

10th Metal and Non Metal

CBSE
Chemistry

Chapter-4 (Metals and Non-metals)

1 Match the following

- | | |
|------------------------------------|------------------|
| a) Mercury | a) Bad conductor |
| b) Sulphur | b) Hydrogen gas |
| c) Gas that burns with 'pop' sound | c) Blood |
| d) Iron | d) Thermometer |

2 Fill in the blanks

- Acids turn _____ litmus to _____ litmus.
- Bases turn _____ litmus to _____ litmus.
- Metals form _____ oxides and non metals form _____ oxides.
- Copper does not react with _____ acid even on heating but it reacts with sulphuric acid.
- A material which conducts electricity is called _____.
- Reactions of non metals with bases are _____.

3 Tick the correct option

- A liquid metal _____
i) Sulphur ii) Gold iii) Mercury
- Metals, non metals and metalloids are _____
i) Compounds II) Elements III) Matter
- Which is the best conductor of electricity.
i) Copper II) Silver III) Iron
- Elements which are ductile and malleable are _____
i) Non- metals II) Metals III) Metalloids

4 Give one word/one sentence answer

- Name a metal which can be cut with a knife.

- b) Name the metal used in thermometer.
- c) Give the reactivity series of Cu, Zn and Fe.
- d) Which gas is evolved when metals react with sodium hydroxide and water.
- e) What is the colour of CuSO_4 and ZnSO_4 ?
- f) Non-metals react with water or not.
- g) Name the acid formed when sulphur dioxide is dissolved in water.

5 Write true or false

- a) Generally non-metals do not react with water and acids.
- b) Metals do not react with bases.
- c) Silicon is an example of metalloid.
- d) Element does not contain one kind of atom.

6 Give reasons

- a) Phosphorus is stored under water.
- b) Handle of screw driver is not made up of metal.
- c) Metallic pan has wooden handle.
- d) Bells are made up of metals and of wood.
- e) Metals are drawn into wires and beaten into sheets.

7 a) Give differences between Metals and Non metals on the basis of their physical properties and chemical properties.

- b) Draw a diagram of 'Electrical Tester'.

8 Answer the following questions

- a) Give 3 examples of each i) Metals ii) Non metals.
- b) Why does a copper vessel acquire green coating if it is exposed to moisture for a long time. Write the reaction also.



- c) What is rusting of iron? Write the reaction also.
- d) Write 5 uses of metals.
- e) Write 5 uses of non metals.
- f) Write the reaction for displacement reaction and explain it.

9 Complete the reactions and write in words

- a) $2\text{Mg} + \text{O}_2 \rightarrow$
- b) $\text{SO}_2 + \text{H}_2\text{O} \rightarrow$
- c) $\text{CuSO}_4 + \text{Zn} \rightarrow$
- d) $\text{Fe} + \text{O}_2 + \text{H}_2\text{O} \rightarrow$
- e) $2\text{Cu} + \text{H}_2\text{O} + \text{CO}_2 + \text{O}_2 \rightarrow$
- f) $\text{FeSO}_4 + \text{Cu} \rightarrow$
- g) $\text{CuSO}_4 + \text{Fe} \rightarrow$
- h) $\text{ZnSO}_4 + \text{Fe} \rightarrow$