2. When magnesium react with hydrochloric acid to form their respective salt with the evolution of hydrogen gas.

$$Mg + 2HCl \longrightarrow MgCl_2 + H_2$$

Magnesium Hydrochloric acid

Magnesium chloride Hydrogen

3. Metals: You might have seen many of metals in your daily life such as iron, copper, tin, gold, etc. In general, metals are hard and shiny in appearance.

Non-metals: In general, they are not so hard. Most of them have dull appearance. For example, phosphorus, sulphur.

- 4. An alloy is a homogeneous mixture of two or more metals. Alloys are made by mixing metals in molten state and sometimes non-metals. Such as duralumin, stainless steel.
- H. 1. Most of the metals react with oxygen to form metal oxides which are basic in nature. Metals like sodium combine rapidly with oxygen, many times they catch fire when exposed to air. To avoid this condition they are kept under kerosene oil.

Metals 2.

Non-metals (a) Generally solids

- (a) Generally solids or gases
- (b) Mostly white or Silver grey (b) Colourless or coloured
- 3. Physical Properties of metals are as follows:
 - Metals are generally grey or silver and yellow or brown in colour.
 - (ii) Metals are lustre.
 - (iii) Ductile in nature.
 - (iv) Metals are malleable.
 - (v) Metals have high melting and boiling points.
 - (vi) Metals have high tensile strength.
 - (v) High densities.
- 4. The original properties of metal changes when they are alloyed.
 - (a) They are resistant of corrosion and wear and tear.
 - (b) They are resistant to attack by chemicals.
 - (c) They are generally harder and tougher then the constituents metals.
- I. 1. Sodium and potassium combine rapidly to oxygen so they catch fire when exposed to air. To avoid this condition they are kept under kerosene oil.
 - 2. Physical Properties:
 - (a) Ductility; (b) Conductivity; (c) Sonorous

Chemical Properties:

(a) Reaction with oxygen; (b) Reactivity with dilute acid

