


Environment & its Components



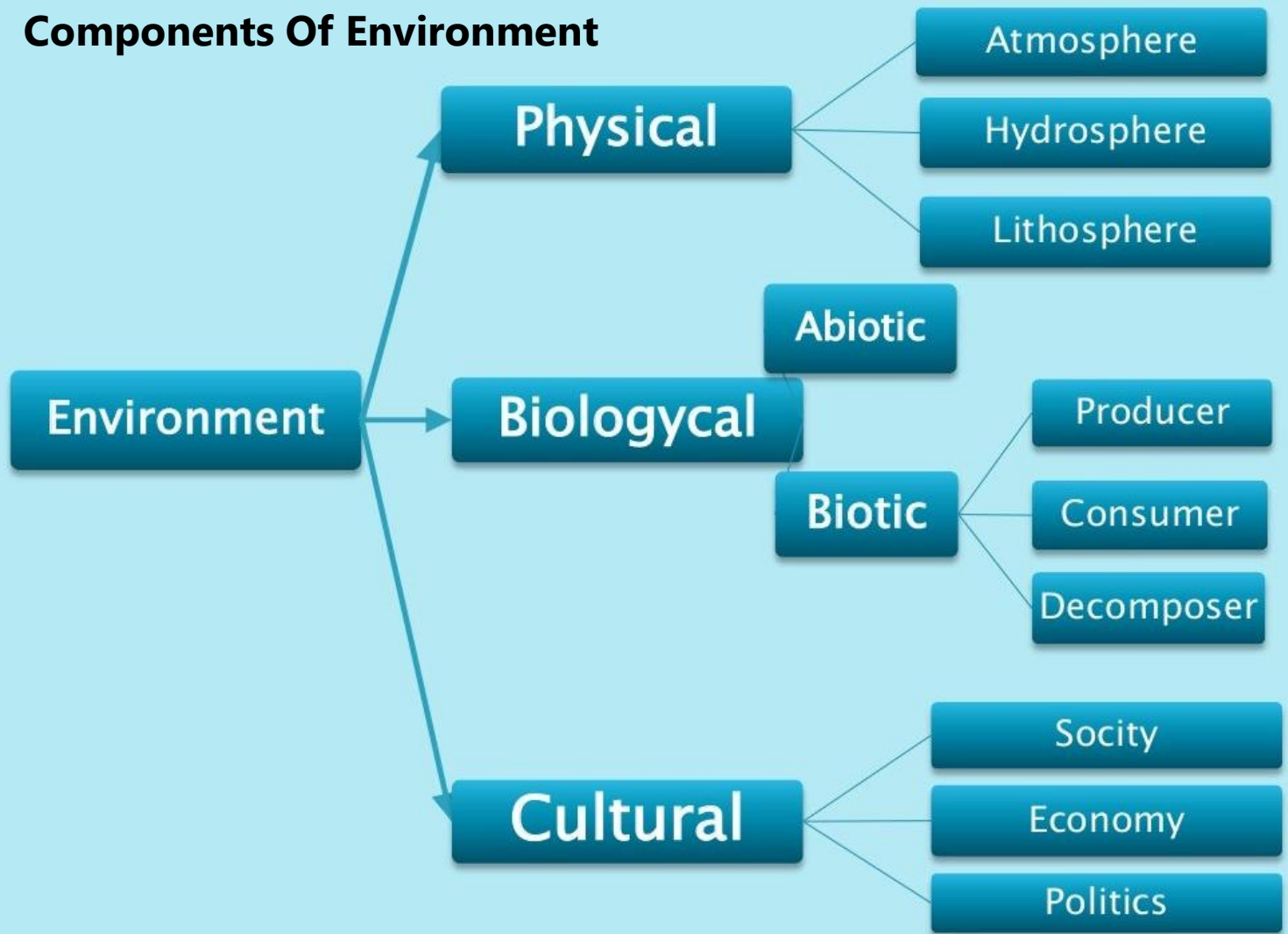
Introduction



Every organism in this earth is surrounded by a lot of things; say other organisms, plants, water, air, light, land etc. These surroundings of the organism, all the living and non-living things constitute its environment

Definition: Environment is a combination of various physical and biological elements that affect the life of an organism

Components Of Environment



Physical Components of Environment



The Physical Components of environment includes **soil, water, air, climate, temperature, light** etc.

