WORKSHEET **2**

CHAPTER 2 – CHEMICAL CHANGES AND REACTIONS

A. Tick (\checkmark) the correct option.

1.	Which of the following cannot displace silver from silver nitrate solution?				
	a. Gold b. Mercury	c. Lead	d. Iron		
2.	Which of the following is a double decomposition	n reaction?			
	a. $NH_4Cl \rightarrow NH_3 + HCl$	b. $N_2 + 3H_2 \rightarrow 2$	2NH ₃		
	c. $2Mg + O_2 \rightarrow 2MgO$	d. Cd(NO ₃) ₂ + N	$\text{Ia}_2\text{S} \rightarrow \text{CdS} + 2\text{NaNO}_3$		
3.	Sulphur burns in oxygen to give sulphur dioxide	. This reaction is a	n example of		
	a. combination reaction.	b. photolysis.			
	c. decomposition reaction.	d. double decom	position reaction.		
4.	Combustion of petrol is an example of				
	a. endothermic reaction.	b. exothermic rea	action.		
	c. decomposition reaction.	d. neutralisation	reaction.		
5.	5. A red brown gas is released on heating lead nitrate. This reaction is an example of		s an example of		
	a. combination reaction.	b. oxidation reac	tion.		
	c. decomposition reaction.	d. reduction reac	ction.		
B.	. Fill in the blanks from the choices given within the brackets.				
1.	The formation of ammonia is a (decomexothermic) reaction.	nposition/combinat	ion) as well as an (endothermic/		
2.	In (displacement/double decomposition) reaction, exchange	of radicals between the reactants takes place.		
3.	In (displacement/decomposition) reacti	on, there is only on	e reactant.		
4.	. Sublimation of solids is an example of (endothermic/exothermic) reaction.				
5.	5. All the displacement reactions are governed by the (heat/light/metal activity series)				
C.	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 precipita				
	An exothermic reaction.	ic.			
	An endothermic reaction.				
5.	A reaction involving a change in colour.				

Name:	Teacher's signature:
Class: IX	Date:

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D. Match the following.

1.	Ca(OH) ₂	Calcium carbonate

- 2. CaCO₃ 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?

ANSWERS

WORKSHEET 2

A. Tick (\checkmark) the correct option.

1. a 2. d 3. a 4. b	5. C
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B. Fill in the blanks from the choices given within the brackets.

- 1. combination, exothermic
- 2. double decomposition
- 3. decomposition
- 4. endothermic
- 5. metal activity series

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

- 1. $2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O_{salt} water$
- 2. $Na_2SO_4 + Pb(NO_3)_2 \rightarrow 2NaNO_3 + PbSO_4 \downarrow$ white
 - ppt
- 3. $2Na + 2H_2O \rightarrow 2NaOH + H_2 + heat$
- 4. $H_2 + I_2 \xrightarrow{heat} 2HI$
- 5. $CuSO_4 + Zn \longrightarrow Cu + ZnSO_4$ blue solution columns solution solution

D. Match the following.

- 1. Ca(OH)₂
- 2. $CaCO_3$
- 3. Displacement reaction
- 4. Double displacement reaction
- 5. Combination reaction

E. Answer the following questions.

1. The digestion of food is an exothermic reaction because digestion of food liberates heat energy.

Slaked lime

compound

 $A + B \rightarrow AB$

Calcium carbonate

Exchange of ions between reactants

More reactive element displaces the less reactive element from its

- 2. In decomposition reaction, a compound breaks down to form two or more simpler substances whereas in combination reaction, two or more substances combine to form a single compound.
- 3. Hydrogen peroxide undergoes photochemical decomposition in the presence of light to give hydrogen and oxygen. To protect from photochemical decomposition, it is stored in dark coloured bottles.

4.	Physical changes	Chemical changes	
	No new substances are formed in such type of changes.	New substances are formed in such type of changes.	
	These are temporary.	These are permanent.	

5. Methane is used as a fuel because when methane burns in air, it liberates a huge amount of heat energy.

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