

Chemistry Worksheet Class X
Acids, Bases and Salts

Short answer type questions (3 marks)

1. Explain the action of dilute hydrochloric acid on the following with chemical equations
 - (a) Magnesium ribbon
 - (b) sodium hydroxide
 - (c) crushed egg shells
2. A white powder is added while baking breads and cakes to make them soft and fluffy. Write the name of the powder? Name its main ingredients. Explain the function of each ingredient.
3. A white coloured powder is used by doctors for supporting fractured bones.
 - a. Write chemical name and formula of the powder.
 - b. When this white powder is mixed with water a hard-solid mass is obtained.
 - c. Write balanced chemical equation for the change.
4. A gas X reacts with lime water and forms a compound Y which is used as a bleaching agent in chemical industry. Identify X and Y. Give the chemical equation for the reaction involved.
5. What is baking soda chemically called? Give reaction involved in its preparation. Write one of its uses.
6. Name the compound which is obtained from baking soda and is used to remove permanent hardness of water. Write its chemical formula. How is it prepared from NaCl?
7. State what happens when:
 - a. Gypsum is heated at 373 K
 - b. Blue crystals of copper sulphate are heated.
 - c. Excess of carbon dioxide gas is passed through lime water.
8. Write chemical formula of plaster of paris and gypsum.

Long answer type questions (5 marks)

9.
 - (a) Explain the following chemical properties of acids with the help of balanced chemical equations:
When an acid reacts with a metal carbonate
When an acid reacts with a metal bicarbonate
When an acid reacts with a metal oxide

(b) You are given three solutions A, B and C with pH values 2, 10 and 13 respectively. Write which solution has more hydrogen ion concentration. State the nature of each.

10.

(a) Identify the acid and the base whose combination gives the common salt that you use in food. Write its formula and chemical name of this salt. Name the source from where it is obtained.

(b) What is rock salt? Mention its colour and the reason due to which it has this colour.

11.

(a) State the chemical properties on which the following uses of baking soda are based:

As an antacid

As soda acid fire extinguisher

To make cake soft and spongy

(b) How washing soda is obtained from baking soda? Write balanced chemical equation.

12. Write the chemical name and formula of common salt. List two main sources of common salt in nature. Write any three uses of common salt. How is it connected to our struggle for freedom?