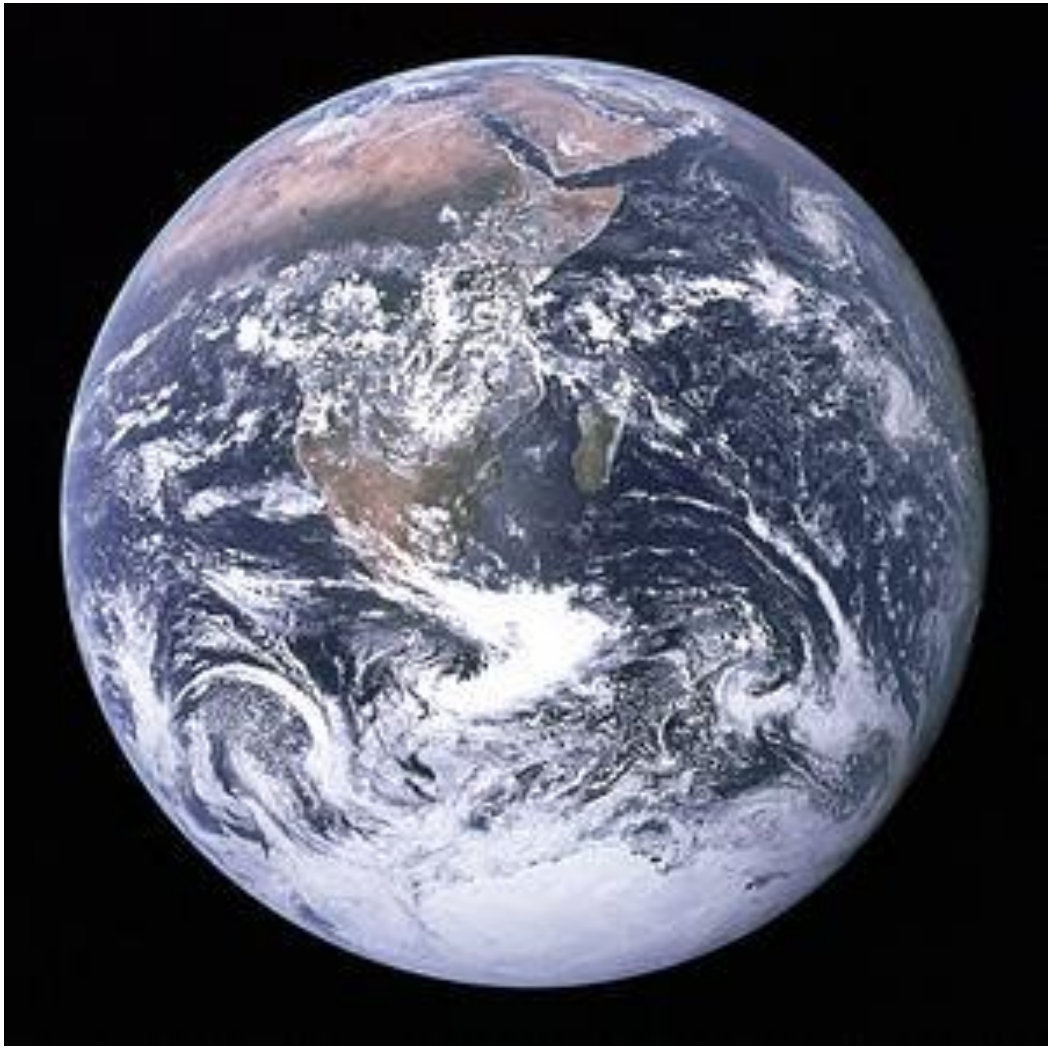
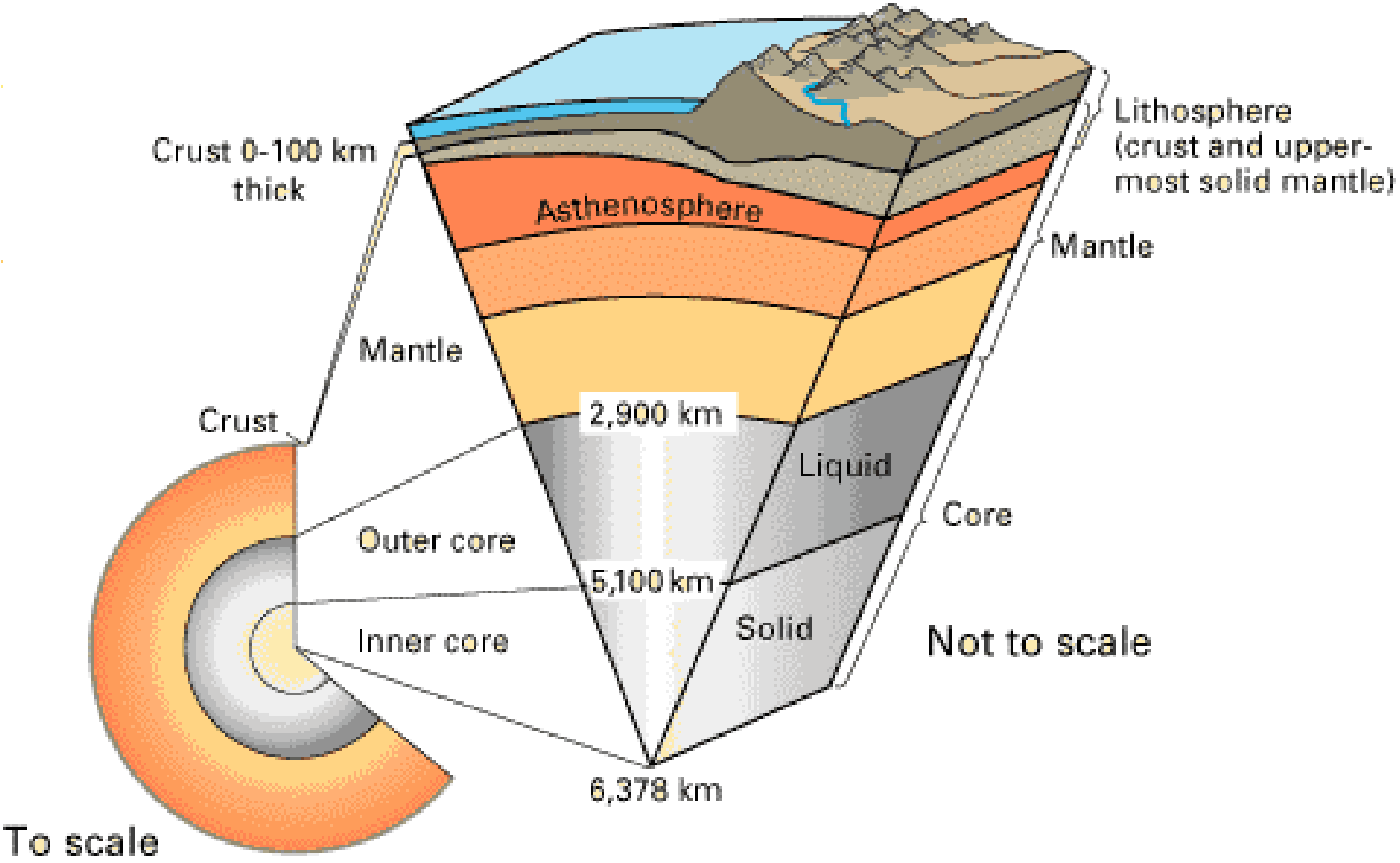
The Biosphere, atmosphere, hydrosphere and lithosphere



