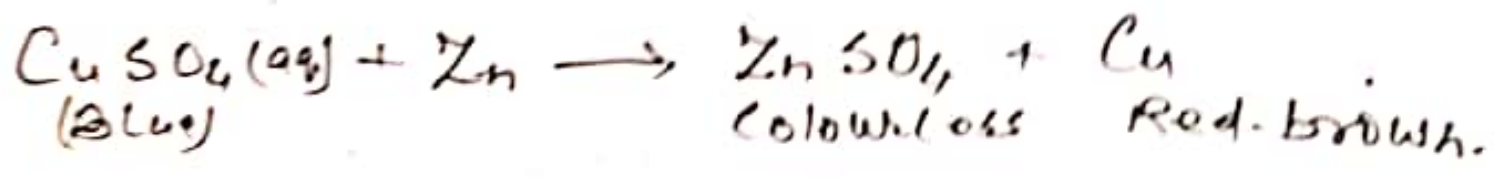


CHEMISTRY

CHEMICAL PROPS. OF METALS

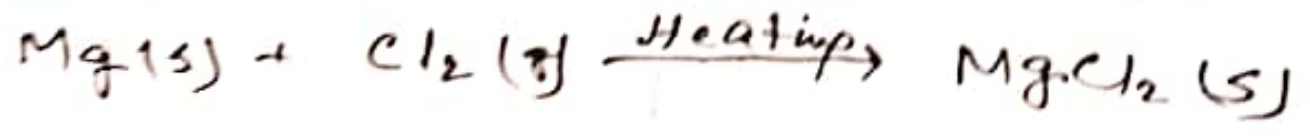
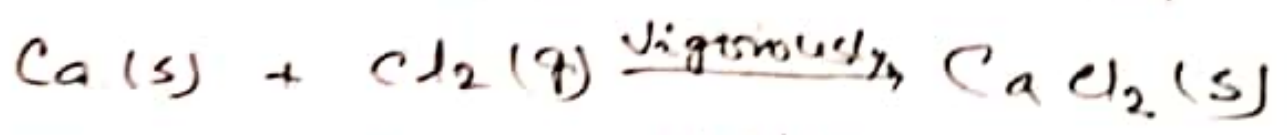
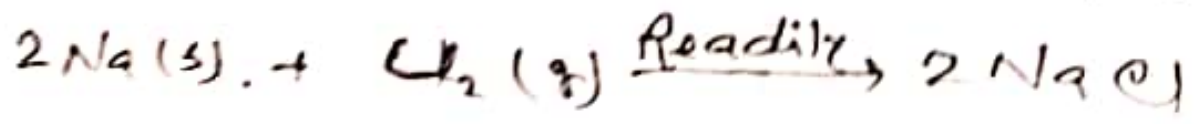
\* REACTION OF METALS WITH SALT SOLUTIONS.

Highly reactive metals displace less reactive metals from their salt solutions.



\* REACTION OF METALS WITH CHLORINE

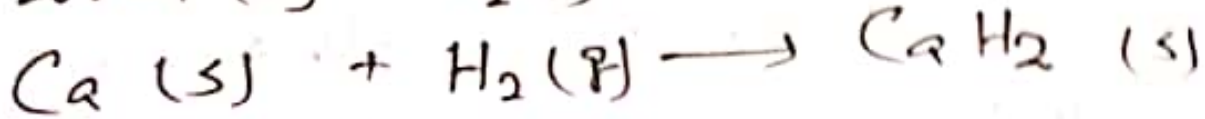
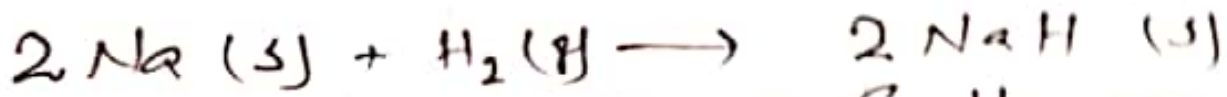
Metals react with chlorine to form ionic metal chloride.



\* REACTION OF METAL WITH HYDROGEN

Most of the metals do not react with hydrogen. Some reactive metals react with hydrogen to form metal hydride.

When  $H_2$  gas is passed over heated Sodium, Calcium metals, 'Metal HYDRIDE' are formed.



## REACTIVITY SERIES OF METALS

The arrangement of metals in a vertical column in order decreasing reactivities is called reactivity series of metals or activity series of metals.

K  
Na  
Ca  
Mg  
Al  
Zn  
Fe  
Sn  
Pb  
[H]  
Cu  
Hg  
Ag  
Au

MOST REACTIVE METALS

Decreasing  
order  
of  
reactivity

(LEAST REACTIVE)

## AQUA-REGIA

A freshly prepared mixture of one part of concentrated nitric acid ( $\text{HNO}_3$ ) and three parts of concentrated hydrochloric acid ( $\text{HCl}$ ) is known as aqua-regia.

Aqua-regia is highly corrosive fuming liquid. It can dissolve all metals. Gold ( $\text{Au}$ ) and platinum ( $\text{Pt}$ ) metals can also be dissolved in aqua-regia.

---