

Chemical Changes and Reactions

Chapter 2: Chemical Changes and Reactions · Topic 1

Key Concept

A combination reaction forms one product from two or more reactants, like hydrogen and oxygen combining to form water.

A decomposition reaction breaks down one compound into simpler substances, often needing heat, light, or electricity as energy input.

A displacement reaction occurs when a more reactive element replaces a less reactive one in a compound, like zinc displacing copper from copper sulfate.

A double displacement reaction involves an exchange of ions between two compounds, often producing a precipitate (insoluble solid).

Quick Revision Notes

- Combination reaction: forms one product from reactants.
- Example: hydrogen + oxygen forms water.
- Decomposition breaks compounds into simpler substances.
- It often needs heat, light or electricity.
- Displacement: reactive element replaces less reactive one.
- Example: zinc displacing copper from copper sulfate.
- Double displacement exchanges ions between compounds.
- This often produces a precipitate.

Practice Questions

- 1 Give an example of a combination reaction.
- 2 Give an example of a decomposition reaction.
- 3 Give an example of a displacement reaction.
- 4 Research a double displacement reaction example.
- 5 Discuss what a precipitate is.
- 6 Write a simple equation for a combination reaction.