Short Answer Questions

Q.1. Which among the following materials would you identify as soft materials and why?

Ice, rubber band, leaf, eraser, pencil, pearl, a piece of wooden board, cooked rice, pulses and fresh chapati

[NCERT Exemplar]

Ans. Rubber band, leaf, eraser, cooked rice and fresh chapati are soft materials because they can be compressed or scratched easily.

Q.2. You are provided with the following materials—turmeric, honey, mustard oil, water, glucose, rice flour, groundnut oil.

Make any three pairs of substances where one substance is soluble in the other and any three pairs of substances where one substance remains insoluble in the other substances. [NCERT Exemplar]

Ans. Soluble:

- i. Honey in water
- ii. Glucose in water
- iii. Groundnut oil in mustard oil

Insoluble:

- i. Turmeric in water
- ii. Rice flour in water
- iii. Mustard oil in water

Q.3. Sugar, salt, mustard oil, sand, sawdust, honey, chalk powder, petals of flower, soil, copper sulphate crystals, glucose, wheat flour are some substances given to Paheli. She wants to know whether these substances are soluble in water or not. Help her in identifying soluble and insoluble substances in water. [NCERT Exemplar]

Ans. Soluble in water—Sugar, Salt, Honey, Copper sulphate crystals, Glucose.

Insoluble in water—Mustard oil, Sand, Sawdust, Chalk powder, Soil, Petals of flower, Wheat flour.

Q.4. Why do we classify materials into different groups?

Ans. Materials are classified into different groups for the following reasons:

- i. For the convenience of identifying and locating the different materials.
- ii. To study their properties and identify common patterns among them.

Q.5. How is density of an object related to its floating or sinking?

Ans. An object will only float if its density is less than that of the surrounding liquid. It will sink if its density is greater than that of the surrounding liquid.

Q.6. Give one example of each of a combustible liquid, gas and solid.

Ans. Petrol is a combustible liquid, CNG is a combustible gas and paper is a combustible solid

Q.7. Why do you think oxygen dissolved in water is important for the survival of aquatic animals and plants? [NCERT Exemplar]

Ans. Dissolved oxygen is available for animals and plants for respiration and survival.