Earth

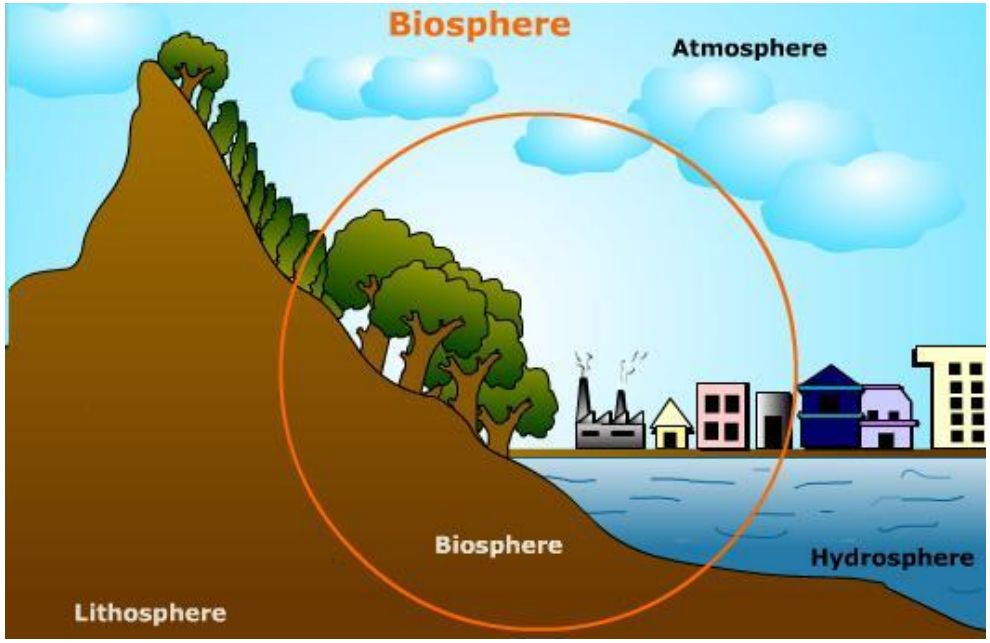
- Roughly 4.5 billion years old
- Third planet orbiting around the sun
- Only planet in our solar system to have surface liquid water
- Home to the only known life in the universe

