प्रु⊍ना International School

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Worksheet - 01

Chapter 01 Chemical Reactions and Equations

1.	The	fol	lowing	reaction	is an	examp	le of	à
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 $4NH_3(g) + 50_2(g) \rightarrow 4NO(g) + 6H_2O(g)$

- (i) displacement reaction
- (ii) combination reaction

(iii) redox reaction

(iv) neutralisation reaction

- (a) (i) and (iv)
- (b) (ii) and (iii)
- (c) (i) and (iii)
- (d) (iii) and (iv
- 2. Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is
- (a) 1:1
- (b) 2:1
- (c) 4:1
- (d) 1:2
- 3. In the double displacement reaction between aqueous potassium iodide and aqueous lead nitrate, a yellow precipitate of lead iodide is formed. While performing the activity if lead nitrate is not available, which of the following can be used in place of lead nitrate?
- (a) Lead sulphate (insoluble)
- (b) Lead acetate
- (c) Ammonium nitrate
- (d) Potassium sulphate

4. Fe2O3+2Al→Al2O3+2Fe

The above reaction is an example of a

- (a) combination reaction
- (b) double displacement reaction
- (c) decomposition reaction
- (d) displacement reaction

5. What happens when dilute hydrochloric acid is added to iron filling? Tick the correct answer

- (a) Hydrogen gas and iron chloride are produced.
- (b) Chlorine gas and iron hydroxide are produced
- (c) No reaction takes place
- (d) Iron salt and water are produced
- 6. Why do we store silver chloride in dark coloured bottles?
- 7. Why should a magnesium ribbon be cleaned before burning in air?
- 8. What is balanced chemical equation? Why should chemical equation be balanced?
- 9. Why does the colour of copper sulphate solution change when an iron nail is dipped in it?
- 10. Write the balance equation for the following reactions Give reasons for the following reactions?
- i. Hydrogen + Chlorine → Hydrogen chloride
- ii. Barium chloride + Aluminium sulphate → Barium sulphate + Aluminium chloride
- iii. Sodium + water → Sodium hydroxide + water

11. What happens when a piece of

- (a) zinc metal is added to copper sulphate solution?
- (b) aluminium metal is added to dilute hydrochloric acid?
- (c) silver metal is added to copper sulphate solution?

16. Explain the following in terms of gain and loss of oxygen with two examples each?

- a. Oxidation
- b. Reduction