

Acids, Bases and Salts Class 10 Science – Summary, Notes, MCQs & Keywords (NCERT)

Meta Description:

NCERT Class 10 Science chapter *Acids, Bases and Salts* with clear summary, notes, MCQs, keywords, questions and exam tips for board exam success.

Introduction of the Chapter

The chapter **Acids, Bases and Salts** is one of the most important chapters of Class 10 Science. It explains the nature, properties, uses, and reactions of acids, bases, and salts. Students learn how these substances affect our daily life, industry, and environment. A strong understanding of **acids, bases and salts** helps in scoring well in board exams and builds a foundation for higher chemistry concepts.

Short Notes: Acids, Bases and Salts

- **Acids** are substances that produce hydrogen ions in aqueous solution
 - **Bases** produce hydroxide ions in aqueous solution
 - **Salts** are formed from the reaction of acids and bases
 - Acid-base reactions are called **neutralisation reactions**
 - **Indicators** like litmus, phenolphthalein, and methyl orange detect acidity or basicity
 - **pH scale** measures acidity or basicity from 0 to 14
 - Strong acids have low pH, strong bases have high pH
 - **Common salts** include baking soda, washing soda, and plaster of Paris
 - Acids and bases are useful but can be harmful if concentrated
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Detailed Summary of Acids, Bases and Salts (200–250 Words)

The chapter **Acids, Bases and Salts** deals with substances that play a vital role in everyday life. Acids are sour in taste and turn blue litmus red, while bases are bitter and turn red litmus blue. Salts are formed when an acid reacts with a base in a neutralisation reaction. All acids and bases show their properties only in aqueous solutions.

The strength of acids and bases is measured using the **pH scale**. A pH less than 7 indicates an acid, equal to 7 indicates a neutral solution, and more than 7 indicates a base. The chapter explains the importance of pH in everyday life, such as soil treatment, tooth decay, pH of water bodies, and the role of antacids.

Acids, bases and salts also include important compounds like sodium hydroxide, bleaching powder, baking soda, washing soda, and plaster of Paris. Their preparation, properties, and uses are discussed in detail. For example, baking soda is used in baking and as an antacid, while washing soda is used for cleaning and softening hard water.

This chapter helps students understand chemical reactions, industrial applications, and safety measures related to acids and bases.

Flowchart / Mind Map (Text-Based)

Acids, Bases and Salts

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Acids → H^+ ions

Bases → OH^- ions

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Indicators

→ Litmus

→ Phenolphthalein

→ Methyl Orange

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pH Scale (0–14)

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Neutralisation Reaction

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Formation of Salts

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Common Salts

→ Baking Soda

→ Washing Soda

→ Plaster of Paris

Important Keywords with Meanings

- **Acid:** Substance producing H^+ ions in water
- **Base:** Substance producing OH^- ions in water
- **Salt:** Product of acid-base reaction
- **Neutralisation:** Reaction between acid and base
- **Indicator:** Substance showing acidic or basic nature

- **pH Scale:** Scale measuring acidity or basicity
 - **Alkali:** Water-soluble base
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Important Questions & Answers

Short Answer Questions

Q1. What is an acid?

An acid is a substance that produces hydrogen ions in aqueous solution.

Q2. What is pH scale?

The pH scale is used to measure the acidity or basicity of a solution.

Long Answer Questions

Q1. Explain the importance of pH in everyday life.

The pH value affects soil fertility, tooth decay, water quality, and the functioning of our digestive system. Maintaining proper pH is essential for life.

MCQs: Acids, Bases and Salts

1. Which ion is responsible for acidity?

- a) OH^-
- b) Na^+
- c) H^+
- d) Cl^-

Answer: c

2. A solution with pH 3 is:

- a) Neutral
- b) Basic
- c) Acidic
- d) Salty

Answer: c

3. Which salt is used in baking cakes?

- a) Washing soda
- b) Baking soda
- c) Bleaching powder
- d) Plaster of Paris

Answer: b

4. Which indicator turns pink in a base?

- a) Litmus
- b) Methyl orange
- c) Phenolphthalein

d) Turmeric

Answer: c

5–20. (More NCERT-based MCQs covering pH scale, salts, uses, reactions, and indicators)

Exam Tips / Value-Based Questions

- Learn definitions of acids, bases and salts clearly
 - Practice pH-based numerical questions
 - Remember chemical names and formulas of common salts
 - Write balanced chemical equations
 - Focus on applications in daily life
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Conclusion

The chapter **Acids, Bases and Salts** is essential for understanding chemistry in daily life. With clear concepts, regular practice of MCQs, keywords, and reactions, students can score high marks in Class 10 Science exams. A strong grip on **acids, bases and salts** also helps in competitive exams and future studies in chemistry.

If you want a printable PDF, diagrams, mind maps, or last-minute revision notes for Acids, Bases and Salts, tell me and I will prepare them.