# **DON BOSCO SCHOOL, KOKAR, RANCHI**

# **CLASS 9**

### **ICSE CHEMISTRY**

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# Chapter 2 CHEMICAL CHANGES AND REACTIONS

# Short answer questions

#### Answers:

- 1. A change in which no new substances are formed and which can be reversed by reversing the conditions is called a physical change.
- 2.A change in which new substances are formed and which cannot be reversed by reversing the conditions is called a chemical change.
- 3.No
- 4. Zn+H<sub>2</sub>SO<sub>4</sub>---->ZnSO<sub>4</sub>+H<sub>2</sub>
- 5. NaOH+HCl---->NaCl+H<sub>2</sub>O NaOH+H<sub>2</sub>SO<sub>4</sub>---->Na<sub>2</sub>SO<sub>4</sub>+2H<sub>2</sub>O
- 6. Exothermic reaction

A reaction in which heat is evolved is called an exothermic reaction.

Endothermic reaction

A reaction in which heat is absorbed is called an endothermic reaction.

7. if heat is evolved in the formation of a compound from its elements the compound is said to be exothermic.

Ex. HCI, carbon dioxide

If heat is absorbed in the formation of a compound from its elements the compound is said to be endothermic.

Ex.HI,NO

- 8.a. Exothermic reaction
  - b. Endothermic reaction
  - c. Endothermic reaction
  - d.Exothermic reaction
  - e.Exothermic reaction
- 9. There will be e an increase of mass because magnesium combines with oxygen to form magnesium oxide.

#### Objective questions

# Choose the correct answer from the options given below each of the following questions.

1.ans. hydrogen iodide

2.ans. carbon dioxide

3.ans. synthesis

4.ans. double decomposition

#### Match the columns

В

- c. Decomposition reaction
- a. Synthetic reaction
- b. Double decomposition reaction
- e. Neutralization reaction
- d. Displacement reaction

#### Fill in the blanks

#### Answers:

- 1.A physical change is a temporary change but a chemical change is a permanent change.
- 2. When an acid reacts with a base to give a salt and water the reaction is called a neutralization reaction.
- 3. In photosynthesis carbon dioxide is consumed and oxygen is given out.
- 4..... Neutralization reaction.
- 5..... displacement reaction.

True or false.

1.a chemical change is always accompanied by the evolution for absorption of heat.

True

2. Photosynthesis is a physical change.

False.

3. Exothermic reactions are very rare.

False.

4...... Is a reversible reaction.

True.

5.the mass of a substance does not change on burning.

False.

6. Respiration takes up carbon dioxide from air.

**False**