Redox Reactions

Based on the ancient concept

Oxidation = Addition of oxygen / Electronegative element
OR
Removal of hydrogen / Electropositive element

Reduction = Addition of hydrogen / Electropositive element
OR
Removal of oxygen / Electronegative element

Redox Reaction = Oxidation + Reduction

Based on new concepts

Oxidation = Electron ejection

Reduction = Gain of electrons

Normality Relation $N_1 V_1 = N_2 V_2$

Molarity Relation $\frac{M_1 V_1}{n_2} = \frac{M_2 V_2}{n_1}$

N_1 = Normality of Solution 1 , N_2 = Normality of Solution 2
V_1 = Volume of solution 1 , V_2 = Volume of solution 2

M_1 = Molarity of Reducing solution
V_1 = Volume of Reducing solution
M_2 = Molarity of oxidized solution
V_2 = Volume of oxidized solution

Some Chemical compounds names & Molecular Formulas

Compound Name	Molecular Formula	Compound Name	Molecular Formula
Acetic acid	CH_3COOH	Potassium Nitrate	KNO_3
Hydrochloric acid	HCl	Ammonium chloride	NH_4Cl
Sulfuric acid	H_2SO_4	Ammonium hydroxide	NH_4OH
Acetate	CH_3COO^-	Calcium nitrate	$Ca(NO_3)_2$
Ammonia	NH_3	Hydrogen Peroxide	H_2O_2
Nitric acid	HNO_3	Silver Chloride	$AgCl$
Phosphoric acid	H_3PO_4	Barium Sulphate	$BaSO_4$
Sodium Phosphate	Na_3PO_4	Magnesium Sulphate	$MgSO_4$
Calcium carbonate	$CaCO_3$	Sodium Sulphite	Na_2SO_3
Sodium Bicarbonate	$NaHCO_3$	Oxalic acid	$H_2C_2O_4$
Sodium Hydroxide	$NaOH$	Potassium dichromate	$K_2Cr_2O_7$
Calcium Hydroxide	$Ca(OH)_2$	Zinc Chloride	$ZnCl_2$
Ethanol	C_2H_5OH	Zinc hydroxide	$Zn(OH)_2$
Nitrous Acid	HNO_2	Zinc Sulphate	$ZnSO_4$
Potassium Hydroxide	KOH	Phosphorus Pentachloride	PCl_5
Silver nitrate	$AgNO_3$	Sodium nitrite	$NaNO_2$
Sodium Carbonate	Na_2CO_3	Potassium Permagnate	$KMnO_4$
Magnesium Hydroxide	$Mg(OH)_2$	Boric acid	H_3BO_3
Methane	CH_4	Potassium nitrite	KNO_2
Sodium chloride	$NaCl$	Tartaric acid	$C_4H_6O_6$
Carban tetra chloride	CCl_4	Aluminium Hydroxide	$Al(OH)_3$
Sodium Sulphate	Na_2SO_4	Iron oxide	Fe_2O_3