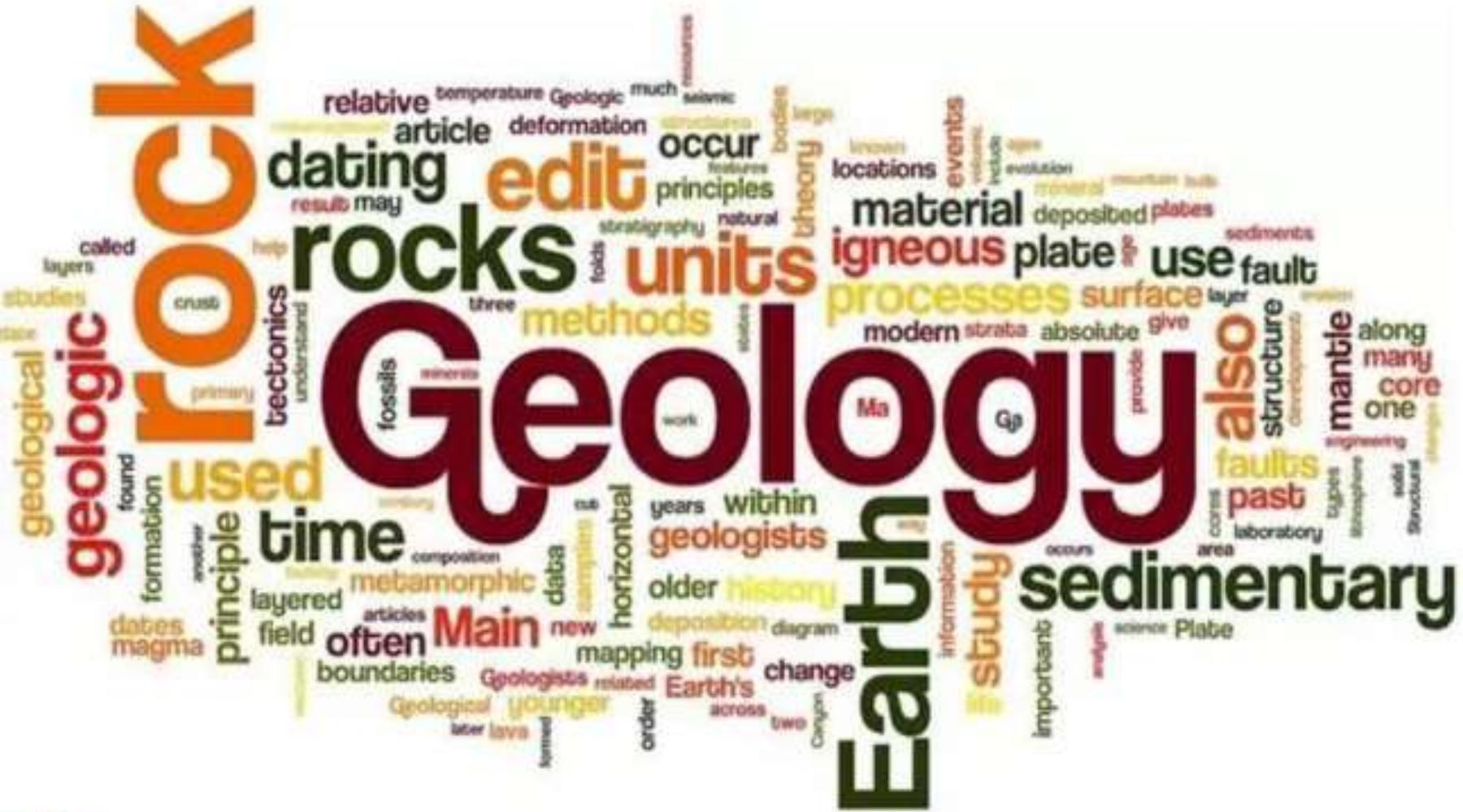


BASICS OF GEOLOGY



INTRODUCTION TO GEOLOGY

(in Greek, Geo means Earth, Logos means Science) is a branch of science dealing with the study of the Earth.

