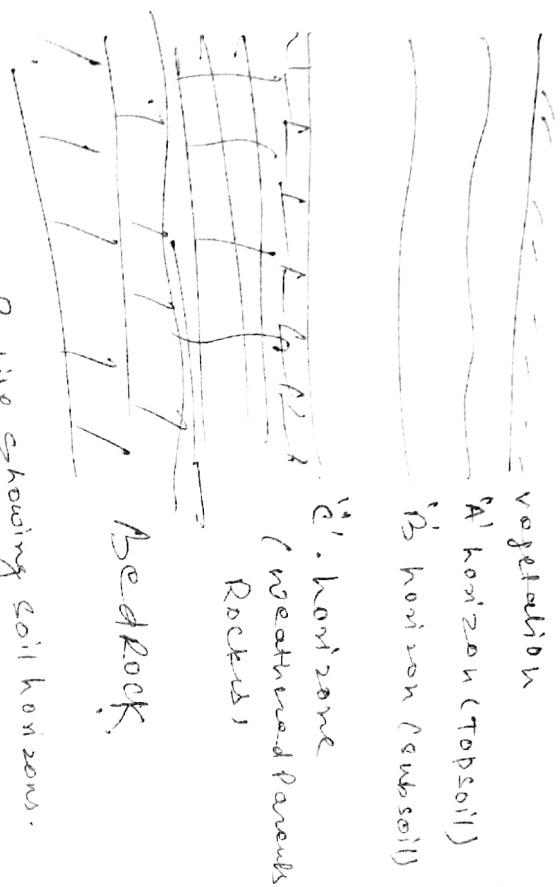
Soil plays a very important role as it produces food for human beings and animals. But due to human ~~act~~ activities, soil is the receptor of many pollutants including pesticides, fertilisers, particulate matter, ~~from~~ power plants, smokestack etc. Hence soil is an important component of environmental chemical cycles.

The mineral component of soil originates from the parent rocks by weathering process. While the organic component due to plant biomass invasions types of decays as well as high populations of bacteria, fungi and earthworms. A typical productive soil consists of approximately 5% organic matter and 95% inorganic matter.

(Pg 8)

- ① Two type of Lithosphere.
- ② Oceanic Lithosphere - It is mainly consists of mafic crust and ~~ultra mafic~~ ultramafic mantle (Petrobilit) It is associated with oceanic crust.
- ③ Continental Lithosphere - It is associated with continental crust. The oceanic lithosphere is more denser than the continental lithosphere.

soil, in general has a loose texture consisting of solid mineral and organic matter, air and space.



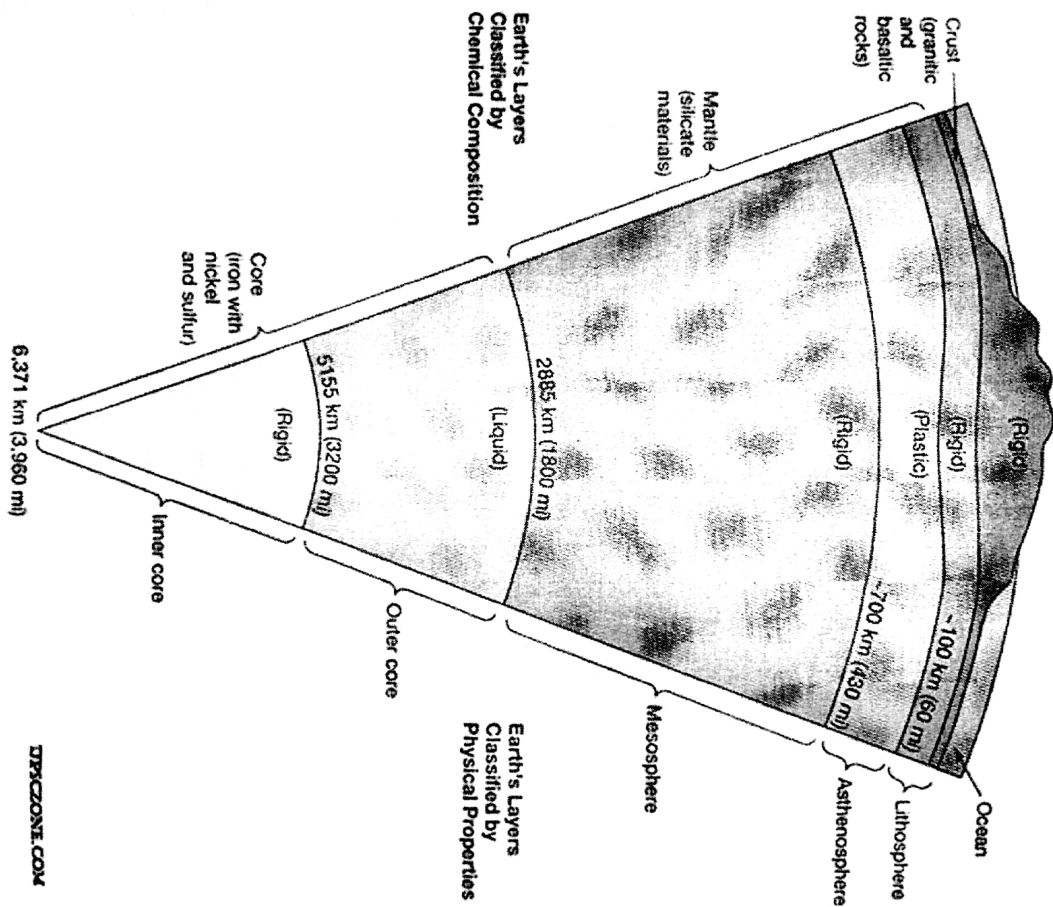
A horizon → Maximum biological activity in the soil and contain bulk of organic matter. Cover and it is important for vegetation.

