

St.Thomas School, Dhurwa, Ranchi

Std-4

Subject- Science

Chapter-8 Material and Solutions.

Excercise

Objective type questions. (pg-96)

A) Choose the correct option. (Answer)

1. (b) Sugar
2. (c) Water and soil
3. (c) go into space between the water molecules
4. (b) solids, liquids and gases
5. (d) Turmeric

B) Choose the correct option to fill in the blanks.

(Answer)

1. dissolves
2. insoluble
3. immiscible
4. distillation
5. filtration

C) Write true or false. (pg-97)

1. False
2. False
3. True

4. True

5. True

D) Give one word for the following. (Answer)

1. Solute

2. Miscible

3. Immiscible

4. Petrol

5. Water

Subjective type questions.

E) Answer the following questions in short.

1. What is a solution? Give an example.

Ans- A solution is a mixture where one substance is dissolved into another. Eg: Sugar and water are mixed together to make a sugar solution, where sugar is solute and water is solvent.

2. Answer given in the practice paper.

3. Why water is called universal solvent?

Ans- Water is known as a universal solvent because it can dissolve many substances such as salt, sugar, coffee and many more.

4. Give an example of miscible liquid.

Ans- When two liquids can be mixed to form a solution, they are called miscible.

Eg- Water and rose syrup are miscible.

5. Give a use of sedimentation and decantation in our daily lives.

Ans- We use sedimentation and decantation in our daily lives while washing rice, dal and other grains for cooking.

Water in the overhead water tank of our houses undergoes sedimentation. The clay particles in the water of the tank settle down. The clear and clean water above the layer of clay flows through the pipe and comes to the tap. This process is called decantation. This way we use sedimentation and decantation in our daily lives.

6. Define filtration.

Ans- The process by which light insoluble solids are separated from a liquid by passing the mixture through a filter is called filtration.

F)

1. How do we separate soluble substances from water using evaporation?

Ans- Evaporation method is used for separating any dissolved solid. In this process, the water is heated to boil which converts the liquid water into water vapour and the soluble substances or dissolved impurities are left behind in the vessel.

2. Explain the process of sedimentation and decantation in detail.

Sedimentation: When we do not disturb the muddy water, the heavy insoluble impurities present in muddy water gradually settle down at the bottom of the container. This process of settling down of impurities at the bottom is called as sedimentation.

The heavy insoluble substances that settle down are called as sediments.

Decantation: After the insoluble impurities settle down at the bottom of the container, the clean liquid can be seen above. We can slowly pour the clean water without disturbing the impurities in another container. This process of removal of clean liquid above the sediments is called as decantation.