Physical Components of the environment is again divided into three parts.

These are:

.Atmosphere

(Gas)



.Hydrosphere

(Liquid)



.Lithosphere

(Solid)



Atmospheric Composition

Gas	Percentage by volume
Nitrogen	78.08
Oxygen	20.95
Argon	0.93
Carbon Dioxide	0.03
Neon	0.0018
Helium	0.00052
Others (Methane, Krypton, Hydrogen, Xenon, Ozone etc).	

Earth's Atmosphere

Exosphere

Thermosphere

Mesopause

Mesosphere

Stratosphere

Ozone Layer

Troposphere



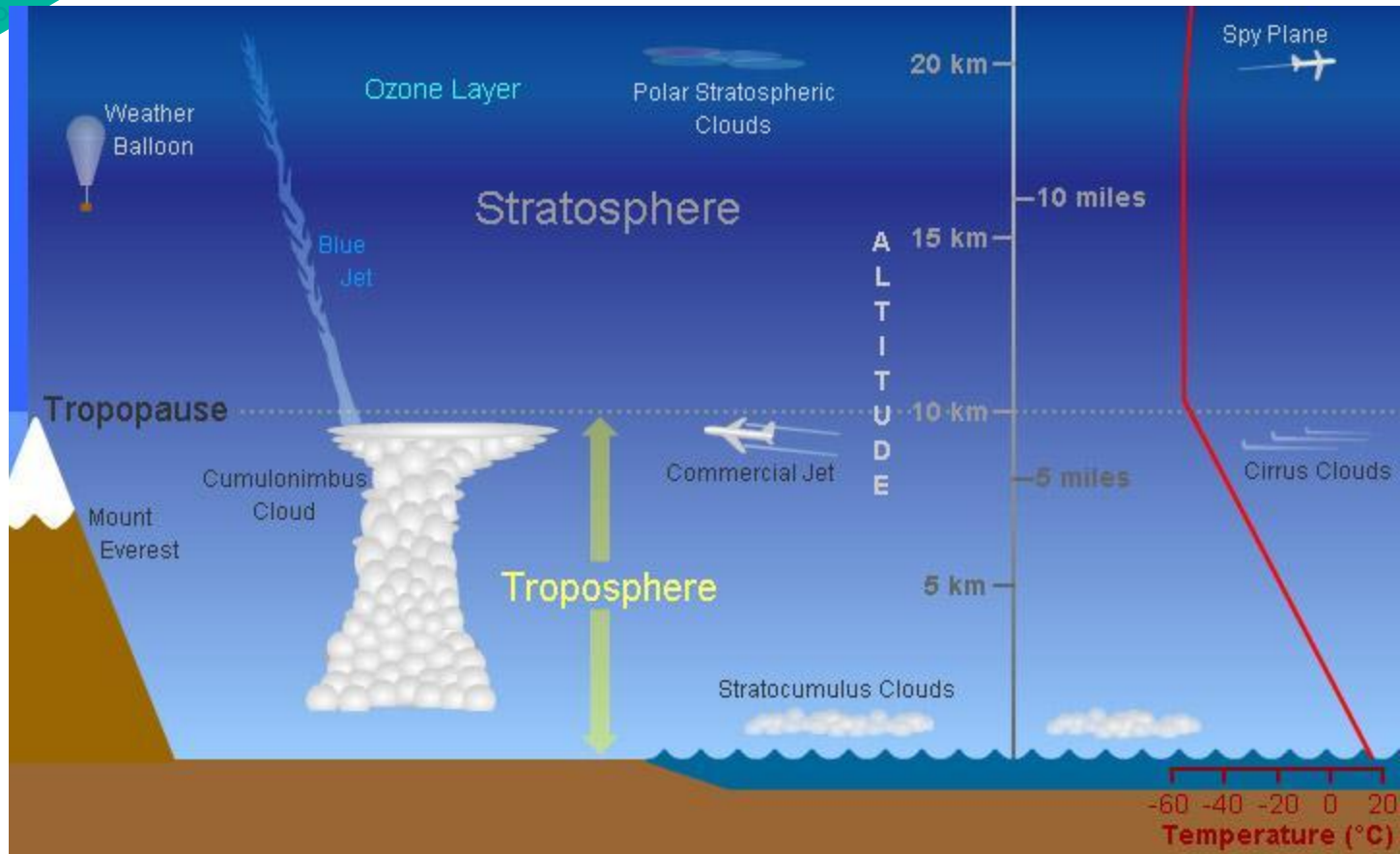
Meteor

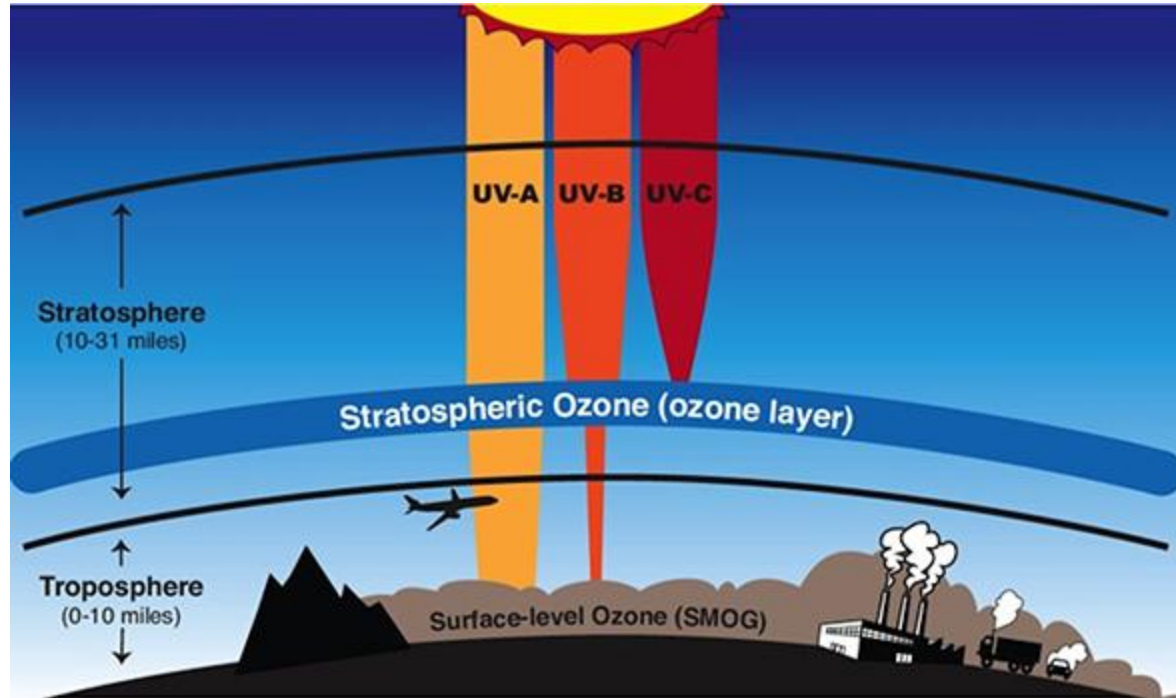
Layers of the Atmosphere

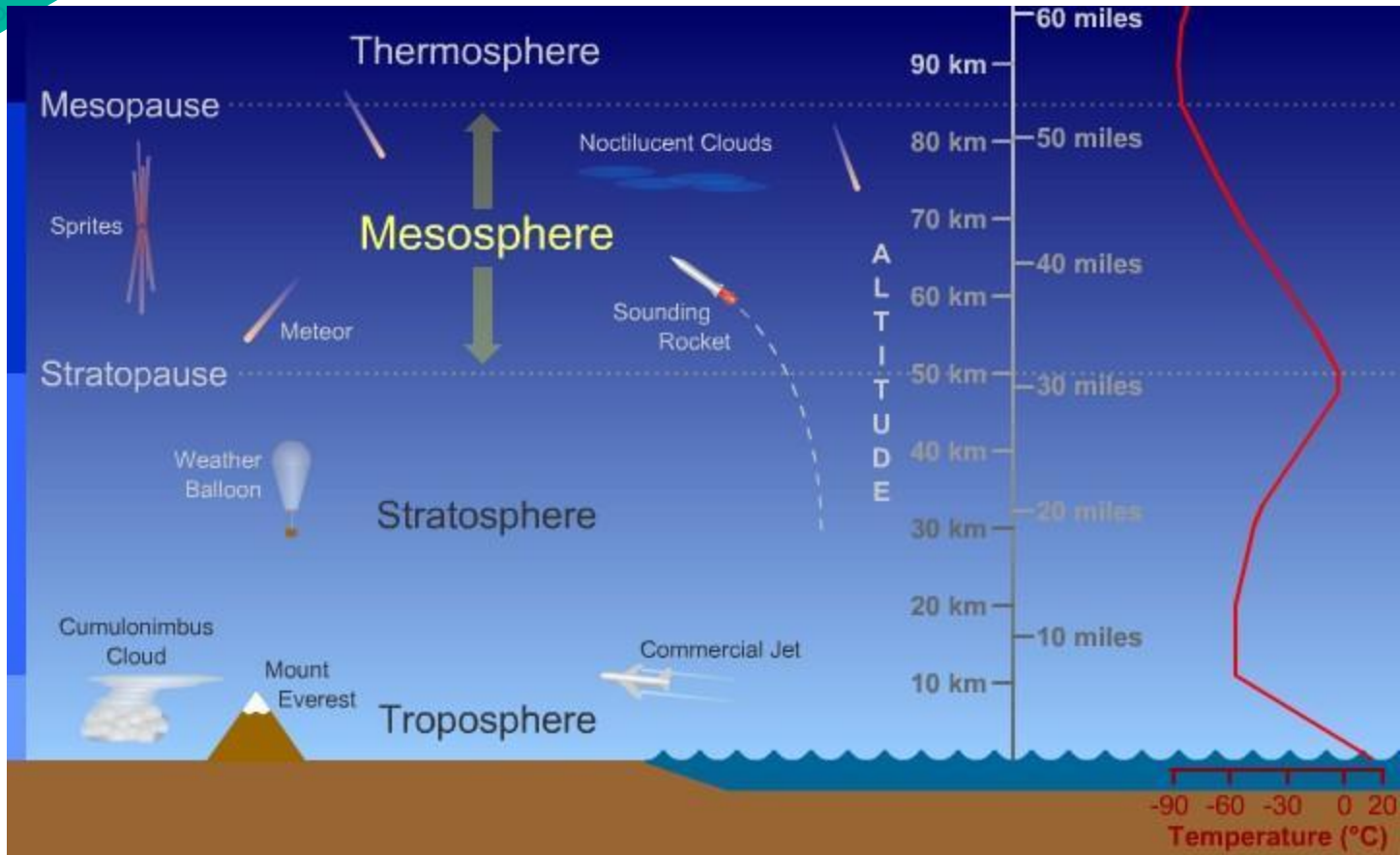


Major layers of the Atmosphere

