

EXERCISE # 1**➤ VERY SHORT ANSWER TYPE QUESTIONS****Q.15** Which metal is use to wrap food items ?

- Q.1** Give one example of each: metals and non-metals.
- Q.2** Name the metal, which is the best conductor of heat and electricity.
- Q.3** Name the property by which metals can be drawn into thin wires.
- Q.4** Name the gas produced, when metals react with acids.
- Q.5** What is the color of the copper sulphate solution ?
- Q.6** State the nature of oxides of non-metals.
- Q.7** Which metal is stored in kerosene ?
- Q.8** Name the property of the metal by which it can be drawn into thin sheets.
- Q.9** What happens when sulphur reacts with oxygen ?
- Q.10** Which non-metal catches fire, if exposed to air ?
- Q.11** Name the gas that burns with a POP sound.
- Q.12** What are Displacement reactions ?
- Q.13** Give one use of non-metal in our daily life.
- Q.14** What are metalloids ?

EXERCISE # 2

➤ SHORT ANSWER TYPE QUESTIONS

- Q.1** What happens when sulphur di-oxide reacts with water ? Give the chemical reaction involved.
- Q.2** Why lemon pickle cannot be stored in an aluminium foil ?
- Q.3** Write two important properties of metals.
- Q.4** Why copper cannot displace zinc from zinc sulphate solution ?
- Q.5** Why immersion rods for heating are made up of metallic substances ?
- Q.6** What happens when iron nails are dipped in water in a test tube for a week ?
- Q.7** What happens when iron reacts with oxygen and water ? Give the chemical reaction involved.
- Q.8** What happens when copper vessel is exposed to moist air for a long time ? Give the chemical reaction that takes place.
- Q.9** Why gold is preferred in making jewellery ?

- Q.10** What happens when dilute sulphuric acid is poured on a zinc plate ? Write the chemical reaction takes
- Q.11** What happens when magnesium ribbon is burnt in air ?
- Q.12** Why metals are used in making aeroplanes, bridges, satellites etc.
- Q.13** Complete the following chemical reactions.
- $$\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow$$
- $$2\text{Cu} + \text{H}_2\text{O} + \text{CO}_2 \rightarrow$$
- $$2\text{Fe} + \text{O}_2 + \text{H}_2\text{O} \rightarrow$$
- $$\text{SO}_2 + \text{H}_2\text{O} \rightarrow$$
- $$\text{Cu} + \text{HCl} \rightarrow$$

➤ LONG ANSWER TYPE QUESTIONS

- Q.14** What will happen when ash of magnesium is dissolved in water ? Is the solution acidic or basic ? What effect does litmus show in case of oxides of metals ?
- Q.15** Explain the following terms : (i) Malleability (ii) Ductility (iii) Sonorous (iv) Lustrous (v) Metalloids.

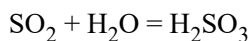
ANSWER KEY

EXERCISE # 1

- Sol.1** Metals : Copper
Non-Metals : Sulphur
- Sol.2** Silver
- Sol.3** Ductility
- Sol.4** Hydrogen gas
- Sol.5** Blue
- Sol.6** The oxides of non-metals are acid in nature.
- Sol.7** Sodium
- Sol.8** Malleability
- Sol.9** Sulphur di oxide is formed.
 $S + O_2 = SO_2$
- Sol.10** Phosphorus
- Sol.11** Hydrogen gas
- Sol.12** The reactions in which more reactive metals displace less reactive metals from their compounds in aqueous solution are called displacement reaction.
- Sol.13** Chlorine is used in purification of water
- Sol.14** Metalloids are those which possess the character of both metals and non-metals.
- Sol.15** Aluminium

EXERCISE # 2

Sol.1 Sulphurous acid is formed.



Sol.2 Aluminium reacts with the citric acid present in the lemon.

Sol.3 (a) Good conductors of heat and electricity.

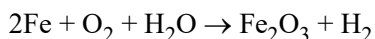
(b) Lustrous, i.e., they can shine.

Sol.4 Because copper is less reactive than zinc.

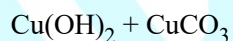
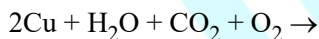
Sol.5 Because metals are good conductors of heat.

Sol.6 A brown layer gets deposited on the iron nails, which is called as the rust.

Sol.7 Iron oxide is formed and hydrogen gas is produced. The chemical reaction that takes place is :

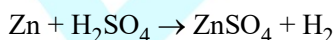


Sol.8 When copper vessel is exposed to moist air for a long time, it acquires a dull green coating. The green material is a mixture of copper hydroxide and copper carbonate. The following chemical reaction takes place:

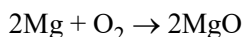


Sol.9 Gold is preferred in making jewellery because gold is a lustrous metal and also possess the property of malleability.

Sol.10 As we know that zinc is more reactive than hydrogen, so it displaces hydrogen from sulphuric acid and forms zinc sulphate. The chemical reaction that takes place during the process is given by

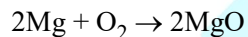


Sol.11 As magnesium is a metal and we know that when metals react with oxygen the oxide formation takes place.



Sol.12 Due to their hardness, metals are preferred in making such things.

Sol.14 When ash of magnesium is dissolved in water then magnesium oxide is formed.



The oxides of metals are basic in nature.

In case of metals the red litmus will turn to blue color.

Sol.15 (i) **Malleability** : The property of the metals by which they can be drawn into sheets.

(ii) **Ductility** : The property of the metals by which they can drawn into thin wires.

(iii) **Sonorous** : The property of the metals by which they produce ringing sound whe struck hard.

(iv) **Lustrous** : The property of the metals by which they appear to be shiny.

(v) **Metalloids** : Those materials that posses the property of both metals and non-metals.