It is also known as earth science.

The study of the earth comprises of the whole earth, its origin, structure, composition and history (including the development of life) and the nature of the processes.

GEOLOGY

PHYSICAL GEOLOGY

is concerned with the materials and processes which compose and operate on the surface of, and within the Earth.

HISTORICAL GEOLOGY

is concerned with the origin and evolution of Earth's continents, oceans, atmosphere, and life.

Geology in our Lives



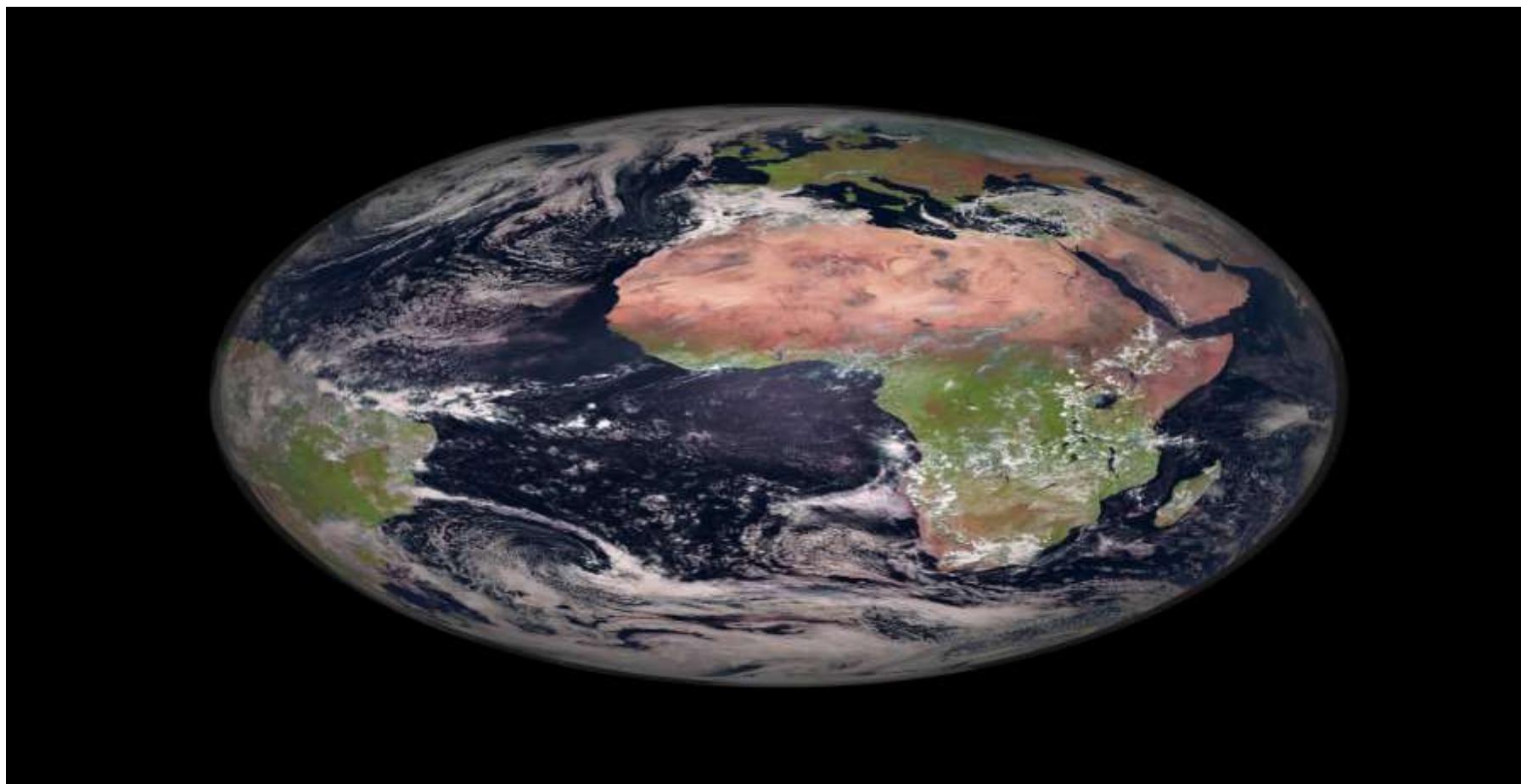
Geologists contribute their part to the nation through the discovery of new deposits of rocks and minerals of economic value





