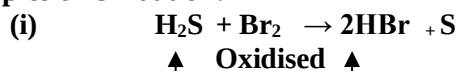
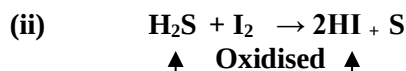


Removal of Hydrogen:**Examples of Oxidation:**

[Sulphur gives/looses Hydrogen and gets oxidised]

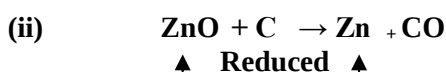


[Sulphur gives/looses Hydrogen and gets oxidised]

Reduction Reaction: Reduction is the loss of oxygen or gain of hydrogen.

The addition of hydrogen to a substance or removal of oxygen from a substance or both is called reduction.

Example of reduction:

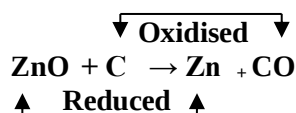


However, both oxidation and reduction occur together.

Redox Reaction

Such reaction in which one reactant gets oxidised while the other gets reduced during a reaction is called **redox reaction**. When oxidation and reduction both take place in same reaction is known as redox reaction.

Example;



Here oxidation and reduction both reactions take place in same reaction.

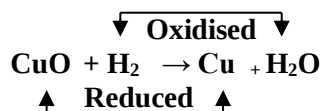
Oxidising Agent/Oxidant/Oxidisers:

The substance which gives oxygen for oxidation or removes hydrogen for reduction is called oxidising agent.

Reducing agent:

The substances which is responsible for removing oxygen or gives Hydrogen for reduction called reducing agent.

Example;



Here in above example CuO is reduced to Cu so reduced substance is CuO. Hence CuO (copper oxide) gives oxygen for oxidation to oxidised H₂ therefore It is a **Oxidising Agent**.

And H₂ is oxidised to H₂O so H₂ Is Oxidised and it is responsible for removing oxygen from CuO (copper oxide) Therefore H₂ (Hydrogen) is Reducing Agent.

Summary:

- | | |
|---|---|
| (a) Oxidised substance : H ₂ | => Which gains in Oxygen |
| (b) Reduced substance: CuO | => Which looses Oxygen |
| (c) Oxidising Agent : CuO | => Which provides Oxygen for oxidation |
| (d) Reducing Agent : H ₂ | => Which is responsible for removal of Oxygen |