

What is an Atmosphere?

Earth's atmosphere is the air surrounding our planet. The atmosphere is composed of several layers, each with its own properties. The lowest layer is the troposphere, which is closest to the surface of the Earth and extends upwards about 7 miles (11 kilometers). The air in this layer is warm, moist, and full of clouds, dust, and other particles.

Above the troposphere is the stratosphere, which extends about 20 miles (32 kilometers) above the Earth's surface. This layer contains a lot of ozone, which is a gas that helps protect the Earth from harmful ultraviolet radiation from the sun.

The next layer is the mesosphere, which is located between 31 and 50 miles (50 and 80 kilometers) above the Earth's surface. This layer is very cold, and temperatures can drop as low as -90 degrees Celsius (-130 degrees Fahrenheit).

Next is the thermosphere, which is between 50 and 400 miles (80 and 640 kilometers) above the Earth's surface. This layer is very hot, with temperatures reaching up to 1,800 degrees Celsius (3,272 degrees Fahrenheit) during the day. However, the air in this layer is very thin, so it does not feel hot to us.

The last layer is the exosphere, which is the outermost layer of the atmosphere and extends from 400 miles (640 kilometers) to 6,200 miles (10,000 kilometers) above the Earth's surface. This layer is very thin and its particles are widely dispersed.

Earth's atmosphere is made up of many different gases, including nitrogen, oxygen, argon, carbon dioxide, and water vapor. These gases are important for life on Earth, as they help keep the planet warm and protect us from harmful radiation from the sun. The atmosphere also helps to protect us from meteorites, which are small pieces of rock and metal that travel through space.

Earth's atmosphere is an important part of our planet. Without it, life as we know it would not exist. The atmosphere helps to keep our planet warm, protects us from the sun's radiation, and helps to circulate air and water around the world.

Atmosphere

Questions:

1. Where is the Atmosphere found and what is it primarily made up of.
2. List at least 3 layers of the Atmosphere.
3. Explain why the Atmosphere is vital to our survival.
4. What would happen to living things if there was no Atmosphere? Why?
5. List 3 facts and 2 interactions that occur in the Atmosphere.