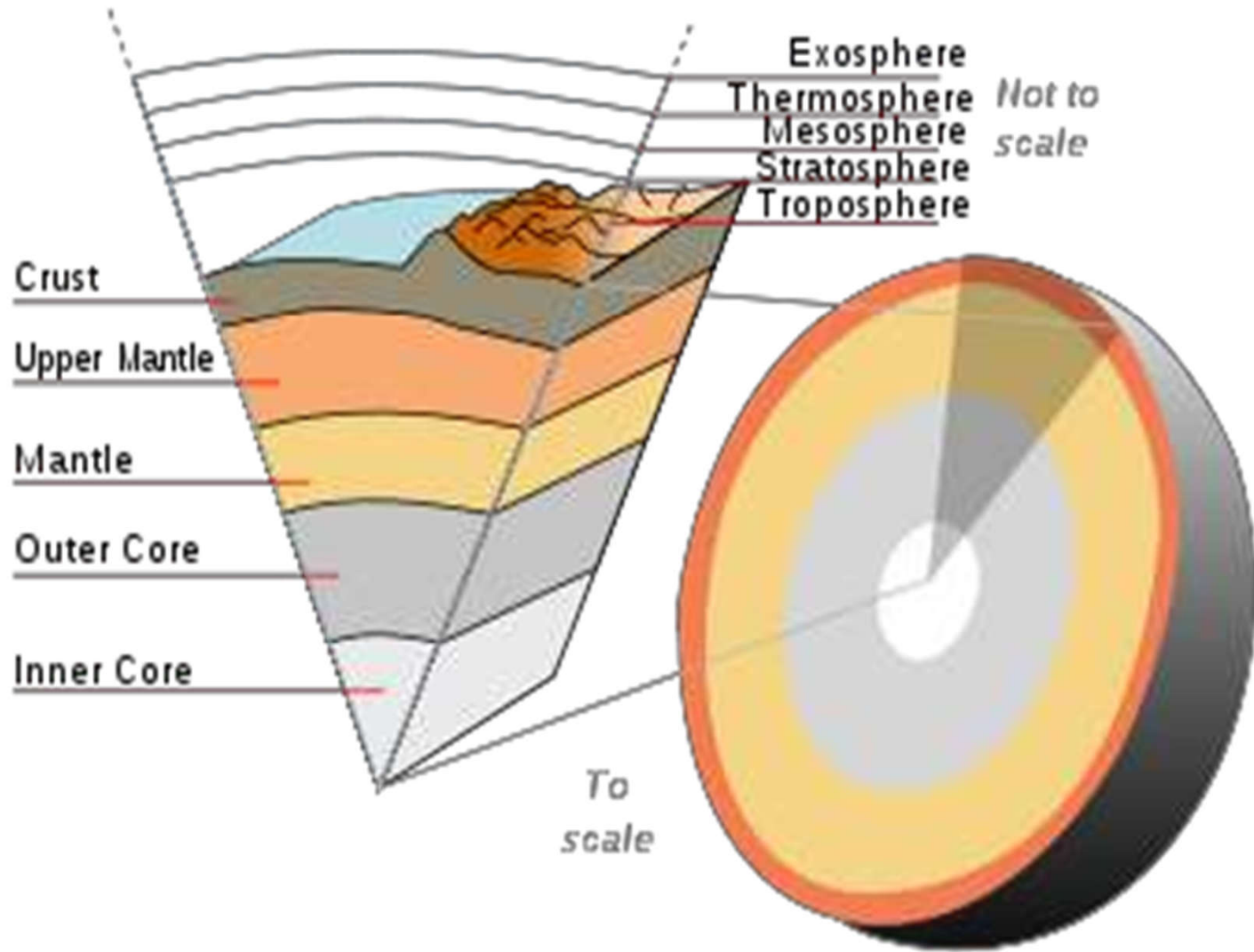


# Lithosphere

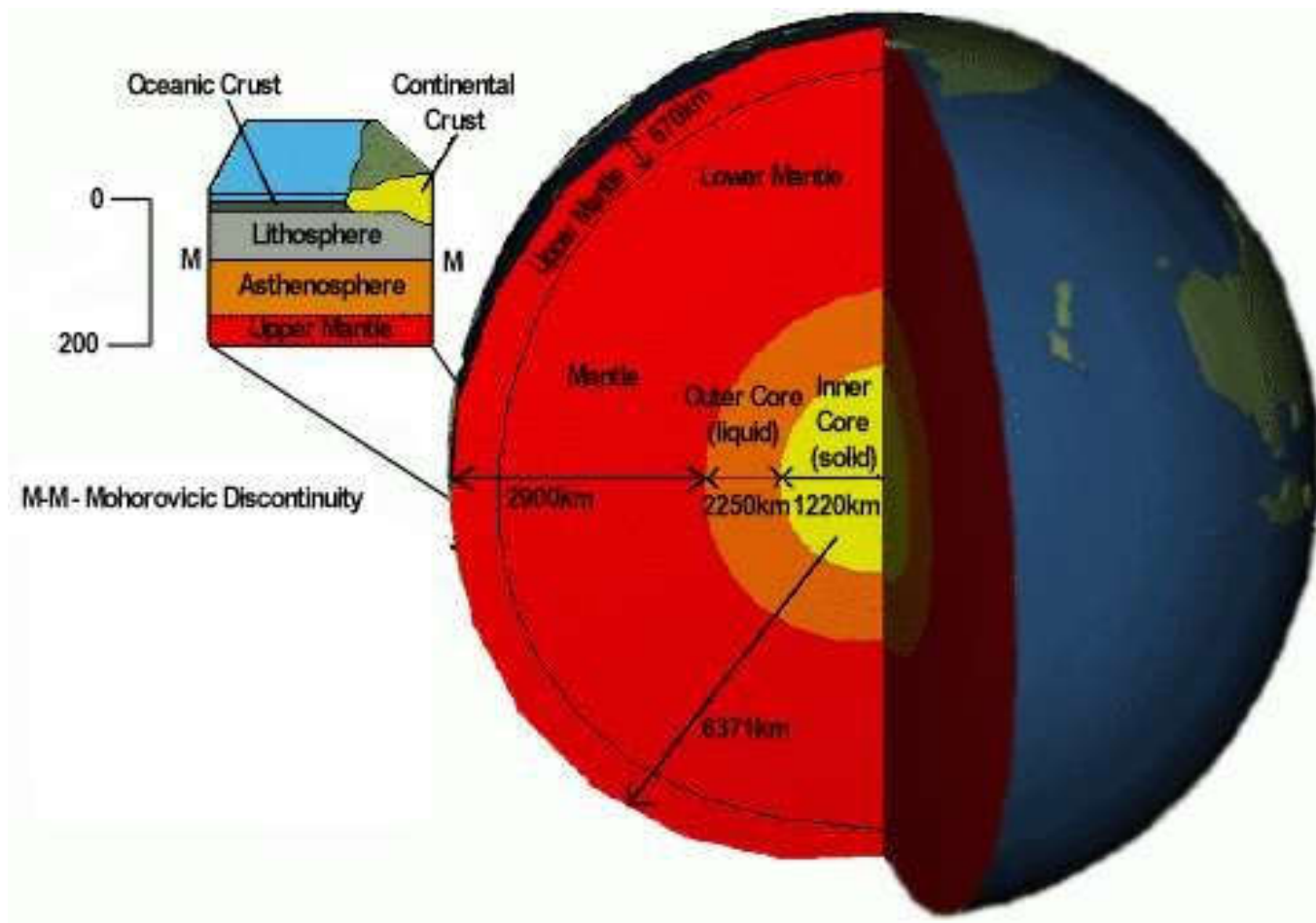
# The Lithosphere

The lithosphere (from the Greek [lithos] for "rocky" + [sphaira] for "sphere") is the rigid outermost shell of a rocky planet. It comprises the crust and the portion of the upper mantle that behaves elastically on time scales of thousands of years or greater.



# Earth's Lithosphere

- In the Earth, the lithosphere includes the crust and the uppermost mantle, which constitute the hard and rigid outer layer of the Earth. The lithosphere is underlain by the **asthenosphere**, the weaker, hotter, and deeper part of the upper mantle.
- The uppermost part of the lithosphere that chemically reacts to the atmosphere, hydrosphere and biosphere through the **soil forming process** is called the **pedosphere**.



# two types of lithosphere

**Oceanic lithosphere**, which is associated with Oceanic crust and exists in the ocean basins

- **Continental lithosphere**, which is associated with Continental crust

# Soil

A Natural Resource

**Soil** is one of the most important and essential **natural resources**. Farmers and gardeners know this fact and go to great efforts to conserve it. They understand that when the soil is destroyed, then gardens will not be successful and good crops cannot grow. They also know that it takes a considerable amount of time for soil to form.



Soil is defined as a covering over most of the earth's land surface. It is made of particles of rock and minerals, living things and the remains of living things. It takes thousands of years for soil to form just a few inches and for some parts of the country it has been less than that.

Soil is formed in two general ways:

When weather conditions cause rock to break down.

When soil is carried from one place to another.

# How is soil made?

- Air

Moving air, such as the wind blows sand against rock to wear it down.

- Water

The force of running water can wear away rock. Rain and snow also help to break down rock into smaller particles.

- Plants

Plants help the soil as they grow and when they die. As dead plants decay, it adds an organic material to the soil, which makes it more fertile.

- Animals

The body waste of many animals helps to keep the soil fertile, as well as the remains of dead animals as they decay.

Soil is a natural resource, which is required for production of food, industrial raw materials as well as for generation of energy resources. It is also a natural value, which is protected as natural heritage. From the viewpoint of natural resource, natural value and spatial factor it is irreplaceable for development and existence of mankind.

The preservation of the natural resource soil from physical destruction and pollution as well as the preservation of balance between the soil and other parts of the ecosystem represent one of the significant activities in the world nowadays.