→ Agricultural crops.
→ Metal ions and clay particles in the

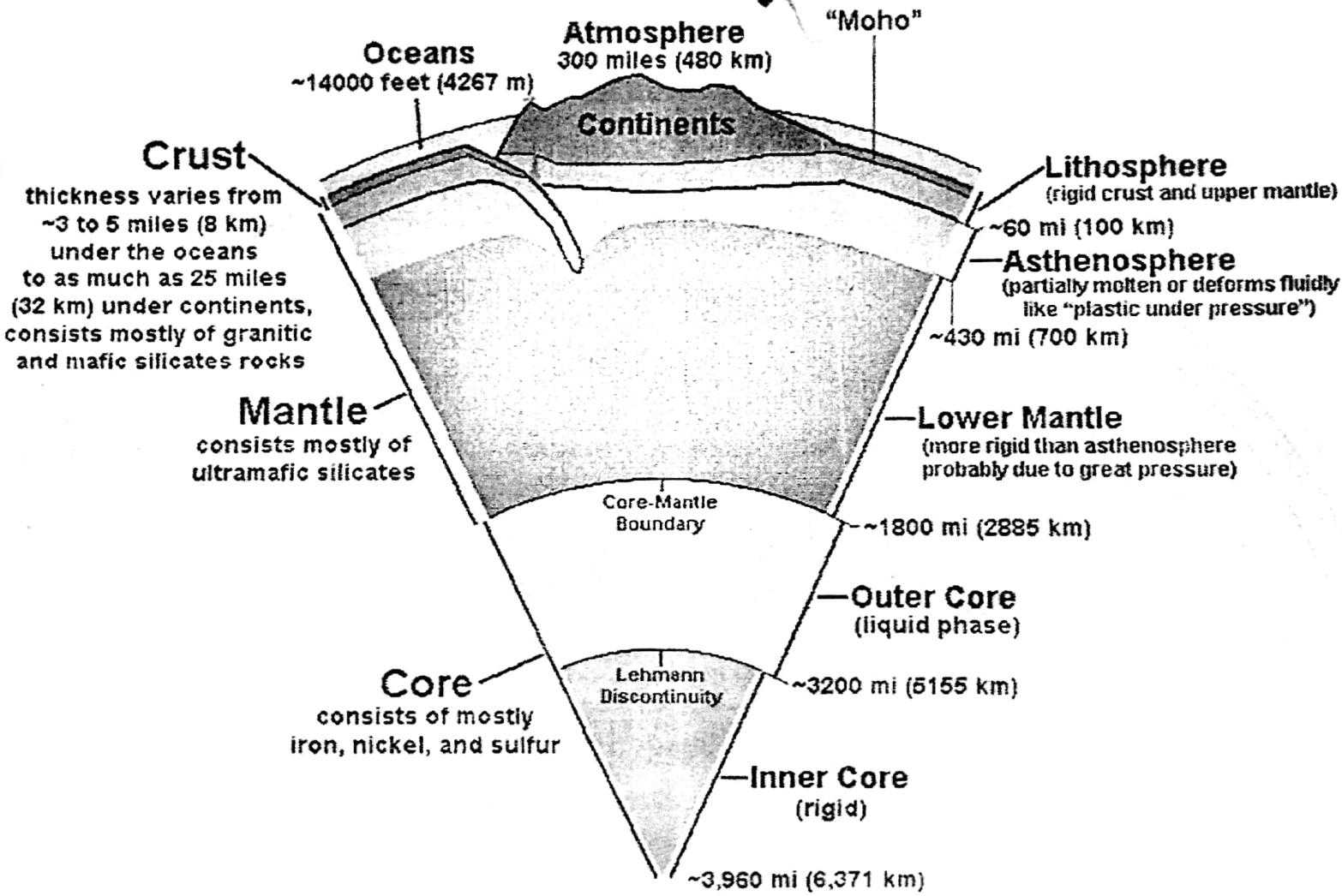
A horizons are subject to considerable leaching.