Geologists work to understand the history of our planet. The better they can understand Earth's history the better they can foresee how events and processes of the past might influence the future

Processes acting on the Earth



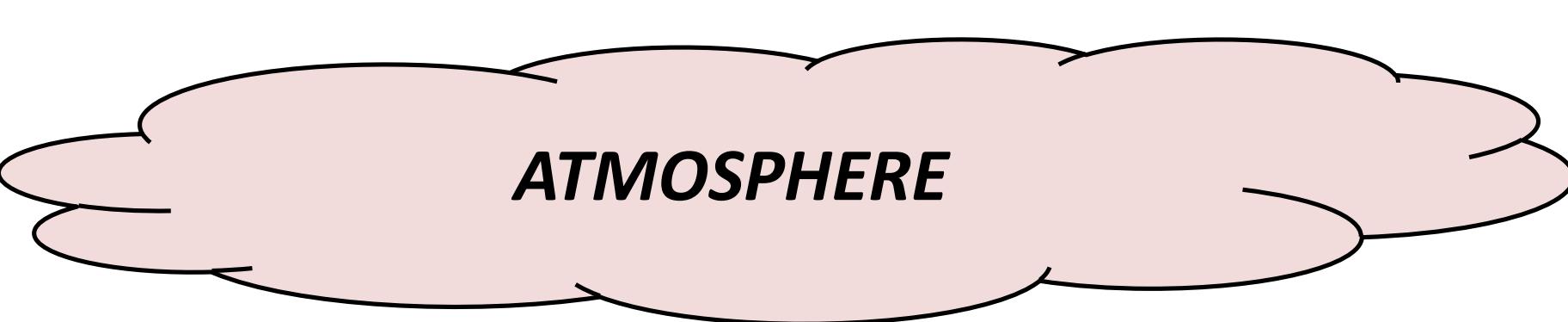
The Earth is a dynamic system that undergoes constant changes with time both internally and on its surface.

Internal Processes that originate deep within the Earth are termed as internal processes.



Surface processes are all those processes which take place on the earth's surface and result in sculpting the earth's surface. Most of the surface processes are driven by water, though wind, ice and gravity also play an important role.





