

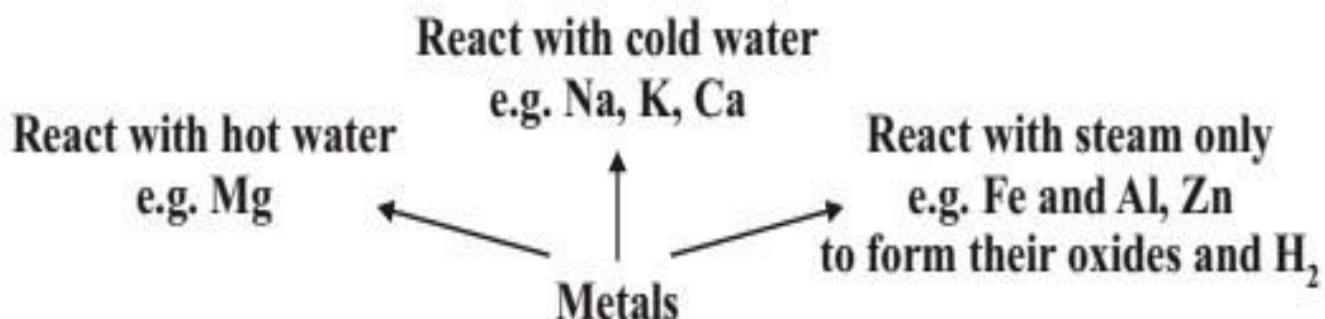
CHEMISTRY STUDY MATERIALS FOR CLASS 10

GANESH KUMAR

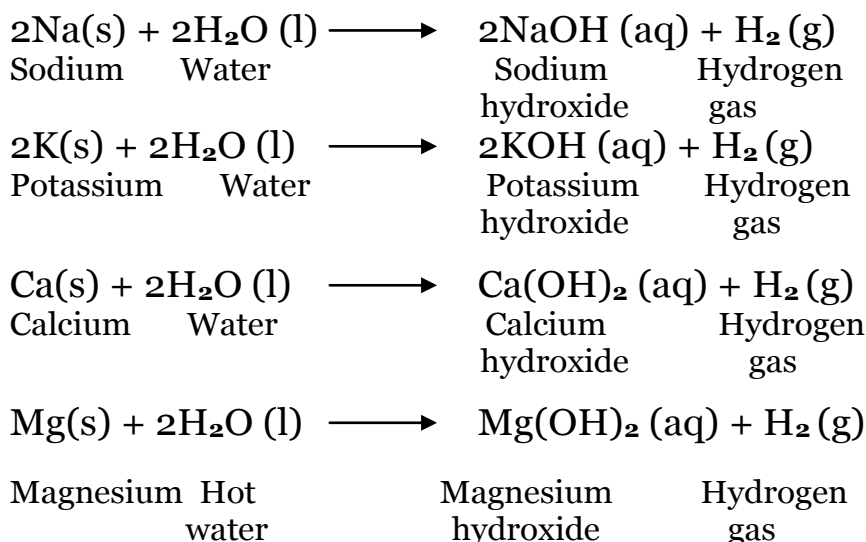
DATE:- 25/05/2020

Chapter- 3 (Metals and Non-metals- Revision Notes)

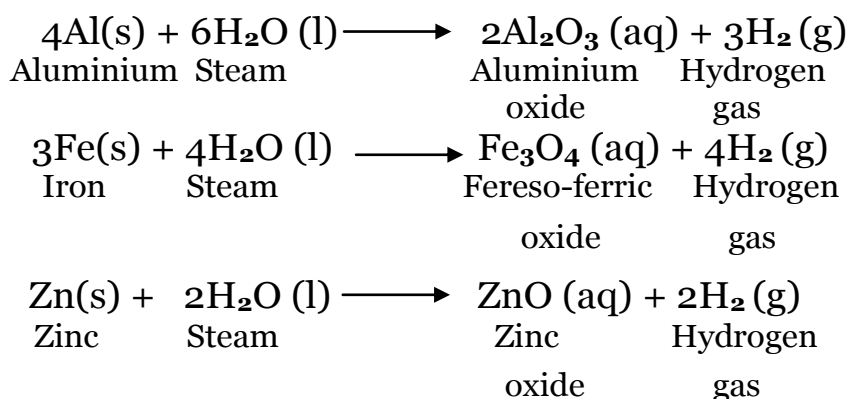
REACTION WITH WATER: Metal oxides on reaction with water form alkalis.



