Roll No :
Date :

School : REDDY CLASSES
Assessment :
Subject :
Class :

Time :
Marks: 10

Do as directed.

1 The following materials are taken and beaten with a hammer. Write your observation in the table provided. **1**

Material	Flattens/Breaks into pieces
1. Iron nail	
2. Pencil	
3. Coal piece	
4. Chalk	
5. Aluminium wire	
6. Copper wire	

Ans :

Material	Flattens/Breaks into pieces
1. Iron nail	Flattens
2. Pencil	Breaks into pieces
3. Coal piece	Breaks into pieces
4. Chalk	Breaks into pieces
5. Aluminium wire	Flattens
6. Copper wire	Flattens

2 Some properties are listed in the following table. Distinguish between metals and non-metals on the basis of these properties. **1**

Properties	Metals	Non-metals
1. Appearance		
2. Hardness		
3. Malleability		
4. Ductility		
5. Heat conduction		
6. Conduction of electricity		

Ans :

Material	Flattens/Breaks into pieces
1. Iron nail	Flattens
2. Pencil	Breaks into pieces
3. Coal piece	Breaks into pieces
4. Chalk	Breaks into pieces
5. Aluminium wire	Flattens
6. Copper wire	Flattens

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3 In figure you find that the bulb glows when an iron nail is placed between two ends of wire. Complete the following sentences on the basis of this fact. **1**

1. _____ is a metal.
2. Metals are good _____ of electricity.

[NCERT Exemplar Problems]

3. If in figure iron nail is replaced by a wooden stick, will the bulb glow or not? Justify your answer.

_____

_____

Ans :

1. Iron
2. conductors
3. No, the bulb will not glow because wood is an insulator, i.e. does not conduct electricity.

4 Name the metal present in the following bases: **1**

(a) Calcium hydroxide _____ (b) Milk of magnesia _____

(c) Sodium hydroxide _____ (d) Copper hydroxide _____

Ans : (a) Calcium (b) Magnesium
(c) Sodium (d) Copper

5 Name the non-metal present in the following acids: **1**

(a) Sulphuric acid _____ (b) Nitric acid _____

(c) Hydrochloric acid _____ (d) Sulphurous acid _____

Ans : (a) Sulphur and oxygen (b) Nitrogen and oxgyen
(c) Chlorine (d) Sulphur and oxygen

6 Write the following reactions in the form of chemical equations: **1**

1. Reaction of iron with oxygen and water

_____

2. Reaction of magnesium with oxygen (burning Mg in air)

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3. Reaction of copper with moist air

4. Reaction of sulphur with oxygen

5. Reaction of sulphur with water

6. Reaction of copper sulphate with zinc

Ans :

1. $4Fe + 3O_2 + 6H_2O \longrightarrow 2Fe_2O_3.3H_2O$
Iron, Oxygen, Water, (Rust)

2. $2Mg + O_2 \longrightarrow 2MgO$
Magnesium, Oxygen, Magnesium oxide

3. $2Cu + \underbrace{H_2O + CO_2 + O_2}_{\text{moist air}} \longrightarrow Cu(OH)_2 + CuCO_3$
Copper, Water, Carbon dioxide, Oxygen, Copper hydroxide, Copper carbonate

4. $S + O_2 \longrightarrow SO_2$
Sulphur, Oxygen, Sulphur dioxide

5. No reaction will take place as non-metals do not react with water.

6. $CuSO_4 + Zn \longrightarrow ZnSO_4 + Cu$
Copper sulphate, Zinc, Zinc sulphate, Copper

7 Complete the following reactions. **1**

1. $CuSO_4$ (aq) + Zn(s) → _____
2. $CuSO_4$ (aq) + Fe(s) → _____
3. $ZnSO_4$ (aq) + Cu(s) → _____
4. $FeSO_4$ (aq) + Cu(s) → _____
5. $ZnSO_4$ (aq) + Fe(s) → _____

Ans : 1. $ZnSO_4$ + Cu
2. $FeSO_4$ + Cu
3. No reaction as copper is less reactive than zinc.
4. No reaction as Cu is less reactive than Fe.
5. No reaction as Fe is less reactive than Zn.

8 What are the colours of the following solutions? **1**

1. Copper sulphate _____
2. Ferrous sulphate _____
3. Zinc sulphate _____

Ans : 1. Blue 2. Green 3. Colourless

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Fill in the blanks.

9 **Fill in the blanks to complete the following paragraph.** **1**

The name of the product formed in the reaction of sulphur and _____ is sulphur dioxide gas. When sulphur dioxide is dissolved in _____, sulphurous acid is formed. The sulphurous acid turns _____ litmus paper to _____. Generally, the oxides of _____ are acidic in nature.

After completing the paragraph write two questions which you can raise on the basis of this information.

_____

_____

Ans : oxygen, water, blue, red, non-metals

(i) How does sulphur react with oxygen?

(ii) What is the nature of non-metallic oxides?

Tick (✓) the correct answer.

10 Which of the following is not a metal? **1**

(a) Copper (b) Sulphur

(c) Aluminium (d) Iron

Ans : (b)

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