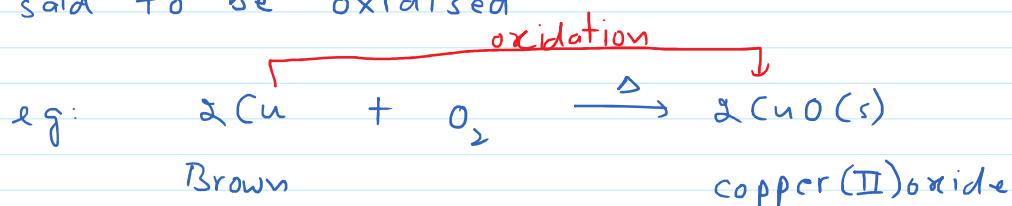


Oxidation and Reduction

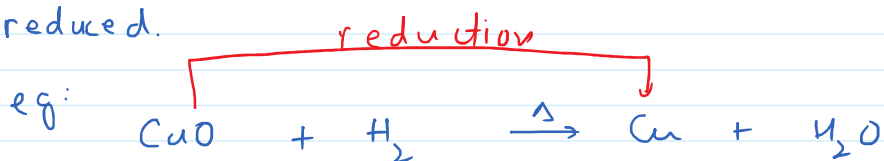
Oxidation

Addition of oxygen or removal of hydrogen from a substance is called oxidation and the substance is said to be oxidised



Reduction

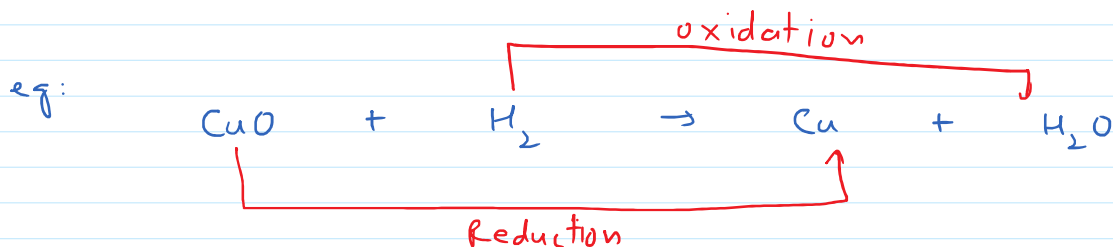
Removal of oxygen or addition of hydrogen to a substance is called reduction and the substance is said to be reduced.



Oxidation - Reduction / Redox reaction

Oxidation and reduction go hand in hand. In a reaction if one substance is oxidised, then other is reduced.

These are called redox reaction.



CuO is reduced to Cu because CuO loses oxygen
 H_2 gains oxygen and is oxidized to H_2O .

Oxidizing agent:

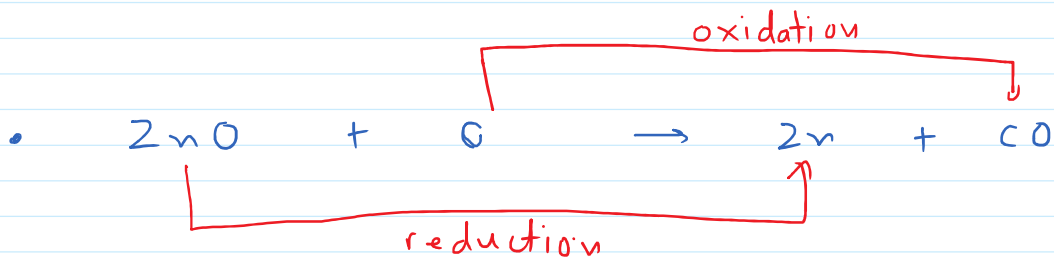
Substance which causes oxidation.

eg: CuO in above reaction.

Reducing agent

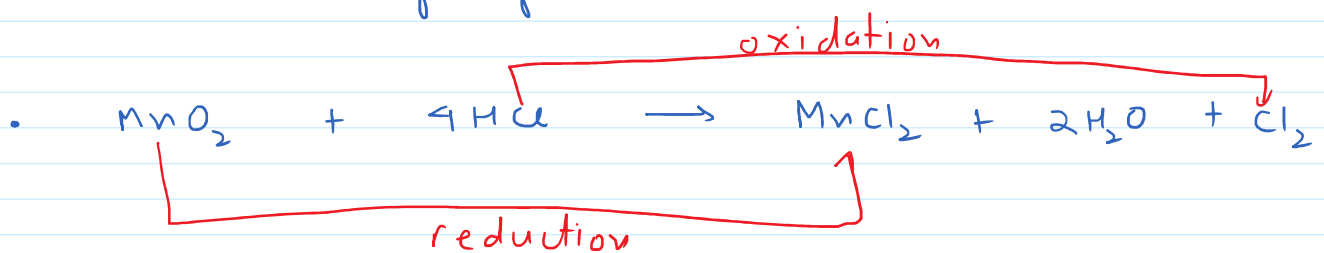
Substance which causes reduction

eg: H_2 in above reaction



$\text{ZnO} \rightarrow$ oxidising agent

$\text{C} \rightarrow$ reducing agent



$\text{MnO}_2 \rightarrow$ oxidising agent

$\text{HCl} \rightarrow$ reducing agent.