**L5: Matter-Solid, Liquid and Gas**

**4. Answer in brief**

**Q1.What is matter?**

Anything that has mass and occupies space is called matter.

**Q2.What are the three basic states of matter? Give few example of each.**

Solid: wood,stones plastic etc

Liquid: milk ,oil,petrol etc

Gas: oxygen,carbon dioxide nitrogen etc

**Q3.List two properties of liquids.**

a)Liquids can flow.

b)Liquids take the shape of the container in which they are poured in.

**Q4. Name the process in which a solid changes into liquid on heating.**

Melting

**Q5.Define the term ‘freezing’.**

The process of conversion of a liquid into a solid is called freezing.

**5. Answer in detail.**

**Q1.Write two differences between solids and gases.**

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| **Solids** | **Gases** |
| i) i)Solids have definite shapes and volumes. | ii)i) Gases do not have either. |
| ii)ii) In solids, particles are tighly packed. | ii)ii) In gases they are loosely packed. |

**Q2.Why do solids have a fixed shape and size?**

Particles in solids have no space to move around as they are tightly packed. Therefore solids always have a fixed size and shape.

**Q3. Explain the terms ‘evaporation ‘and ‘condensation’.**

**Evaporation:** The process of conversion of a liquid into a gas is called evaporation.

**Condensation:** The process of conversion of a gas into a liquid is called condensation.

**Q4.How is a solution formed? Give an example.**

When a solid dissolves in a liquid, it forms a solution.

When we add sugar to a glass of water and mix it well, the sugar disappears and we get sugar solution. In sugar solution, sugar is the solute and water is the solvent.

**Sugar solution = Solute (sugar) + Solvent (water)**

**Q5.What is the difference between a solute and a solvent? Give examples.**

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| **Solute** | **Solvent** |
| i) Solute is the substance which dissolves in a liquid. | i) Solvent is the substance, usually a liquid, in which the solute dissolves. |
| ii) In sugar solution, sugar is the solute. | ii) In sugar solution, water is the solvent. |

**HOTS**

**Q1.We put our wet clothes in the open to let them dry. They dry quicker on a hot day than on a rainy day. Why?**

Wet clothes dry more quickly on a hot day than on a rainy day because the rate of evaporation is higher on a hot day.

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