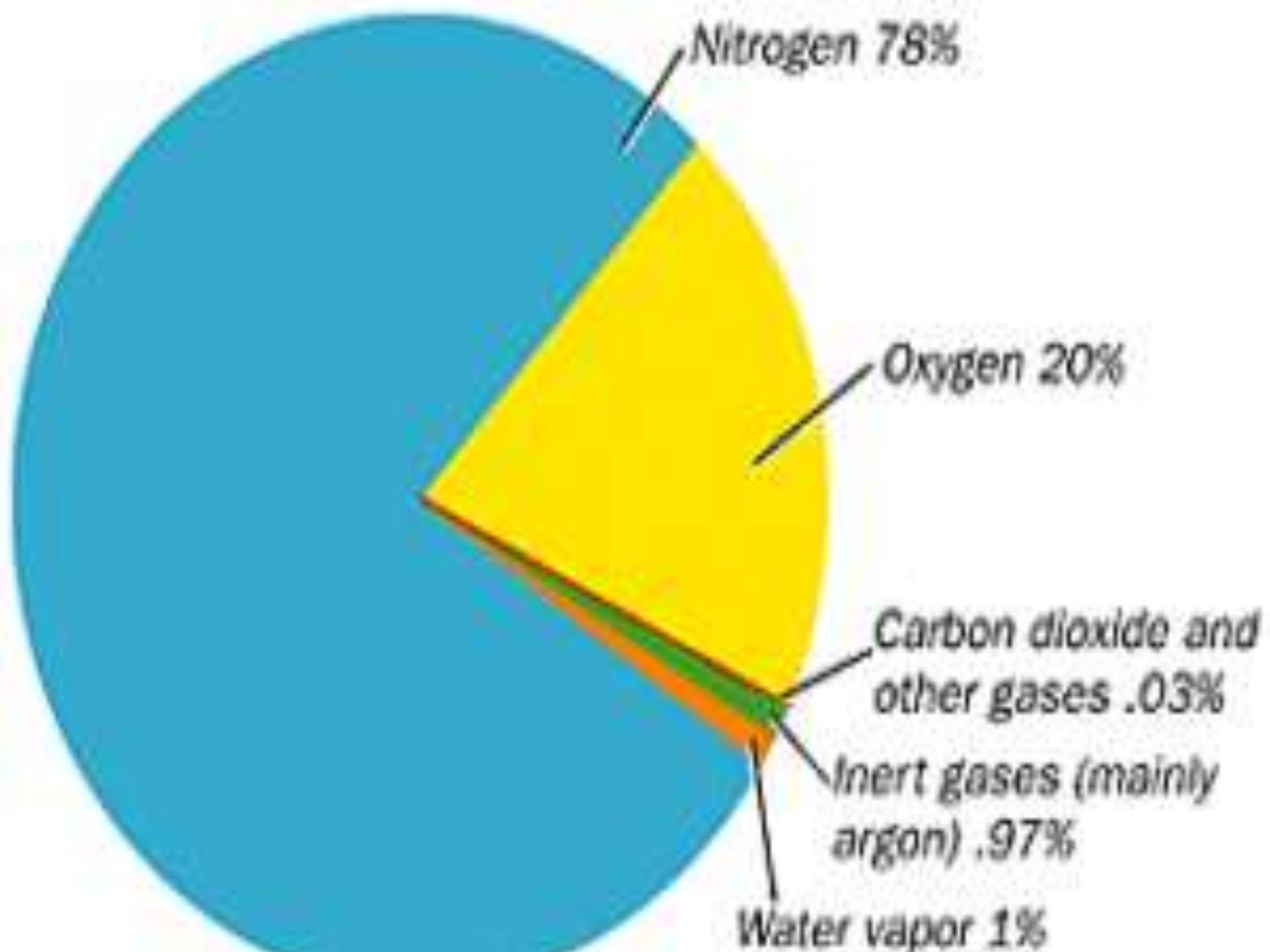
ATMOSPHERE



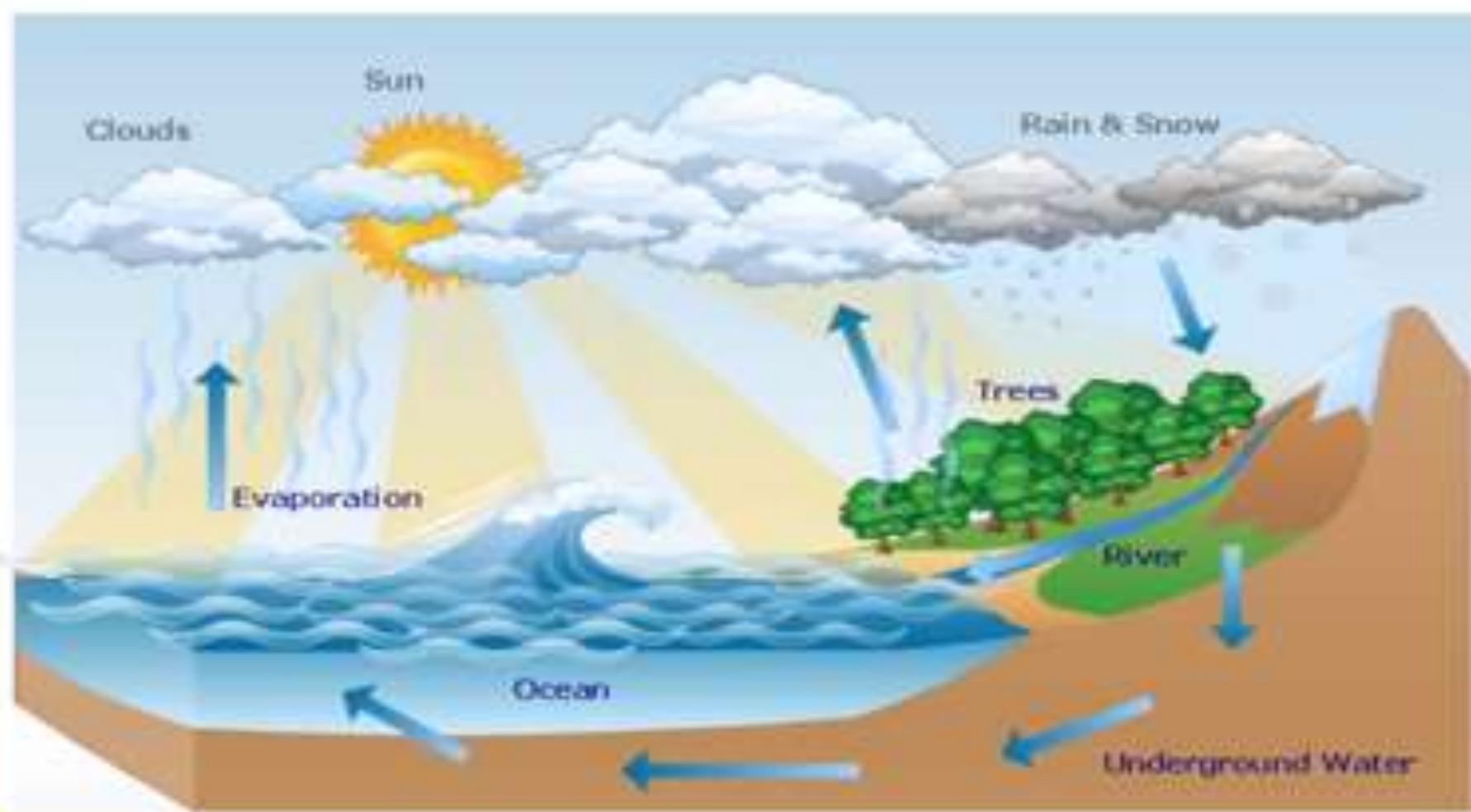
is the body of air which surrounds our planet.

Most of our atmosphere is located close to the earth's surface where it is most dense.

The atmosphere not only provides the air that we breathe but also acts to protect us from the Sun's intense heat and dangerous ultraviolet radiation.



