

Introduction to Acid and Base

Chapter 12: Introduction to Acid and Base · Topic 1

Key Concept

Acids taste sour, turn blue litmus paper red, and release hydrogen ions (H^+) when dissolved in water, like lemon juice or vinegar.

Bases taste bitter, feel soapy, turn red litmus paper blue, and release hydroxide ions (OH^-) when dissolved in water, like soap or baking soda.

The pH scale, ranging from 0 to 14, measures acidity or basicity, with 7 being neutral, below 7 acidic, and above 7 basic.

Neutralisation occurs when an acid and base react together, forming salt and water, balancing their opposing properties.

Quick Revision Notes

- Acids: sour taste, turn blue litmus red.
- Release H^+ ions in water.
- Examples: lemon juice, vinegar.
- Bases: bitter taste, soapy feel.
- Turn red litmus blue, release OH^- ions.
- Examples: soap, baking soda.
- pH scale: 0-14, 7 is neutral.
- Neutralisation: acid + base $\rightarrow$ salt + water.

Practice Questions

- 1 Test a household substance's pH using litmus.
- 2 Discuss the properties of acids.
- 3 Discuss the properties of bases.
- 4 Write the general neutralisation reaction.
- 5 Research the pH of common substances.
- 6 Explain acids and bases in your own words.