

WORKSHEET 2

CHAPTER 2 – CHEMICAL CHANGES AND REACTIONS

A. Tick (✓) the correct option.

- Which of the following cannot displace silver from silver nitrate solution?
a. Gold b. Mercury c. Lead d. Iron
- Which of the following is a double decomposition reaction?
a. $\text{NH}_4\text{Cl} \rightarrow \text{NH}_3 + \text{HCl}$ b. $\text{N}_2 + 3\text{H}_2 \rightarrow 2\text{NH}_3$
c. $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ d. $\text{Cd}(\text{NO}_3)_2 + \text{Na}_2\text{S} \rightarrow \text{CdS} + 2\text{NaNO}_3$
- Sulphur burns in oxygen to give sulphur dioxide. This reaction is an example of
a. combination reaction. b. photolysis.
c. decomposition reaction. d. double decomposition reaction.
- Combustion of petrol is an example of
a. endothermic reaction. b. exothermic reaction.
c. decomposition reaction. d. neutralisation reaction.
- A red brown gas is released on heating lead nitrate. This reaction is an example of
a. combination reaction. b. oxidation reaction.
c. decomposition reaction. d. reduction reaction.

B. Fill in the blanks from the choices given within the brackets.

- The formation of ammonia is a _____ (decomposition/combination) as well as an _____ (endothermic/exothermic) reaction.
- In _____ (displacement/double decomposition) reaction, exchange of radicals between the reactants takes place.
- In _____ (displacement/decomposition) reaction, there is only one reactant.
- Sublimation of solids is an example of _____ (endothermic/exothermic) reaction.
- All the displacement reactions are governed by the _____ (heat/light/metal activity series)

C. Give one example of each of the following types of reactions.

- A reaction involving the formation of a salt and water.
- A reaction involving the formation of a precipitate.
- An exothermic reaction.
- An endothermic reaction.
- A reaction involving a change in colour.

Name:

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Class: IX

Date:

D. Match the following.

- | | |
|---------------------------------|---|
| 1. Ca(OH)_2 | Calcium carbonate |
| 2. CaCO_3 | Slaked lime |
| 3. Displacement reaction | $A + B \rightarrow AB$ |
| 4. Double displacement reaction | More reactive element displaces the less reactive element from its compound |
| 5. Combination reaction | Exchange of ions between reactants |

E. Answer the following questions.

1. Why does digestion of food an exothermic reaction?
2. How does decomposition reaction differ from combination reaction?
3. Hydrogen peroxide is stored in dark coloured bottles. Give reason.
4. Give two differences between physical and chemical changes.
5. Why do we use methane as a fuel?