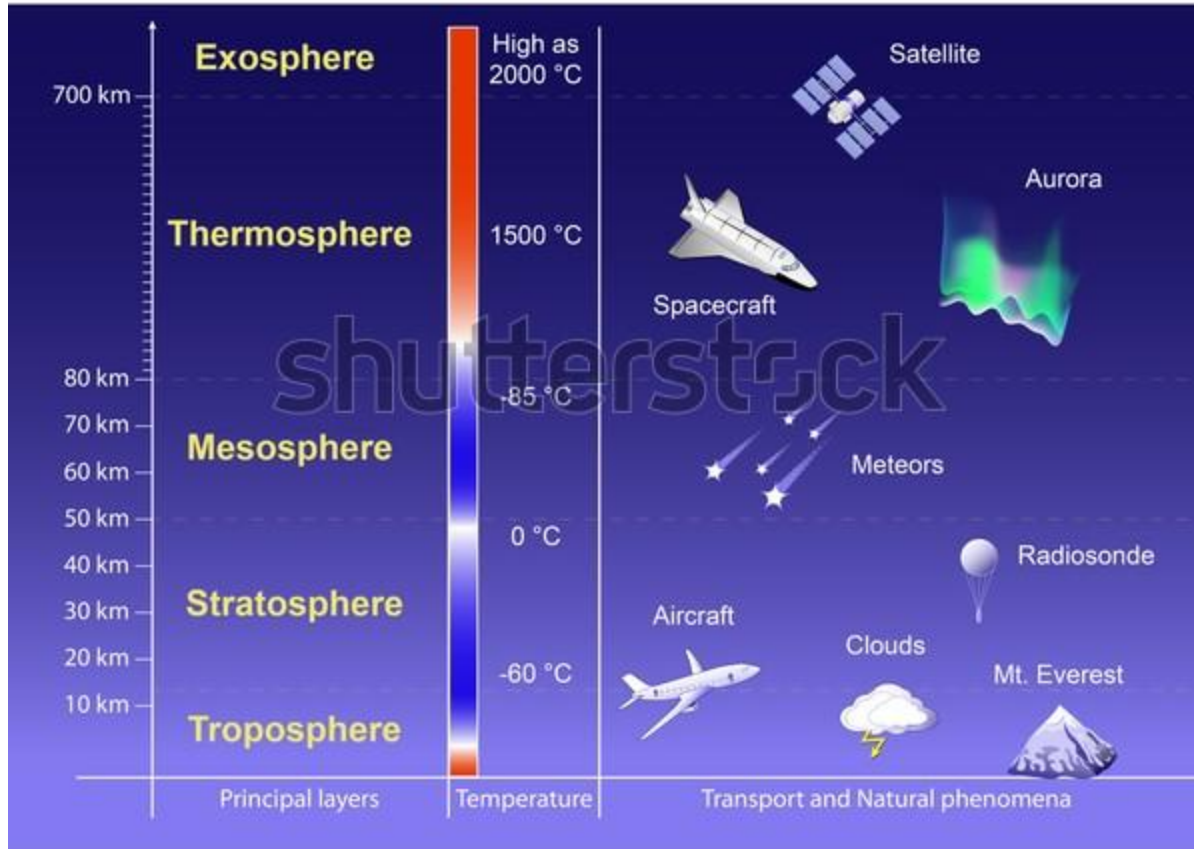
Region	Altitude range (km)	Temperature range (C)	Important chemical species
Troposphere	0-20	15 to - 56	Nitrogen, oxygen, water vapour, carbon dioxide
Stratosphere	20 - 50	-56 to -2	Ozone
Mesosphere	50 - 85	-2 to -92	Oxygen +, nitric oxide
Thermosphere	85 - 500	- 92 to 1200	Oxygen + nitric oxide







