

Properties of Substances

Chapter 6: Properties of Substances · Topic 1

Key Concept

Substances exist in three states - solid, liquid, and gas - each with distinct properties regarding shape and volume.

Solubility is a substance's ability to dissolve in a liquid, like sugar dissolving in water, forming a solution.

Some substances conduct electricity or heat well (conductors), while others do not (insulators), an important property for many uses.

Understanding these properties helps us select appropriate materials for different purposes, like choosing insulators for electrical safety.

Quick Revision Notes

- Three states: solid, liquid, gas.
- Each has distinct shape/volume properties.
- Solubility: ability to dissolve in a liquid.
- Example: sugar dissolving in water.
- Conductors: conduct electricity/heat well.
- Insulators: do not conduct well.
- Understanding helps select right materials.
- Example: insulators for electrical safety.

Practice Questions

- 1 Classify three substances by their state.
- 2 Test if sugar or salt dissolves in water.
- 3 Name a conductor and an insulator.
- 4 Discuss why insulators are used in electrical wires.
- 5 Discuss the properties of a substance around you.
- 6 Explain solubility in your own words.