

NCERT solution for Air around us

Question 1

What is the composition of air?

Answer

It is a mixture of gases, water vapors and dust particles. The composition of air is

Gas	%
Nitrogen	79
Oxygen	20
CO ₂	1%
He, H ₂ etc.	
Water Vapors	
Dust Particles	

Question 2

Which gas in the atmosphere is essential for respiration?

Answer

Oxygen is essential for living organisms.

Question 3

How will you prove that air supports burning?

Answer

Place a burning candle in a tray. Cover it with a glass jar. To make it air-tight, fill tray with water. After sometime, burning candle dims and goes off. Water level also rises up in the jar. It shows air support burning.

Question 4

How will you show that air is dissolved in water?

Answer

Take some water in a glass vessel or beaker. Heat it slowly on a tripod stand. Well before the water begins to boil, look carefully at the inner surface of the vessel. These bubbles come from the air dissolved in water.

Question 5

Why does a lump of cotton wool shrink in water?

Answer

Air is present in the cotton wool. When dipped in water, air present in wool escape and it shrinks.

Question 6

The layer of air around the earth is known as _____

Answer

Atmosphere

Question 7

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

Answer

CO₂

Question 8

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

Answer

1. Animals use air for respiration.
2. Plants use air to prepare their food. (photosynthesis)
3. Power generation by wind mills. Wind mill helps in electricity generation
4. Burning of fuels and substances.

5. Air plays important role in water cycle
6. Birds, insect can fly because of the presence of air

Question 9

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

Answer

Plants consume oxygen for respiration but they also produce oxygen by photosynthesis by consuming Carbon dioxide. But plants produce more oxygen than they consume. So we generally say that Plants produce oxygen. Animals also respire i.e. they inhale oxygen and gives out carbon dioxide in the atmosphere. So oxygen and carbon dioxide balance is maintained in the atmosphere.