

NCERT Solution

Air Around us

Exercise

1. What is the composition of air?

Answer:

Air is a mixture of gases such as nitrogen, oxygen, small amounts of carbon dioxide, and many other gases, dust particles. The main constituent of air is 78 % nitrogen and 21% oxygen gases and 1% remaining gases such as small amounts of carbon dioxide, and many other gases, dust particles and water vapours.

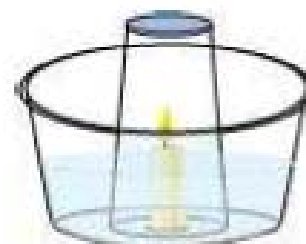
2. Which gas in the atmosphere is essential for respiration?

Answer:

Oxygen is essential for respiration for all living organisms.

3. How will you prove that air support burning?

Answer. Take a lighted candle. Place in tub containing some water in it. Cover the candle with an inverted glass. You will observe that the candle blows out after burning for long time and water level inside the inverted glass rises up to some extent. This is because of air inside glass is used up in the burning and water occupies space. This shows that oxygen of air supports burning.



4. How will you show that air is dissolved in water?

Answer:

Take water in pan and heat it. You will observe that tiny bubbles appear on the inner side before the water starts boiling. These bubbles are formed because of air dissolved in water. This shows that air is dissolved in water.

5. Why does a lump of cotton wool shrink in water?

Answer:

A lump of cotton wool shrinks when is immersed in water. This is because the air inside wool cotton is driven out by water. They layer stick together and hence the lump shrinks.

6. The layer of air around the earth is known as_____.

Answer:

The layer of air around the earth is known as atmosphere.

7. The component of used by green plants to make their food is _____.

Answer:

The component of used by green plants to make their food is carbon dioxide.

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

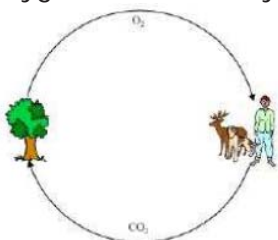
Answer:

- i. Winnowing
- ii. Formation of clouds
- iii. Respiration
- iv. Photosynthesis
- v. Transpiration
- vi. Flying of birds

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

Answer:

Plants utilize carbon dioxide present in the atmosphere for the process of photosynthesis. In photosynthesis, plants release oxygen gas in the atmosphere. This oxygen is inhaled by human or animals and carbon dioxide is exhaled out.



In this way, plants and animals help each other in the exchange of gases in the atmosphere.