

1. Name the following : [4]
- The acid used present in Baking Powder.
 - The substance that releases hydronium ions as the only positive ion when dissolved in water.
 - The cation that does not form any precipitate with ammonium hydroxide but forms one with sodium hydroxide.
 - The gas evolved when sodium hydroxide is added to aluminium and heated.
2. Give reason : [2]
- Iron (III) Chloride is stored in a closed container.
 - An aqueous solution of ammonium chloride is acidic in nature although it is a normal salt.
3. State your observation when : [3]
- Washing soda crystals are exposed to the atmosphere.
 - Ammonium hydroxide solution is added dropwise till in excess to copper sulphate solution
 - Red and blue litmus solutions are added separately to copper sulphate solution.
4. Outline the steps (balanced chemical equations) that would be necessary to convert insoluble lead (II) oxide to insoluble lead chloride. [2]
5. Give balanced equations for the following : [5]
- Phosphorus reacts with concentrated nitric acid.
 - Zinc oxide reacts with dilute hydrochloric acid.
 - Magnesium sulphite reacts with dilute nitric acid.
 - Ferric chloride solution reacts with aqueous sodium hydroxide.
 - Ammonium sulphate is warmed with potassium hydroxide.
6. Choosing substances from the list given below, write balanced chemical equations to prepare the following salts. [4]

Dilute sulphuric acid
Iron
Sodium
Zinc

Copper
Sodium Carbonate
Sodium Chloride
Zinc nitrate

Copper(II) Carbonate

- Sodium Sulphate
- Copper (II) Sulphate

- Zinc Carbonate
- Iron(II) sulphate