HYDROSPHERE

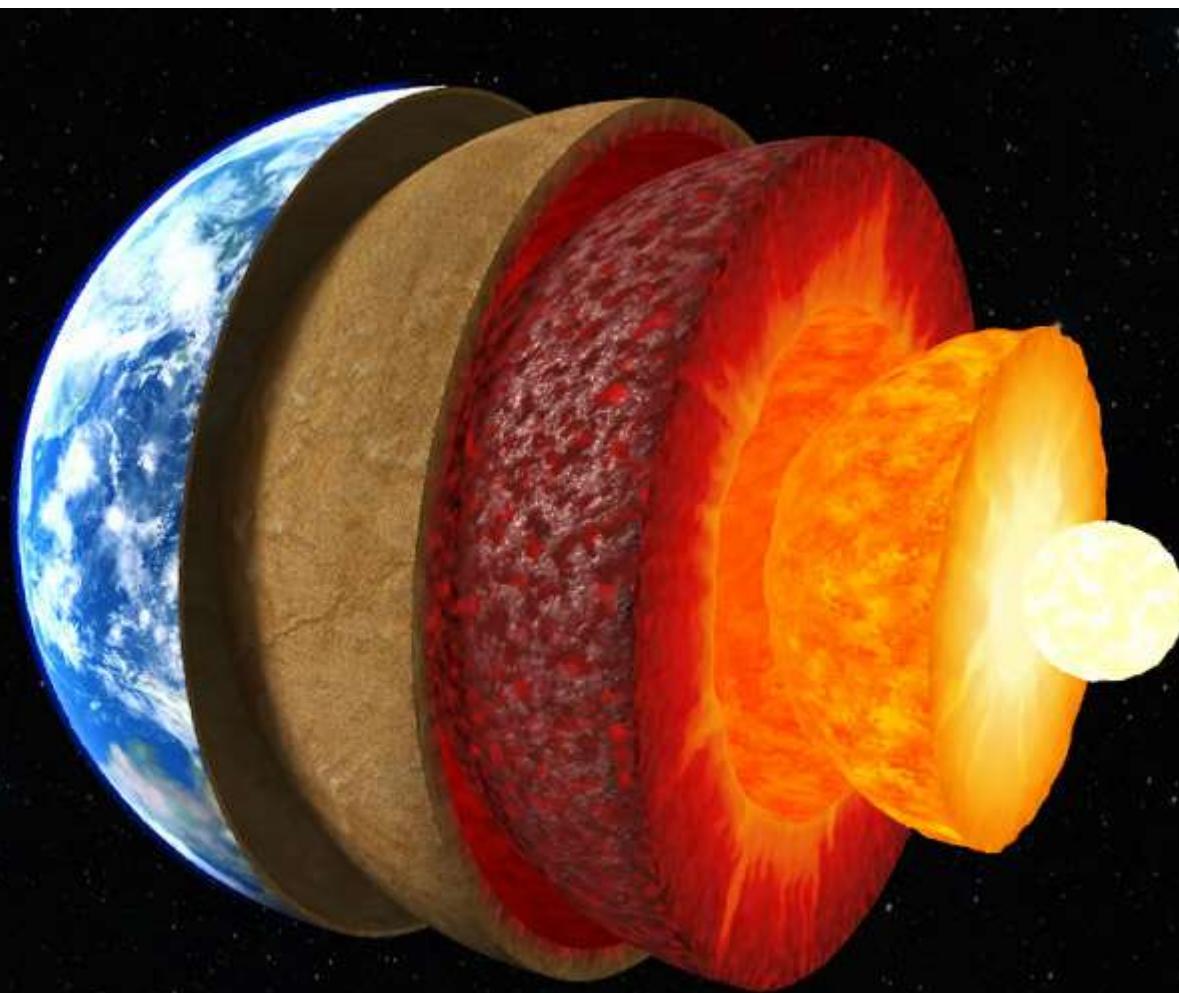


is composed of all of the water on or near the earth.

This includes the oceans, rivers, lakes, and even the moisture in the air.

Ninety-seven percent of the earth's water is in the oceans. The remaining three percent is fresh water; three-quarters of the fresh water is solid and exists in ice sheets.