LAYERS OF THE ATMOSPHERE

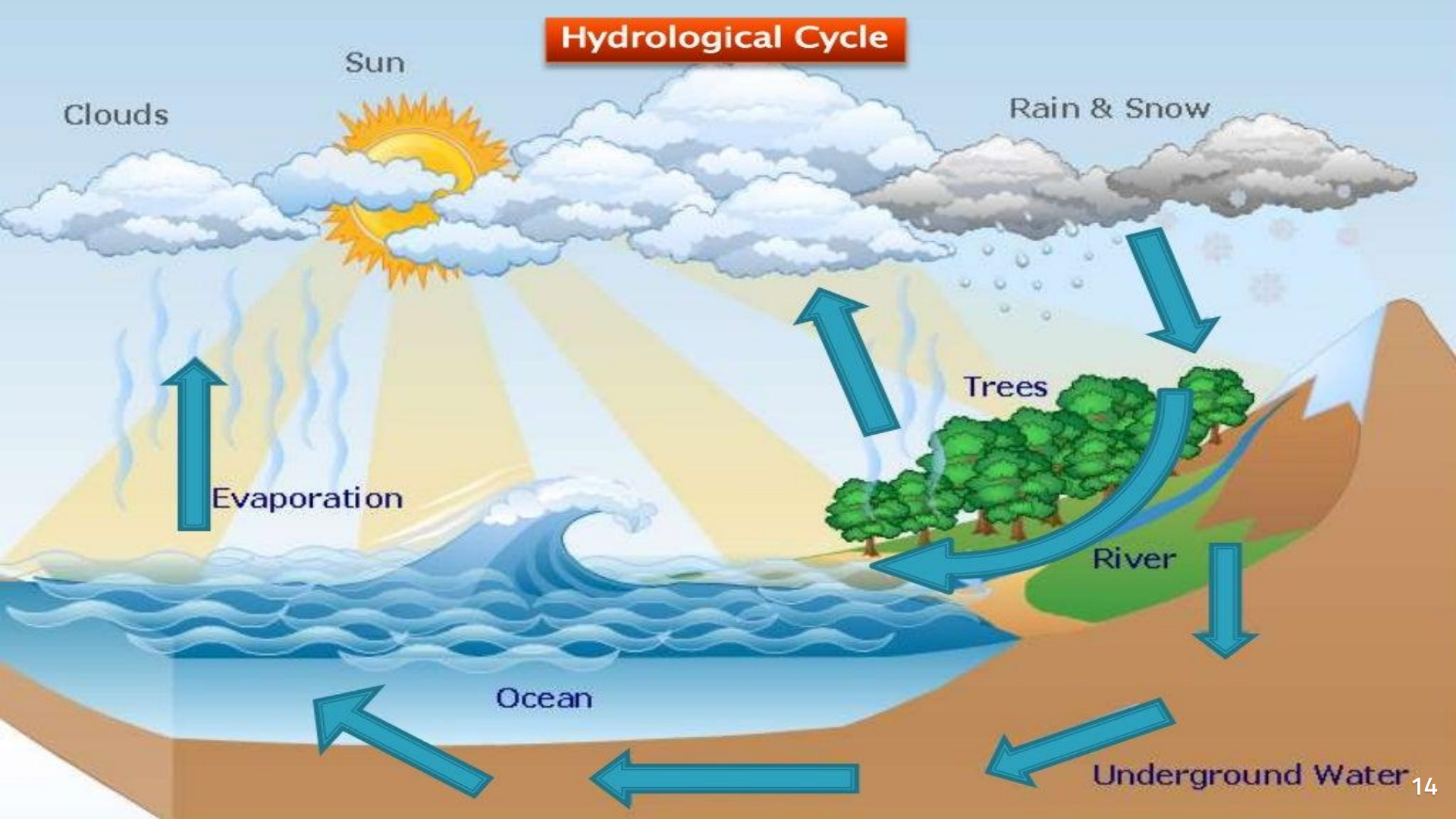


Hydrosphere

