

Important HBSE, CBSE and other State Boards Class 9th (Science) Chapter 1: Matter in Our Surroundings

Very Short Answer (1 Mark)

1. What is matter?
2. Name the three states of matter.
3. Write two differences between solids and liquids.
4. Write two differences between liquids and gases.
5. What is the particle theory of matter?
6. What is sublimation? Give one example.
7. Differentiate between fusion (melting) and vaporisation.
8. What happens to the kinetic energy of particles when temperature is increased?

Short Answer (2–3 Marks)

1. Explain the characteristics of solids, liquids and gases with examples.
2. Why was the particle theory of matter accepted?
3. Why do liquids have a definite mass and volume but no definite shape?
4. Why do gases have the highest kinetic energy among all states of matter?
5. Define vaporisation. Write four factors affecting the rate of evaporation.
6. Why does evaporation cause cooling?
7. Differentiate between heat and temperature.
8. What is the process called when a solid directly changes into gas? Give examples.

Long Answer (4–5 Marks)

1. Compare the properties of solids, liquids and gases in tabular form.
2. Explain the process of melting (fusion) with the help of a diagram.
3. Differentiate between boiling and evaporation.
4. Prove that 'particles of matter are continuously moving' with the help of diffusion experiment.
5. Explain in detail the factors affecting the rate of evaporation.
6. Why is extra energy required for the change of state from liquid to gas?