

The layer of air around the earth is known

as.....

Ans: Atmosphere

The component of air used by green plants to make their food, is.....

Ans: Carbon dioxide.

List five activities that are possible due to presence of air.

Ans: The activities that are possible due to the presence of air, are:

- (a) To make a simple firki
- (b) To make a weather cock
- (c) To breathe for survival
- (d) For burning of substance
- (e) For photosynthesis

. How do plants and animals help each other in exchange of gases in the atmosphere?

Ans: Animals and plants use oxygen from air during respiration and release carbon dioxide gas in air. But green plants also release oxygen gas by using carbon dioxide during photosynthesis. Thus, we can say that animals and plants help each other in exchange of gases.

Name the main component of air.

Ans: Nitrogen gas

What is the source of oxygen gas in air?

Ans: Photosynthesis by green plants is source of oxygen gas in air.

What is the percentage of nitrogen in air?

Ans: 78.1%

What is the percentage of oxygen in air?

Ans: 20.9%

What is the source of carbon dioxide in air?

Ans: Respiration by animals and plants and burning of fuel.

Mention one necessary condition for the combustion to take place.

Ans: Presence of air.

. Why is air considered as a mixture?

Ans: Air contains oxygen and nitrogen as its major constituents of air. These gases retain their properties in air. So the air is called a mixture.

Name the major gas present in the (a) inhaled air (b) exhaled air.

Ans: (a) Oxygen (b) Carbon dioxide.

Write the necessary conditions for rusting of iron to take place.

Ans: Rusting of iron takes place in the presence of moisture and air. So the presence of air and water vapour in air are two necessary conditions for rusting of iron.

What is wind energy? Mention its two advantages.

Ans: Blowing air is called wind. Wind possesses kinetic energy. The kinetic energy possessed by wind is called wind energy.

Uses of Wind Energy are:

- (i) Wind energy is used to pump the ground water.
- (ii) Wind energy is used to generate electricity with the help of windmills.

. Mention two uses of air.

Ans: The two uses of air are as below:

- (a) For respiration all organisms need air.
- (b) For burning of any substance air is needed.

. Describe balance of oxygen in the air.

Ans: The oxygen in air is used by the organisms present in air, water or soil or on earth for their respiration. During respiration carbon dioxide gas is released to air. But green plants during photosynthesis use carbon dioxide of air for preparing food and they release oxygen gas in the air. Thus the balance of oxygen in air is maintained.

What happens if the percentage of oxygen in the air reaches to 70%?

Ans: If any substance catches fire it will become difficult to extinguish the fire, as oxygen supports combustion.

What happens if the percentage of carbon-dioxide increases in the air?

Ans: The increased percentage of carbon-dioxide will cause green house effect, i.e. it will not allow the hot rays of sun to escape from the atmosphere after reflection once they enter the earth's atmosphere, thereby increasing the temperature of earth, ice on mountains will melt and water level will rise.

You must have seen during rainy season, when it rains the animals like earthworm, snakes, snails etc. are commonly seen. Explain why?

Ans: All these animals live in underground burrows or remain buried in the soil. They get oxygen from air that enters into the burrow through entrance of burrow or through pores in the soil. But when it rains, the water gets filled in their dwelling places and pores of the soil. So, they come out in search of air.