

### LITTERA PUBLIC SCHOOL

#### CLASS 6

### CHAPTER 15

SCIENCE

### AIR AROUND US

#### Very short answer type questions:

1. Name the gas used to fill the packets of potato chips?

Ans. Nitrogen is used to fill the packets of potato chips.

2. Name various components of air.

Ans. Various components of air are:- Nitrogen, Oxygen, Carbon dioxide, inert gases, smoke, dust particles and water vapour.

3. What is the amount of nitrogen in the air?

Ans. 78% of the atmosphere contains Nitrogen.

4. Which of the two is present in lesser amount in air – oxygen or nitrogen?

Ans. Oxygen is present in lesser amount.

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

Ans. Oxygen is essential for respiration.

#### **Short answer type questions:**

1. What is wind? State three uses of wind.

Ans. Moving air is called wind. Some of the uses of wind are:-

- Wind helps in the movement of wind mills to generate electricity, draw water from tube wells and run floor mills.
- ii. Wind helps in the movement of yachts, parachutes, gliders and aeroplanes.
- iii. Wind helps in the dispersal of seeds and Pollen of flowers of several plants.

#### 2. Give four uses of air in our day to day life.

Ans. Four uses of air are:-

- i. Air is used in breathing, burning and respiration.
- ii. Compressed air is used to fill the tubes of bicycles, automobiles and aeroplanes.
- iii. Air help the birds, bats and insects in flying.
- iv. Air please an important role in the water cycle as it carries water vapour in it.

#### 3. What is air? Write about the composition of air.

Ans. Air is a mixture of several gases. We cannot touch or see air but it is present everywhere around us. The air in the Earth's atmosphere is made up of approximately 78% nitrogen, 21% oxygen, Carbon dioxide 0.03%. The percentage of water vapour and dust particles keep changing from time to time and place to place.

#### 4. What is the importance of atmosphere?

Ans. Importance of atmosphere are:-

- i. The atmosphere contains the air that we breathe.
- ii. It protects us from the harmful radiation of the Sun.
- iii. It helps to keep the planet's heat on the surface.
- iv. It plays a very important role in the water cycle.

#### 5. Why is polluted air harmful to us?

Ans. Polluted air is harmful to us because some pollutants are poisonous. Inhaling them can increase the chances of health problems.

# 6. Why do divers and mountaineers carry oxygen cylinders with them?

Ans. Sea divers carry oxygen gas cylinders along with them because there is no free oxygen in the sea water since the little dissolved oxygen present in water can't be used for breathing by divers. It can be used only by aquatic animals.

Mountaineers carry oxygen cylinders with them because in high altitudes atmospheric pressure is low which makes air less dense. This makes the volume of Oxygen for breathing very less.

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

Ans. Animals and plants are connected to each other by the oxygencarbon dioxide cycle. Plants need the carbon dioxide from animals to live and animals must have the oxygen from plants to survive.

#### 8. What are the sources of oxygen and carbon dioxide in the air?

Ans. The main source of oxygen in the atmosphere is through photosynthesis. Plants produce oxygen during photosynthesis which is released into the atmosphere.

Sources of carbon dioxide is cellular respiration in animals. Carbon dioxide is also produced while burning fuels.

#### 9. What precautions should be taken to prevent air pollution?

Ans. Air pollution can be prevented by following ways:-

- i. Use of public transport
- ii. Buy Energy Efficient Vehicles Like Electric
- iii. Avoid Plastic Bags
- iv. Make use of Solar Energy
- v. Always Use Recyclable Products

#### Long answer type questions

## 1. Why is it considered unhealthy to breathe in through the mouth?

Ans. It is considered unhealthy to breathe through mouth because fine hair and mucus are present inside the nose to prevent dust particles from getting into the respiratory system. But when we breathe through mouth, there is no filtration system to filter out dust particles.

#### 2. Explain oxygen and carbon dioxide cycle in atmosphere.

Ans. Plants use carbon dioxide in a process known as photosynthesis. During photosynthesis, plants give off oxygen as a waste product. Carbon dioxide moves from the air into the leaves of plants through tiny openings in the plant's leaves. Oxygen moves out of the plant leaf through these same openings.

All animals, including humans, require oxygen to survive. Animals breathe in the oxygen made by plants and breathe out carbon dioxide as a waste product.