H.W
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Ch-6

AIR AND ATMOSPHERE

classmate
Date
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EXERCISE- I

1- What is atmosphere?

Ans- The earth is surrounded by a thick layer of air called the atmosphere that extends upto a height of about 320 kilometres above the surface of the Earth.

2- Why can't we see air?

Ans- We cannot see air because it is colourless, odourless, tasteless, ~~trans~~ parsent gaseous matter.

3- What is wind?

Ans- Fast moving air is called wind.

4- What would have happened if there would have been no atmosphere around the Earth?

Ans- Without atmosphere life would not have been possible as atmosphere protects us from harmful gases. We could not live without air present in atmosphere. In absence of the atmosphere, the earth would get so cold at night and so hot at day that we would not be able to survive. No CO_2 for plants without atmosphere

5- Why is air called a mixture? Give five facts in support of your answer.

Ans- Air is a mixture because:

* Air has no formula. (Mixtures do not have formula but compounds have a definite formula).
* No energy changes are involved to form air from various gases.
* When air is formed out of its constituents, no change in mass and volume takes place.
* The composition of air varies from place to place and from time to time.
* The components of air can be separated by simple physical methods.

6- What are the main components of air? Write down the composition of ~~three~~ main gases present in air by volume.

Ans- The main components of air:

(i) Nitrogen
(ii) Oxygen

composition of three main gases present in air by volume:

- Nitrogen - 78%
- Oxygen - 21%
- Carbon dioxide - 0.03 - 0.04%

7 - What do you observe when

(a) Ice cold water is filled in a glass tumblers.

Ans - We will observe that fine water droplets get deposited on the outer wall of the glass tumbler.

(b) A burning candle is covered with an inverted jar.

Ans - The candle burn more brightly because candle gets oxygen supports in burning.

(c) Carbon dioxide gas is passed through lime water.

Ans - When CO_2 gas is passed through lime water, it forms calcium carbonate which is white precipitate (turbidity). This gives the milky white appearance to the solution.

(d) A beam of light is allowed to enter in a closed dark room through a small hole.

Ans - We will see randomly moving dust particles in the beam of light. This confirms the present of dust particles in light.

8. Write the chemical name of

(a) Lime water

Ans - Calcium hydroxide - $CA(OH)_2$

(b) The white insoluble solid formed on reaction of carbon dioxide with lime water.

Ans - Calcium Carbonate - $CaCO_3$