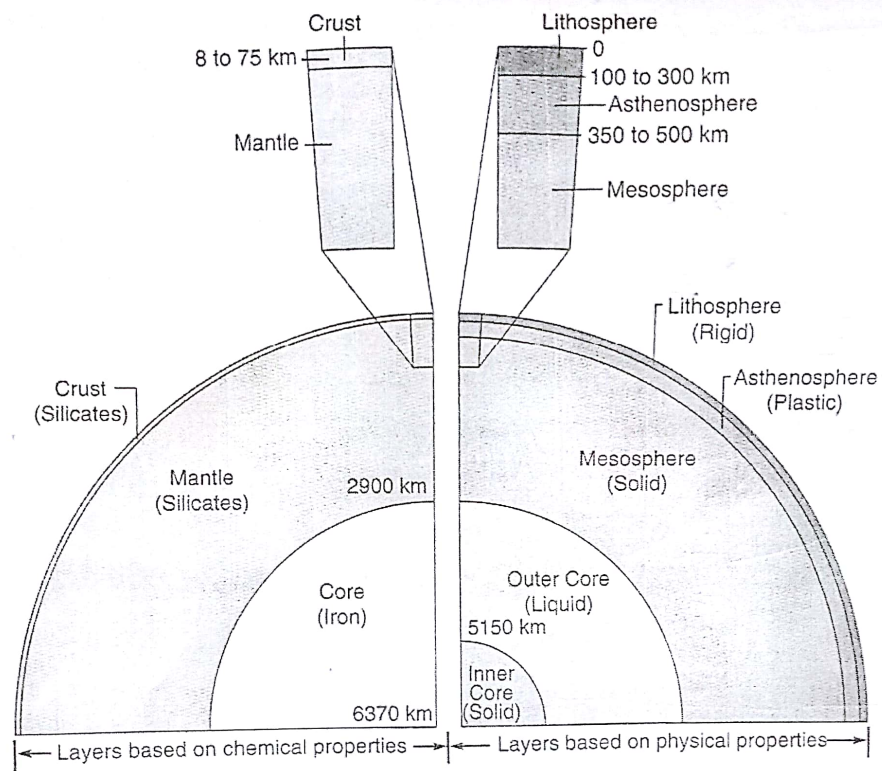
B horizons → It receives materials organic matter salts, or clay particles leached from the top soil.

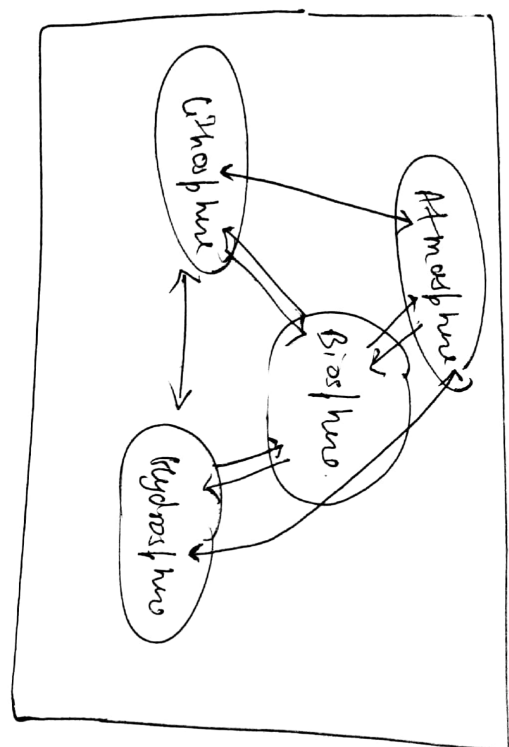
C horizons is composed of weathered parent rocks from the soil originated.



Structure of the Earth







Explanatory