

Matter (Physics)

Chapter 1: Matter (Physics) · Topic 1

Key Concept

The kinetic theory of matter explains that particles are always moving, with more energy causing more movement, explaining state changes.

Melting point and boiling point are specific temperatures at which a substance changes from solid to liquid, or liquid to gas.

Sublimation is when a solid changes directly to gas without passing through the liquid state, like dry ice (solid CO₂).

Understanding matter's states and changes helps us explain everyday phenomena like cooking, weather, and industrial processes.

Quick Revision Notes

- Matter has kinetic theory explaining particle movement.
- More energy causes more particle movement.
- Melting point: solid to liquid temperature.
- Boiling point: liquid to gas temperature.
- Sublimation: solid directly to gas.
- Dry ice (solid CO₂) sublimates.
- This explains cooking and weather.
- It also explains industrial processes.

Practice Questions

- 1 Discuss the kinetic theory of matter.
- 2 Research the melting and boiling points of water.
- 3 Explain sublimation with the dry ice example.
- 4 Discuss why heating increases particle movement.
- 5 Research another example of sublimation.
- 6 Explain how cooking involves state changes.