Oxidation / Reduction

Reactions.

Oxidation: Occurs when atoms lose electrons.

Reduction: Occurs when atoms gain electrons.

Acronym
OIL RIG : “Oxidation is losing, Reduction is gaining”.

These are called ½ reactions because one cannot happen without the other.

They occur every time a transfer of electrons occur.

Zn + O 🡪 Zn +2 + O -2

Zinc’s 2 valence electrons are transferred over to the oxygen which becomes negative and zinc becomes positive.

Oxidizing agent: is the atom (oxygen) that causes the loss of electrons.

Reducing agent: is the atom (Zinc) that causes the gaining of electrons.