

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2023-24

CLASS: 10 SUBJECT: CHEMISTRY DATE: 14/05/2023

LESSON : CH-1 CHEMICAL REACTIONS AND EQUATIONS

Q.1 Why does the color of copper sulphate solution change when an iron nail is dipped in it? Write a chemical equation to represent the particular reaction.

Q.2 Why is respiration considered an exothermic reaction? Explain.

Q.3 (i) Mention the color of FeSO_4 crystals.

(ii) How does this color change upon heating?

(iii) Give balanced chemical equation for the change.

Q.4 What is the general name of the chemicals which are added to fat and oil containing foods to prevent the development of rancidity?

Q.5 (i) Name the salts that are used in black and white photography.

(ii) Give reactions when they are exposed to light.

(iii) Write the type of chemical reaction taking place.

Q.6 When potassium iodide solution is added to a solution of lead (II) nitrate in a test tube, a precipitate is formed.

(i) What is the color of the precipitate?

(ii) Name the compound precipitated.

(iii) Write a balanced chemical equation for the reaction.

(iv) What type of reaction is this?

Q.7 What is redox reaction? Explain with example.

Q.8 Name and state the law which is kept in mind while balance a chemical equation.

Q.9 Giving one example of each, define the following terms:

(i) Corrosion

(ii) Rancidity

Q.10 A small amount of calcium is taken in a beaker and water is added slowly to it.

(i) Will there be any change in temperature of the contents? Explain.

(ii) Name and define the type of reaction taking place.

(iii) Write chemical equation for the above reaction.

Q.11 A brown substance 'X' on heating in air forms a substance 'Y'. When hydrogen gas is passed over heated 'Y', it again changes back into 'X'.

(i) Name the substance 'X' and 'Y'.

(ii) Name the chemical processes occurring during both the changes.

(iii) Write the chemical equations involved in both the changes.

Q.12 A decomposition reaction requires energy in the form of heat, light or electricity. Give one example of each.

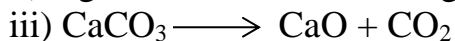
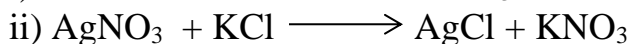
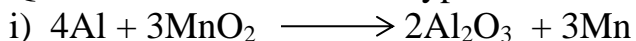
Q.13 Account for the following:

(i) Paint is applied on iron articles.

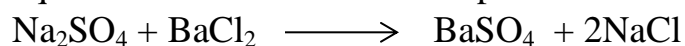
(ii) Oil and fat containing food items are flushed with nitrogen.

(iii) When an iron nail kept in copper sulphate solution, blue colour of the solution fades and iron nails become brownish.

Q.14 Name and define the type of the reaction .



Q.15 Aqueous solution of sodium sulphate and barium chloride react as follows



(i) Identify the type of the reaction.

(ii) Define the type of the reaction

(iii) Suggest other name to this reaction.