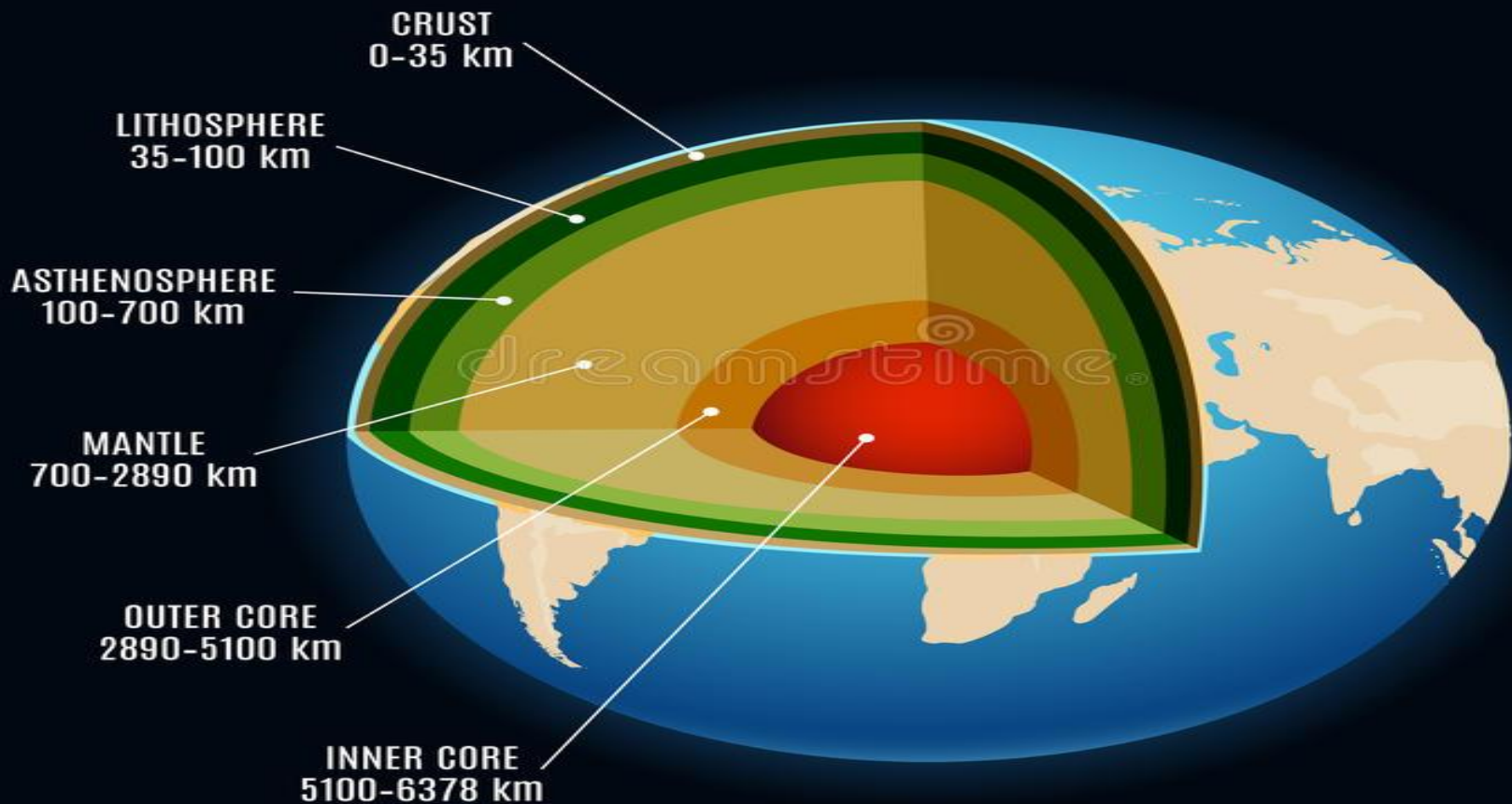
It includes the surface water and its surrounding interface

