- 1. (a) What happens when dilute sulphuric acid is poured on a copper plate?
 - (b) What happens when a zinc metal granule is placed in dilute hydrochloric acid? Write the word equation of the reaction involved.

Answer:

- a) Copper metal does not react with dilute sulphuric acid. Hence, no reaction will take place.
- b) Zinc metal reacts with dilute hydrochloric acid to form its salt, zinc chloride. Hydrogen gas is evolved during this reaction.

Zinc + Hydrochloric acid ----→ Zinc chloride + Hydrogen

2. State five properties of metals and non-metals.

Answer:

Metals	Non-metals
Generally hard in nature	Brittle or soft in nature
Can be beaten into sheets	Not malleable
i.e malleable	
Can produce ringing	Not sonorous
sounds on striking with a	
hard object i.e sonorous	
Can be drawn into wires i.e	Not ductile
ductile	

Good conductors of heat	Poor conductors of heat
and electricity	and electricity
Have lustre i.e shiny	Not lustrous
appearance	
Produce basic oxides when	Produce acidic oxides when
burnt in air	burnt in air.

- 3. Saloni took a piece of burning charcoal and collected the gas evolved in a test test tube.
 - (a) How will she find the nature of gas?
 - (b) Write down word equations of all the reactions taking place in this process.

Answer:

- (a) If she brings wet blue and red litmus paper strips near the mouth of gas container, the gas turns blue litmus to red. So, gas has acidic nature.
- (b) Carbon + oxygen → Carbon dioxide

Carbon dioxide + Water → Carbonic acid