

Distinguish, differentiate, compare and explain what is the Difference between Atmosphere and Biosphere. Comparison and Differences.

Difference between Atmosphere and Biosphere

Atmosphere, hydrosphere, lithosphere and biosphere are the four main segments of the environment. Atmosphere is a cover of gases that extends to a height of about 1600 km above the surface of the earth and protects the life on the earth from harmful radiations coming from the sun or the outer space. Atmosphere is further divided into four regions such as troposphere, stratosphere, mesosphere and thermosphere. Hydrosphere forms that part of the environment which contains water. Lithosphere is the solid component of the earth consisting of soil, rocks, mountains etc. Biosphere is that part of the above segments where living organisms interact with these parts and live together.

What is Atmosphere and how far it extends ?

The atmosphere is made of gasses such as oxygen, hydrogen, water vapor, ozone, and the wind. Atmosphere is the thin layer made up of a mixture of gases and particles suspended in the air that surround the Earth (predominantly N_2 , O_2 , Ar, CO_2 and H_2O).

Atmosphere extends approximately 1000km above the Earth surface and is integral to the biosphere. It is the Earth's protective layer of air above the Lithosphere and consists of the troposphere (where the weather occurs), the stratosphere, which protects the earth surface from the Sun's ultraviolet radiation (includes the ozone layer) mesosphere, Ionosphere and the exosphere. These layers are based on temperature. It is made up of nitrogen (78%), Oxygen (21%) and various other gases (1%).

What is Biosphere and how far it extends ?

The biosphere is all that has life such as plants, animals, people, insects, microbes, etc. Biosphere is a sphere that includes all the Earth's organisms, including humans, and matter that has not yet decomposed.

Is a component of the Earth's biological system consisting of all living organisms, decomposed and dead matter, from the deepest layers of soil to the depths of the ocean. The interactions within the biosphere aid in the global biochemical exchanges of matter and energy and is considered the global ecosystem. The Biosphere is divided into three subareas or biomes which are separated by latitude, the Lithosphere, Hydrosphere and Atmosphere.