Water is the most abundant substance on the Earth's surface. The oceans cover approximately 71% water of the planet, glaciers and ice caps cover additional areas. Water is also found in lakes and streams, in soils and underground reservoirs, in the atmosphere, and in the bodies of all living organism. Thus, water in all its forms- ice, liquid, water and water vapour- is very familiar to us.

Hydrological Cycle



EARTH STRUCTURE



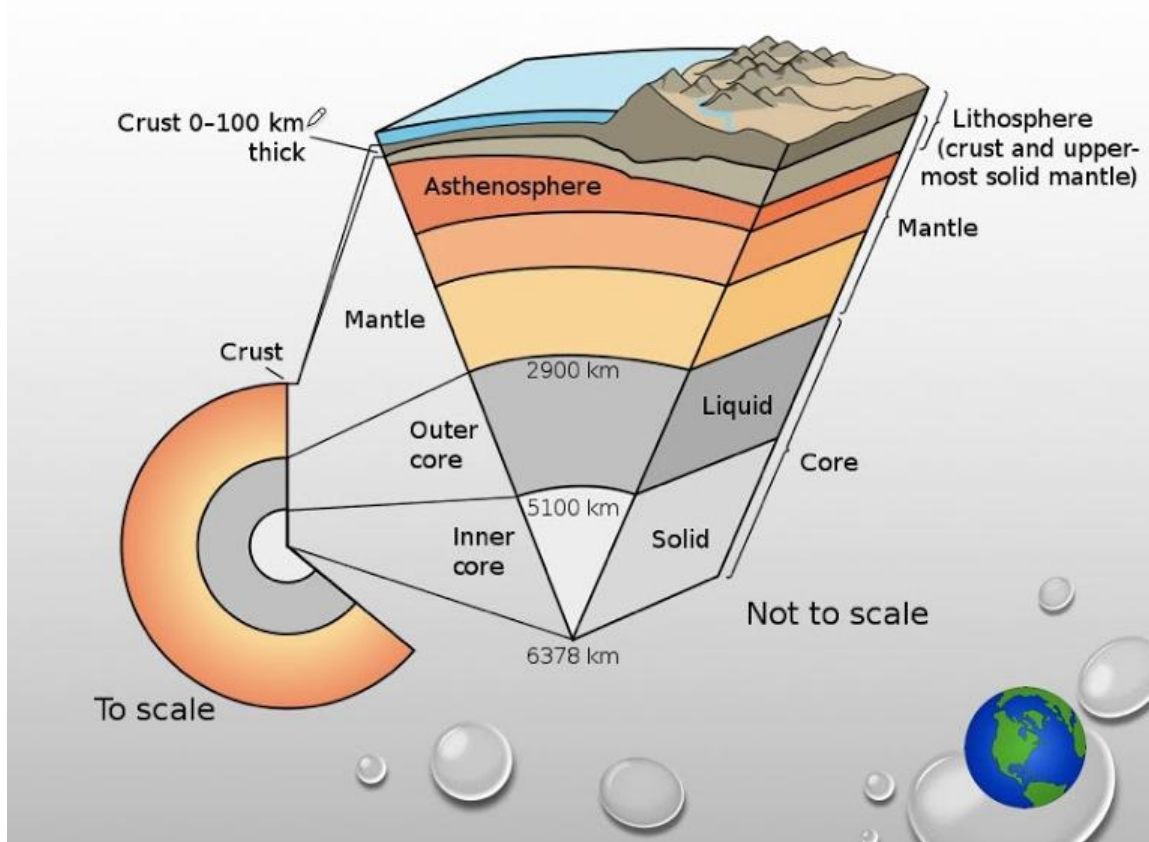
Lithosphere

It is the outer boundary layer of solid earth and the discontinuity within the mantle.

Basically lithosphere is nothing but a crustal system composed of various layers:
Core, mantle and outer crust.



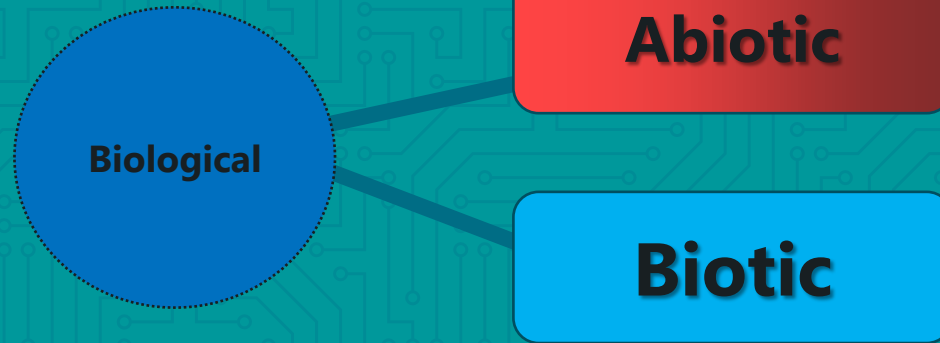
An outline of earth layer



Biological components of Environment

There are two kind of Biological components

They are



The Abiotic components of Environment

Abiotic components are non-living chemical and physical factors in the environment. Abiotic phenomena underlie all of biology. Abiotic factors, while generally downplayed, can have enormous impact on evolution. Abiotic components are aspects of geodiversity. They can also be recognised as "abiotic pathogens"

E.g-Temperature, light, sun light, pH, soil components, etc.

The biotic Components of Environment

This component consists of all living things like plants, animals and small micro-organisms like bacteria.

✓ All ecosystems consist of three different types of living organisms.



Producers

- ✓ **Generally green plants and other photosynthetic bacteria**
- ✓ **Produces various organic substances**
- ✓ **With the help of water, soil and light energy.**

E.g. Plants



Consumer

Consumers depend for their nutrition on the organic food produced by the green plants,

E.g animals.



Decomposers

- ✓ Bring about the decomposition of dead plants and animals
 - ✓ Return various important minerals
 - ✓ For the running of the biogeochemical cycles
- E.g. fungi and bacteria.





Cultural Environment

The Cultural Environment gives an idea of learned behavioral traits those are clear and shared by members of society

The most important thing about the cultural environment is that it cannot be physically represented, but it is there anyway.

THANK YOU

The image features the words "THANK YOU" spelled out in a bold, sans-serif font using ten light-colored wooden blocks. Each letter is carved into a separate block, and they are arranged in two groups: "THANK" followed by a small gap, then "YOU". The blocks are resting on a horizontal wooden plank. The background is a soft-focus green, suggesting an outdoor setting with foliage. The lighting is natural and even, highlighting the texture of the wood.