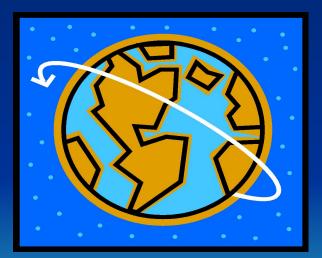
# The structure of the Earth!



# Formation of the Earth

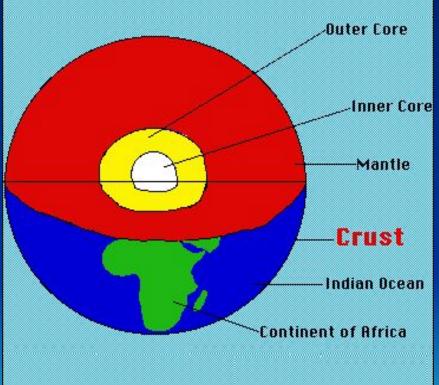
 4 billion years ago the Earth was a cloud of dust. The cloud began to spin and formed the solid earth. The Earth consists of the core, the mantle and the crust.

## Earth Layers



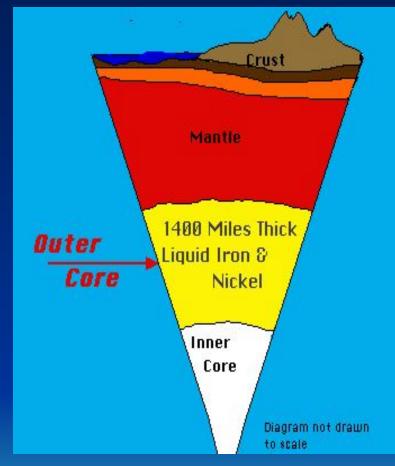
• The Earth is divided into four main layers.

\*Inner Core \*Outer Core \*Mantle \*Crust



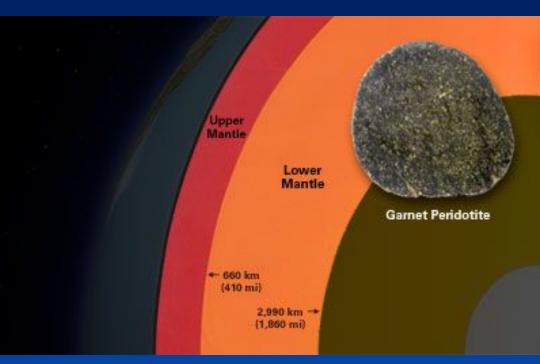
#### <u>The Core</u>

The core consists of the liquid outer core and the solid inner core. The liquid core controls the magnetic field of the Earth. The temperature of the core is 6,700 degrees Celsius. It consist of iron and nickel.



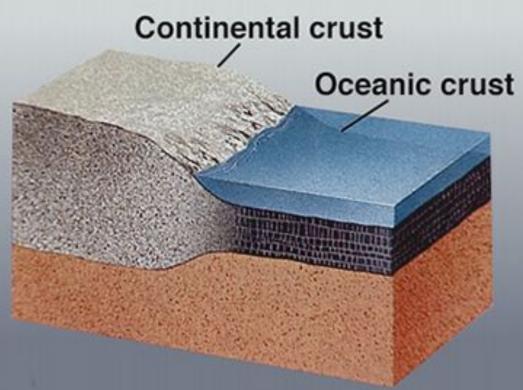
#### The Mantle

 The mantle consists of upper and lower mantle. The mantle is very hot and it moves. The temperature is 2000 degrees Celsius.





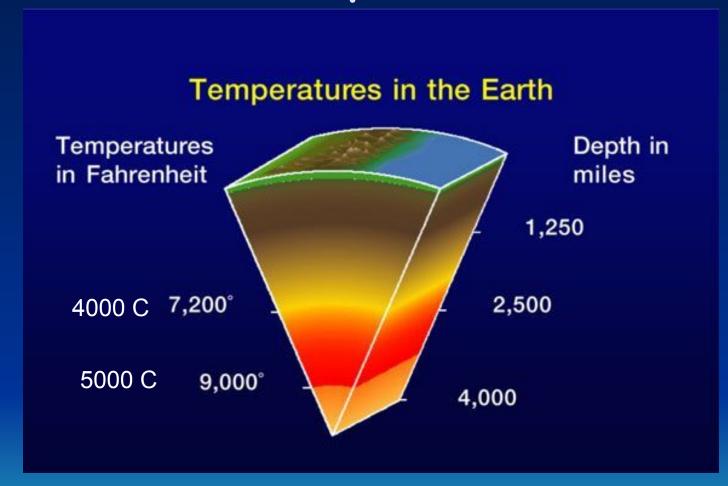
The crust can be continental and oceanic. The continental crust is 3,8 billion years old. The oceanic crust is 180 million years.



#### Tectonic plates

The crust and the upper mantle make tectonic plates. Tectonic plates move on the lower mantle. This tectonic movement makes mountains, volcanoes, continents, tsunamis, earthquakes.

#### Temperature





#### The crust consists of rocks:

- Granite
- Limestone
- Black coal
- Clay
- Sand

#### Rocks consist of minerals.

Granite consists of 3 minerals: Quartz Mica Feldspar Limestone consists of 1 mineral: Calcite

### There are 3 types of rocks:

- Magmatic rocks / Igneous rocks: granite, basalt. They make 60% of the crust.
- <u>Sedimentary rocks</u>: sand, clay, chalk, limestone
- <u>Metamorphic rocks</u> = igneous rocks + sedimentary rocks + high temperature + high pressure (marble, gneiss).