

**PARAGON CONVENT SCHOOL**  
**SECTOR : 24 B, CHANDIGARH**  
**CHAPTER - 10**  
**ESSENTIAL FOR LIFE: AIR AND WATER**

**MCQs. Page no. 105**

1. B
2. C
3. B

**MCQs. Page no. 108**

1. A
2. B
3. C

**EXERCISES**

**SECTION- A**

**A. Oral Questions:**

Q1.- How is air important to us?

Ans.- Air is important to us because:

- We breathe in air to stay alive.
- We fill air in balls, tyre tubes and balloons.
- We use air to generate electricity by windmills.
- Sail boats need air to move.
- Gliders parachute and airplanes fly in the air.

Q2.- Why should we drink clean water?

Ans.- We should drink clean water because impurities in water can cause diseases and make us sick.

Q3.- How can we purify drinking water?

Ans.- We can purify drinking water by boiling, chlorination and using water purifier.

Q4.- Name two soluble impurities.

Ans.- Salt and sugar are two soluble impurities.

### **B. Science Quiz.**

Q1.- Name the most abundant gas in the atmosphere.

Ans.- Nitrogen.

Q2.- Up to what height above the earth's surface is the atmosphere extended?

Ans.- 300km above the earth's surface.

Q3.- Name two types of impurities present in water.

Ans.- Soluble and insoluble impurities.

### **WORKSHEET**

#### **A. MCQs:**

1. A

2. A

#### **B. Circle the odd ones. Give reason for your choice.**

1. Nitrogen                      Mud                      Oxygen

Ans.- Mud : As mud is solid substance, where as others are gases of atmosphere.

2. Evaporation                      Distillation                      Sedimentation

Ans.- Sedimentation: it is a method of removal of insoluble impurities, whereas others are used for removing soluble impurities.

3. Sand                                      Mud                                      Salt

Ans.- Salt: it is soluble impurity of water, whereas others are insoluble impurities.

#### **C. Fill in the blanks.**

1. Filtration

2. Chlorine

3. Soluble

4. Water

**D. Identify the process in the given pictures and write their names in the spaces provided.**

1. Decantation
2. Filtration
3. Sedimentation

## **SECTION- B**

### **A. MCQs.**

1. B
2. A

### **B. Very short answer questions:**

Q1.- What is the percentage of oxygen in the atmosphere?

Ans.- 21%

Q2.- Name the instrument which is used to measure atmospheric pressure.

Ans.- A barometer

### **C. Short answer questions:**

Q1.-What is chlorination?

Ans.- Addition of chlorine tablets in water to kill germs and to make the water pure is called chlorination.

Q2.- What is loading?

Ans.- Improving and increasing the rate of sedimentation by adding chemicals like alum is known as loading.

Q3.- The atmosphere acts as a blanket over the earth and protects it from the harmful rays of the sun.

A) What happens as we go higher up in the atmosphere?

B) Do you act like atmosphere for your brothers and sisters?

Ans.- (a) As we go higher up in the atmosphere, the amount of air becomes less.

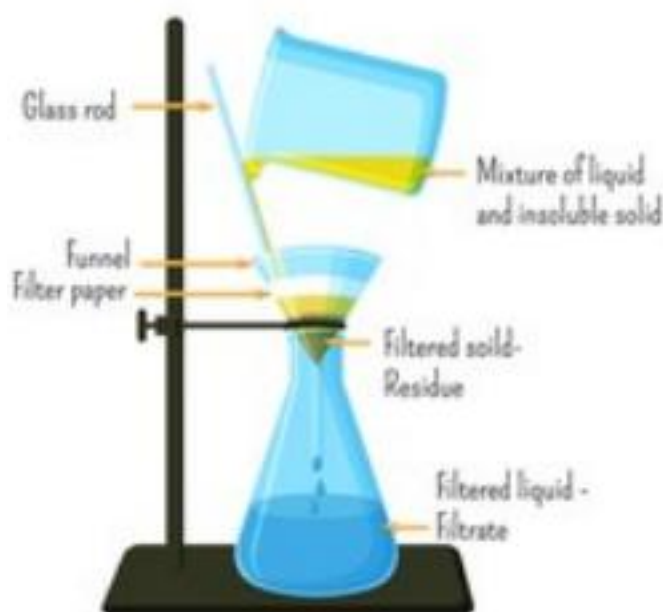
(b) We should act like an atmosphere for our brothers and sisters and always protect them from the bad people and bad influences.

**D. Long answer questions:**

Q2.- Explain filtration with the help of a diagram.

Ans.- Filtration is a method used to separate water from insoluble impurities like sand by using a filter paper.

We make a cone of filter paper and keep it inside a funnel. The mixture is poured into the funnel. The sand does not pass through the filter paper and remains behind on the filter paper. This is called residue. The clear water comes out of the filter paper and is collected in the flask below the funnel. This is called filtrate.



**Activity:**

- Draw different layers of atmosphere.
- Draw diagrams of sedimentation, decantation and filtration.
- Draw set up for distillation.