LITHOSPHERE



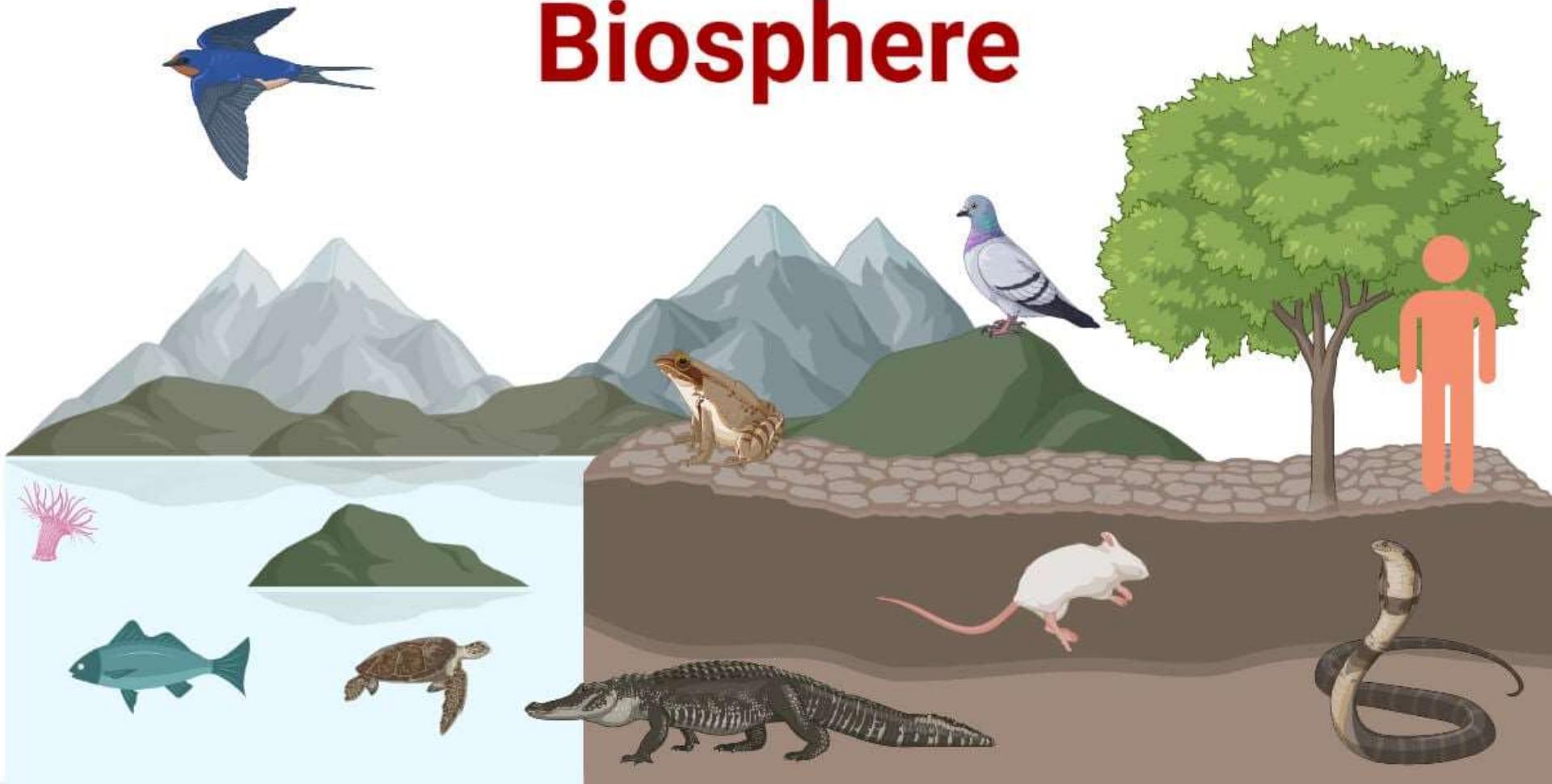
Beneath the atmosphere and the oceans is the solid Earth, or lithosphere.

The lithosphere is the solid, rocky crust covering entire planet.

This crust is inorganic and is composed of minerals.

