

2.1.6. Changes in State : Part Two

Part I : Answer the following as True or False

1. A change of state is a chemical change.
2. Melting is the process where a solid changes into a liquid when heated.
3. Freezing is the process of a liquid turning into a solid when cooled.
4. Evaporation takes place only at the boiling point of a liquid.
5. Boiling is the rapid change of liquid to gas throughout the liquid.
6. Condensation is the change of state from a gas to a liquid.
7. Sublimation is the process where a gas changes directly into a solid.
8. Deposition is the change from gas directly to solid.
9. The freezing point of a liquid is the same temperature as its melting point.
10. During a change of state, the substance's composition changes into a new substance.
11. Dry ice (solid CO₂) changes directly into gas without becoming liquid.
12. Condensation releases energy into the surroundings.
13. Boiling and evaporation are the same because both occur only at the boiling point.
14. Iodine and ammonium chloride are substances that can undergo sublimation.
15. Adding energy to a solid always turns it into a liquid immediately.

Part II : Match the concepts in column “A” with descriptions in column “B”. Put the correct number in the space provided

Column A (Processes / Concepts)

1. Melting (Fusion) A solid changing directly into gas without becoming liquid
2. Freezing (Solidification) Gas changing directly into solid
3. Evaporation Temperature at which a liquid changes into a solid
4. Boiling Change of liquid to gas at the surface, below boiling point
5. Condensation Gas cooling down to become liquid
6. Sublimation Example of sublimation (solid CO₂)
7. Deposition Liquid changing into solid on cooling
8. Freezing Point Temperature at which a liquid changes into a gas throughout the liquid
9. Boiling Point Solid changing into liquid on heating
10. Dry Ice Rapid change of liquid to gas at specific temperature