Internal Structure of Earth



Biosphere

- Regions in which life can exist



- Made up of 3 parts
- Atmosphere (air)
- Hydrosphere (water)
- Lithosphere (rock and sediments)

Atmosphere

- The gases that envelope and surround the Earth make up our atmosphere
- Protects us from UV rays
- Balances the global temperature on the Earth
- Made up of various gases (Nitrogen, oxygen, water vapour, Carbon dioxide, Ozone, etc...)

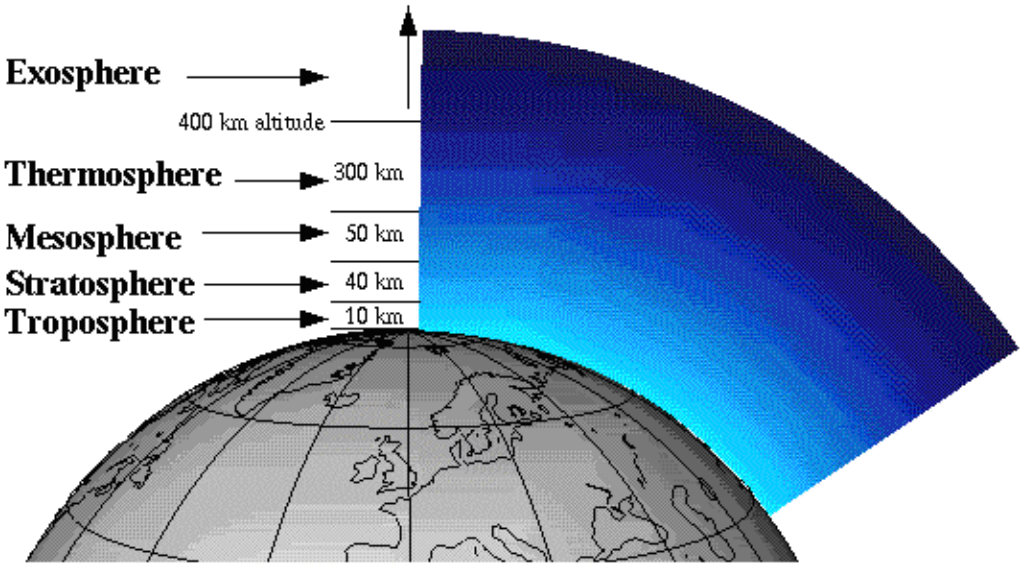
Layers of the atmosphere

Troposphere : contains 80% of all air

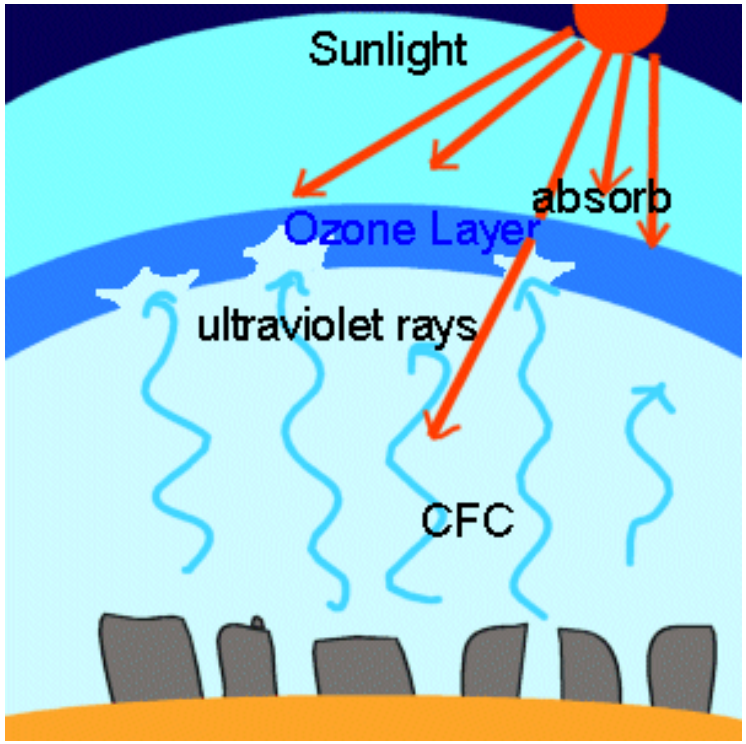
Stratosphere: absorbs UV rays

Mesosphere: Protects Earth from meteorites

Thermosphere: Most meteorites burn up here.