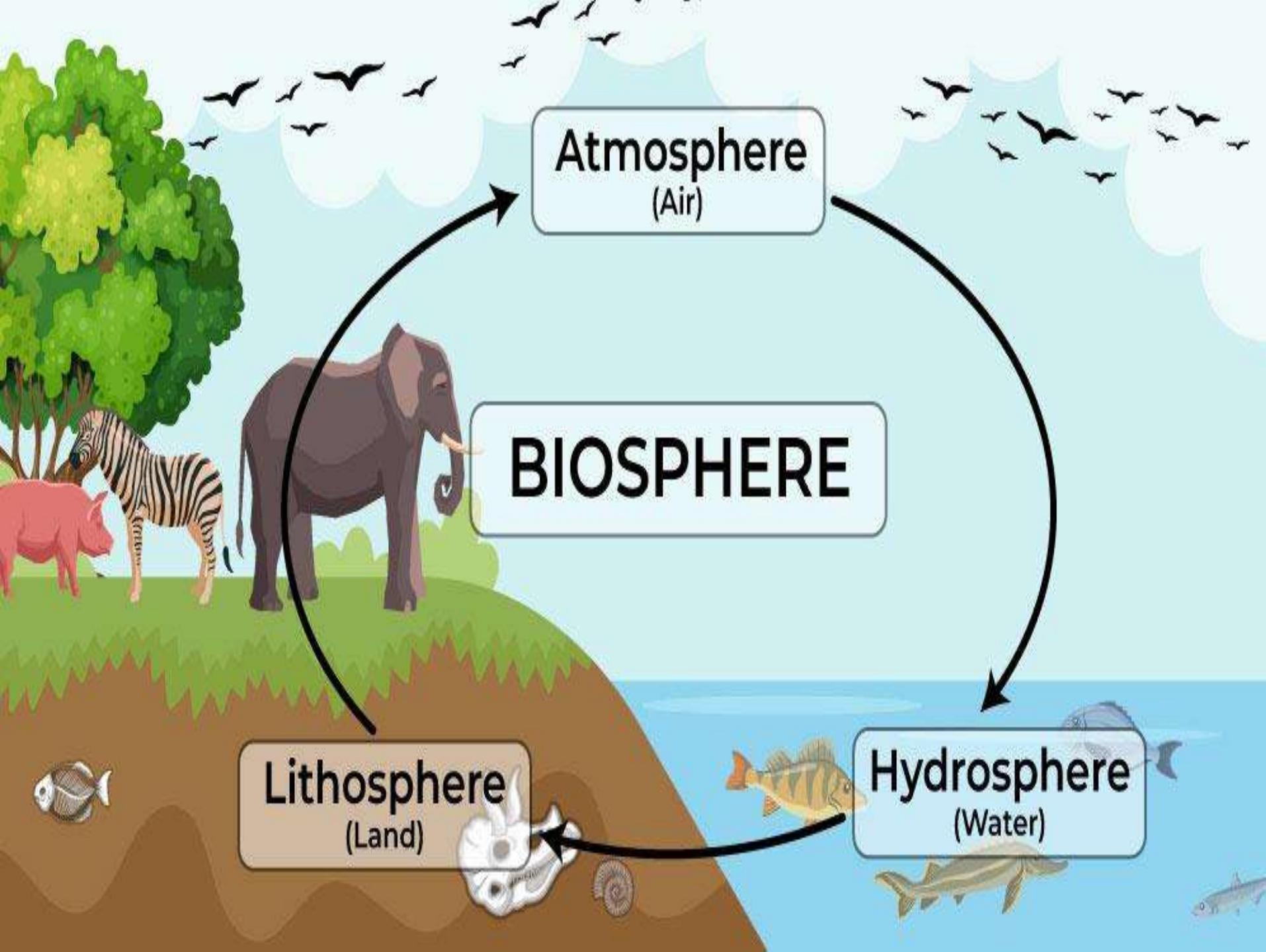
BIOSPHERE

Biosphere



is composed of all living organisms. Plants, animals, and one-celled organisms are all part of the biosphere.

Most of the planet's life is found from three meters below the ground to thirty meters above it and in the top 200 meters of the oceans and seas.



Atmosphere
(Air)

BIOSPHERE

Lithosphere
(Land)

Hydrosphere
(Water)