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How to learn valency easily

(For class IX & X)

STEP -1 Learn and memorize the valency of some common element

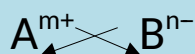
H=1, O=2, Cl=1

STEP -2 Learn and memorize the formula of some common compound.

H₂O, H₂SO₄, CaO, HCl, NaCl

STEP -3 Remember "Valency is written cross"

For A_nB_m valency of A=m and valency of B=n



Now see and learn like written below

Name of Compounds	Formula of compounds	Valency of first element	Valency of second element
Water	H ₂ O	H=1	O=2
Hydrogen chloride	HCl	H=1	Cl=1
Sodium chloride	NaCl	Na=1	Cl=1
Sodium Bromide	NaBr	Na=1	Br=1
Calcium chloride	CaCl ₂	Ca=2	Cl=1
Magnesium Bromide	MgBr ₂	Mg=2	Br=1
Zinc Bromide	ZnBr ₂	Zn=2	Br=1
Zinc Sulphide	ZnS	Zn=2	S=2
Water	H ₂ O	H=1	O=2
Calcium oxide	CaO	Ca=2	O=2
Aluminium oxidess	Al ₂ O ₃	Al=3	O=2

Now you are able to tell valency of Barium in BaCl₂ or valency of Phosphorus in P₂O₅.

Valency of some polyatomic ions

Name of Compound	Formula of Compound	Valency of poly atomic ion	Valency of other element
Ammonium chloride	NH ₄ Cl	NH ₄ =1	Cl=1
Calcium Carbonate	CaCO ₃	CO ₃ =2	Ca=2
Sulphuric acid	H ₂ SO ₄	SO ₄ =2	H=1
Aluminium sulphate	Al ₂ (SO ₄) ₃	SO ₄ =2	Al=3
Phosphoric acid	H ₃ PO ₄	PO ₄ =3	H=1
Sodium Nitrate	NaNO ₃	NO ₃ =1	Na=1
Calcium hydroxide	Ca(OH) ₂	OH=1	Ca=2
Oxalic acid	H ₂ C ₂ O ₄	C ₂ O ₄ =2	H=1
Calcium bi carbonate	Ca(HCO ₃) ₂	HCO ₃ =2	Ca=2
Acetic Acid	CH ₃ COOH	CH ₃ COO=1	H=1
Sodium Acetate	CH ₃ COONa	CH ₃ COO=1	Na=1

Now you are able to tell valency of (NO₃) Ion in NaNO₃, Valency of Aluminium

In Al(OH)₃.

Note–Case of variable valencies are not discussed here.

Monoatomic Cation

Charge / Valency	Name	Ion
1+	Hydrogen	H ⁺
	Lithium	Li ⁺
	Sodium	Na ⁺
	Potassium	K ⁺
	Silver	Ag ⁺
2+	Beryllium	Be ²⁺
	Magnesium	Mg ²⁺
	Calcium	Ca ²⁺
	Strontium	Sr ²⁺
	Barium	Ba ²⁺
3+	Aluminum	Al ³⁺

Monoatomic Anions

Charge / Valency	Name	Ion
1 ⁻	Hydride	H ⁻
	Fluoride	F ⁻
	Chloride	Cl ⁻
	Bromide	Br ⁻
	Iodide	I ⁻
2 ⁻	Oxide	O ²⁻
	Sulfide	S ²⁻
3 ⁻	Nitride	N ³⁻
	Phosphide	P ³⁻

Polyatomic Ions

Name	Ion
Acetate	CH ₃ COO ⁻
Ammonium	NH ₄ ⁺
Bromate	BrO ₃ ⁻
Carbonate	CO ₃ ²⁻
Chlorate	ClO ₃ ⁻
Chlorite	ClO ₂ ⁻
Chromate	CrO ₄ ²⁻
Cyanide	CN ⁻
Dichromate	Cr ₂ O ₇ ²⁻
Dihydrogen Phosphate	H ₂ PO ₄ ⁻
Hydrogen Carbonate (or Bicarbonate)	HCO ₃ ⁻
Hydrogen Phosphate	HPO ₄ ²⁻
Hydrogen Sulfate (or bisulfate)	HSO ₄ ⁻
Hydrogen Sulfide	HS ⁻
Hydroxide	OH ⁻
Hypochlorite	ClO ⁻
Iodate	IO ₃ ⁻
Nitrate	NO ₃ ⁻
Nitrite	NO ₂ ⁻
Oxalate	C ₂ O ₄ ²⁻
Perchlorate	ClO ₄ ⁻
Permanganate	MnO ₄ ⁻
Peroxide	O ₂ ²⁻
Phosphate	PO ₄ ³⁻
Silicate	SiO ₄ ²⁻
Sulfate	SO ₄ ²⁻
Sulfite	SO ₃ ²⁻