

Physical and Chemical Changes

Chapter 9: Physical and Chemical Changes · Topic 1

Key Concept

Physical changes, like melting ice or tearing paper, change the appearance or state of a substance but not its chemical makeup.

Chemical changes, like burning wood or rusting iron, create new substances with different properties than the original.

Signs of a chemical change include colour change, gas production, temperature change, or formation of a new substance.

Understanding the difference between physical and chemical changes helps us predict and explain how substances behave.

Quick Revision Notes

- Physical changes alter form, not composition.
- Melting ice is a physical change.
- Chemical changes create new substances.
- Burning wood is a chemical change.
- Rusting iron is also a chemical change.
- Signs include colour change and gas production.
- Temperature change can indicate a chemical change.
- Understanding this helps predict substance behaviour.

Practice Questions

- 1 List three examples of physical changes.
- 2 List three examples of chemical changes.
- 3 Discuss why rusting is a chemical change.
- 4 Explain why melting ice is a physical change.
- 5 Research a sign that shows a chemical change occurred.
- 6 Discuss whether cutting paper is physical or chemical.