

Acids and Bases

Chapter 2: Exploring Substances: Acidic, Basic, and Neutral · Topic 1

Key Concept

Litmus is a natural dye extracted from lichens, commonly used as an acid-base indicator because of its clear colour change. Other natural indicators include turmeric (turns reddish-brown in bases) and red cabbage juice (turns pink in acids, green in bases). The strength of an acid or base can be more precisely measured using the pH scale, which ranges from 0 (strongly acidic) to 14 (strongly basic), with 7 being neutral (like pure water).

Quick Revision Notes

- Acids taste sour and turn blue litmus red; examples: lemon juice, vinegar, curd.
- Bases taste bitter, feel soapy, and turn red litmus blue; examples: soap, baking soda.
- Litmus, turmeric, and red cabbage juice are natural acid-base indicators.
- The pH scale (0-14) measures acid/base strength; 7 is neutral.

Practice Questions

- 1 Test a lemon juice sample using litmus paper and record the result.
- 2 Name two natural indicators other than litmus.
- 3 Explain what the pH scale measures and what a pH of 7 means.