

Exercise-1

1 What is Atmosphere?

Ans An atmosphere is a layer of gas or layers of gases that envelope a planet, and is held in place by the gravity of planetary body.

2 Why can't we see air?

Ans Air looks invisible because it ~~is~~ sends very little color to our eyes. Air is a mixture of gases mainly nitrogen and oxygen with small molecules that are far apart.

3 What is wind?

Ans. Air moves from areas of high pressure to areas of low pressure.

This movement of air is the wind.

4 What would have happened if there would have been no atmosphere around the water earth?

Ans. If there were no atmosphere around the earth, the temperature would get affected. In the absence of atmosphere, there would be no life, no rains, no winds, no fire.

and also no ozone layer that would be used as a protection layer against harmful radiations.

5. Why is air called a mixture?

Give five facts in support of your answers.

Ans. Air is called a mixture because it consists of many gases like helium, hydrogen, carbon dioxide, nitrogen etc. for about 1%.

6. What are the main components of air? Write down the composition of air.

three main gases present in air by
volume

Ans Nitrogen : 78%

Oxygen : 21%

Carbon dioxide : 0.03 - 0.04%

Inert gases : 0.9%

Water vapour : Variable

Dust particles : Variable

Other impurities : variable

7 What do you observe when

(a) Ice cold water is filled in a
glass tumbler

(b) ~~A burning candle is covered~~

Ans- We will observe that fine water droplets are getting deposited on the outer wall of the glass tumbler when ice cold water is filled in it.

(c) A burning candle is covered with an Inverted Jar

Ans- When a burning candle is covered with an Inverted Jar, the candle flame extinguishes soon after.

(e) carbon dioxide gas is passed through lime water ?

Ans- Carbon dioxide reacts with lime water (a solution of calcium hydroxide, Ca(OH)_2), to form a white precipitate (appears milky) of calcium carbonate, CaCO_3 .

2- A beam of light is allowed to enter in a closed dark room through a small hole.

Ans When a beam of light is allowed to enter a closed dark room through a small hole, we will observe randomly moving dust particles in the beam of light.

- 8- Write the chemical name of
- Lime water - Calcium hydroxide
 - The water insoluble solid forming by reaction of carbon dioxide with lime water?

Ans. H_2O H_2O