Metal oxide + water → MetalHydroxide



In case of Ca and Mg, the metal starts floating due to bubbles of hydrogen gas sticking to its surface.

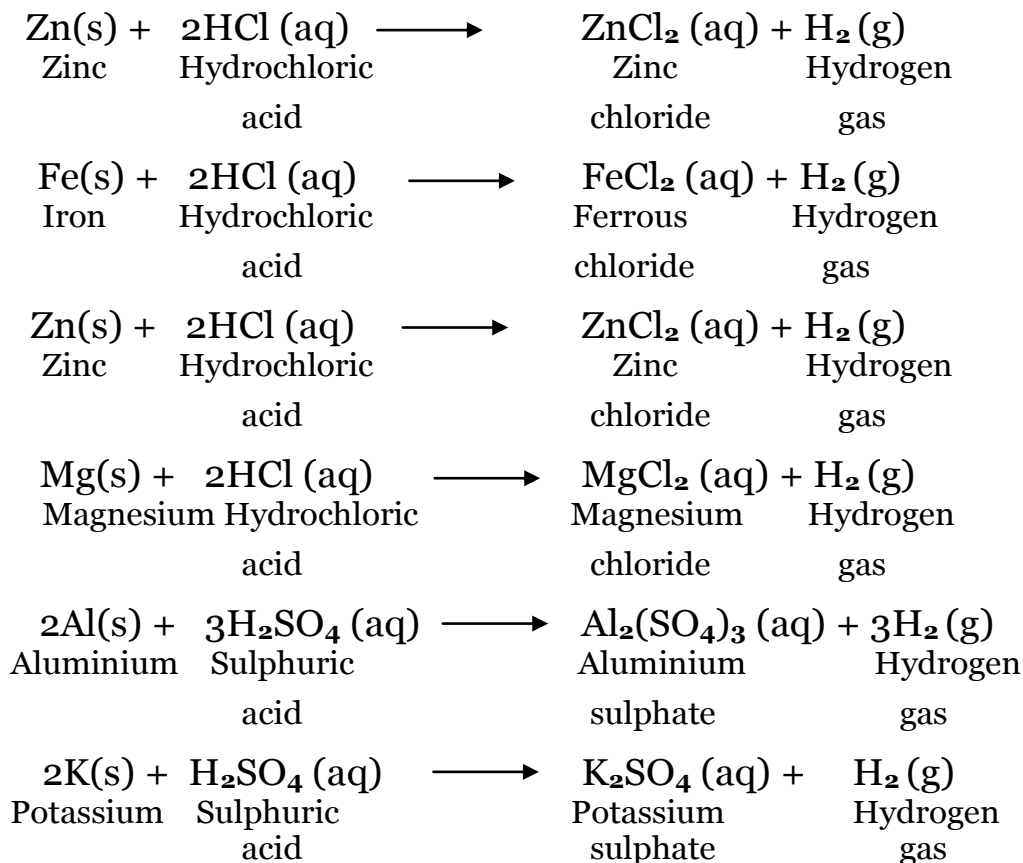


Inert metals like Au and Ag do not react with water.

REACTION WITH ACIDS

Metal + dilute acid \longrightarrow Salt + Hydrogen gas

Metals react with dilute hydrochloric acid and dilute sulphuric acid to form chlorides and sulphates



Note: Copper, mercury and silver don't react with dilute acids.

Hydrogen gas produced is oxidised to water. This happens because HNO_3 is a strong oxidising agent when metals react with nitric acid (HNO_3). But Mg and Mn, react with very dilute nitric acid (1%- 2%) to evolve hydrogen gas. Due to formation a inert nitrate layer of Mn and Mg, nitric acid does not further react with Mn and Mg.