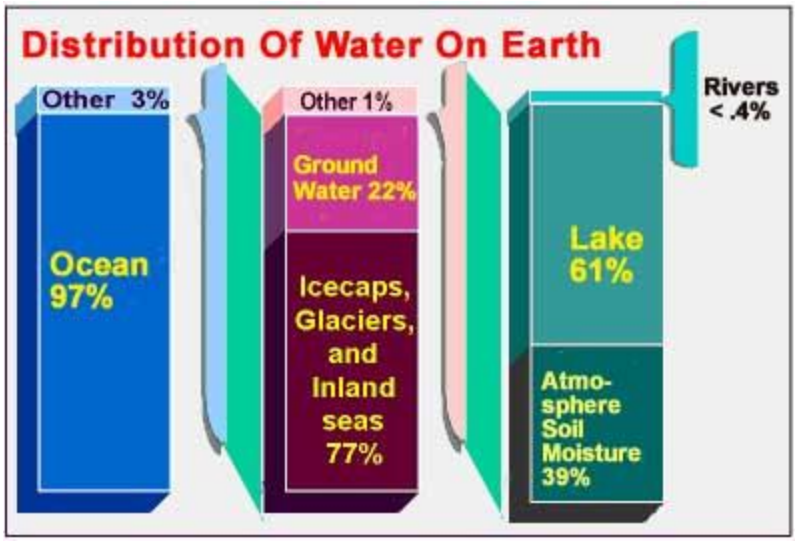
Ozone

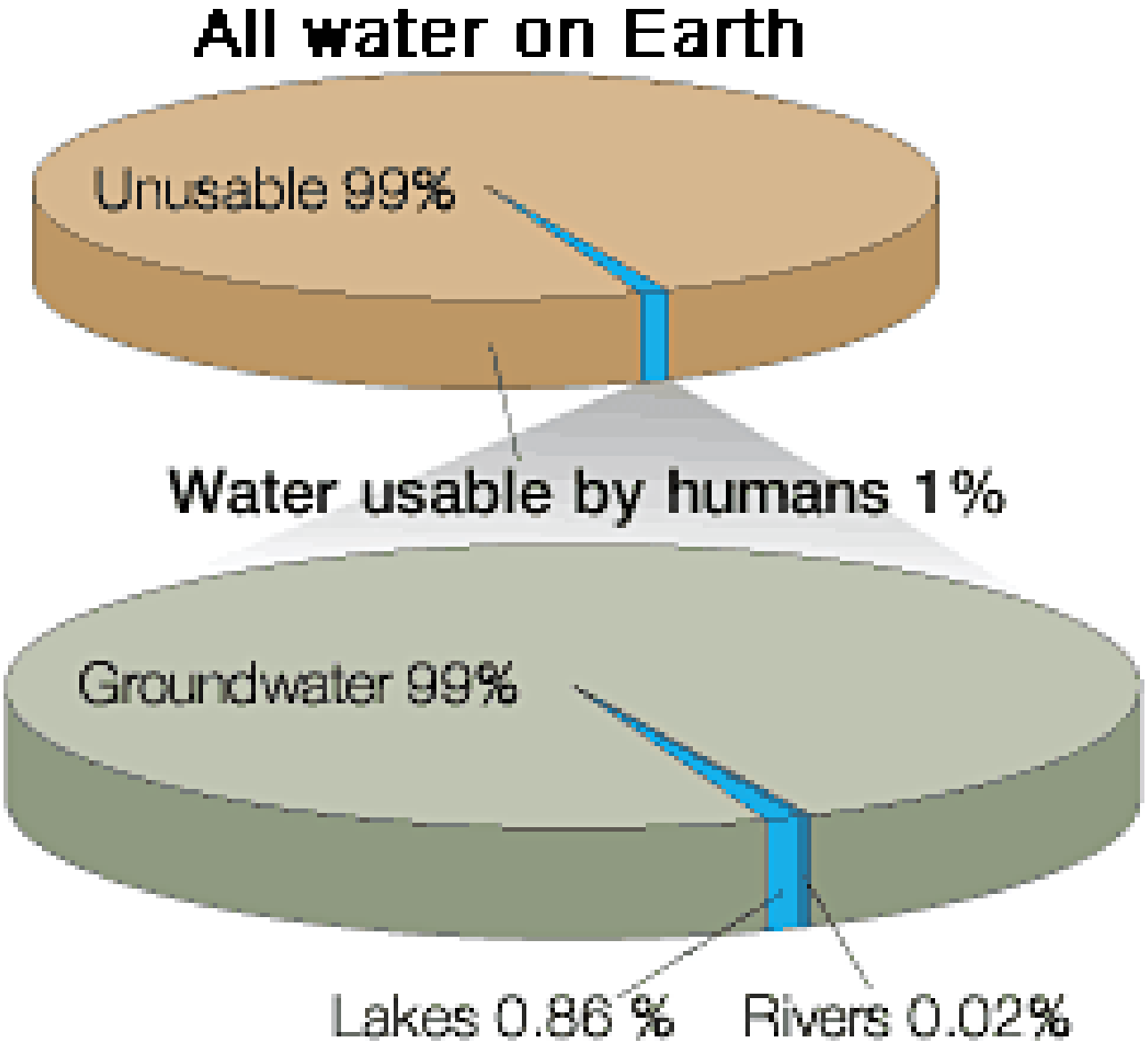


Protects us from UV rays

Destroyed by CFCs (chloroflurocarbons) and aerosol products.

Hydrosphere




All water on Earth
Unusable 99%
Water usable by humans 1%
Groundwater 99%
Lakes 0.86 %
Rivers 0.02%

Fresh Water

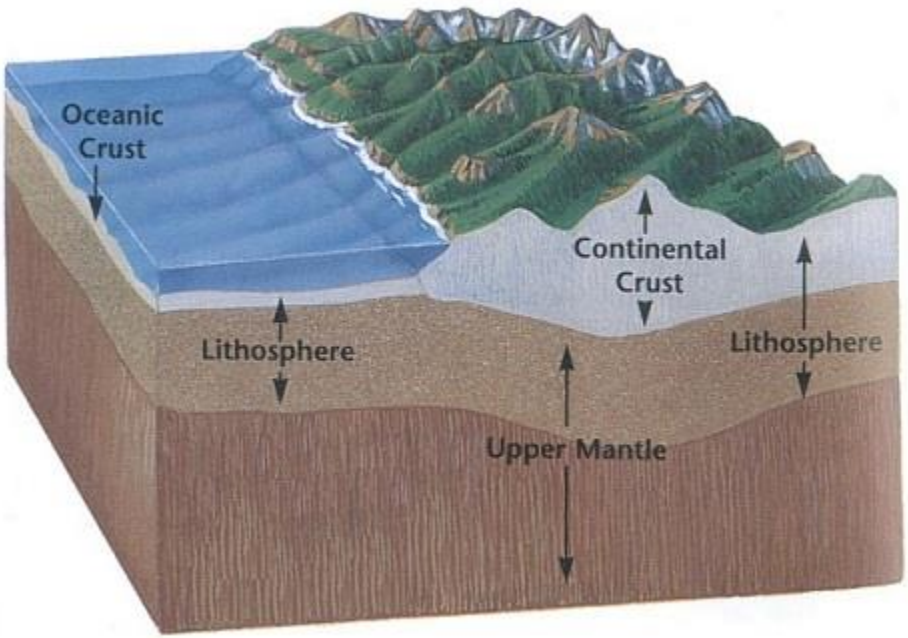
Fresh Water

- Lakes, ponds, rivers, and streams are freshwater habitats. So too are swamps, bogs, and marshes.
- It amounts to precious little water, less than half a percent of the world's water supply.
- Yet it is essential to a wide variety of life on earth.
- The distribution of fresh water in uneven globally. Four countries hold nearly 50% of all the fresh water on Earth.

Salt water

- The water of the seas and oceans is salty because of the vast quantity of mineral salts dissolved in it.

Lithosphere



- Comprises the Earth's crust and part of the upper mantle

Rocks and minerals

- A rock is a heterogeneous blend of various grains (each grain is a mineral)

- A mineral is a pure, natural and inorganic substance

Formation of rocks