

NAMES, FORMULAE AND CHARGES OF SOME COMMON IONS

Positive Ions (Cations)

Aluminum	Al ³⁺
Ammonium	NH ₄ ⁺
Barium	Ba ²⁺
Calcium	Ca ²⁺
Chromium (II), chromous	Cr ²⁺
Chromium (III), chromic	Cr ³⁺
Copper (I), cuprous	Cu ⁺
Copper (II), cupric	Cu ²⁺
Hydrogen, hydronium	H ⁺ , H ₃ O ⁺
Iron (II), ferrous	Fe ²⁺
Iron (III), ferric	Fe ³⁺
Lead	Pb ²⁺
Lithium	Li ⁺
Magnesium	Mg ²⁺
Manganese (II), manganous	Mn ²⁺
Mercury (I), mercurous	Hg ⁺
Mercury (II), mercuric	Hg ²⁺
Potassium	K ⁺
Silver	Ag ⁺
Sodium	Na ⁺
Tin (II), stannous	Sn ²⁺
Tin (IV), stannic	Sn ⁴⁺
Zinc	Zn ²⁺

Negative Ions (Anions)

Acetate	CH ₃ COO ⁻
Bromide	Br ⁻
Carbonate	CO ₃ ²⁻
Hydrogen carbonate, bicarbonate	HCO ₃ ⁻
Chlorate	ClO ₃ ⁻
Chloride	Cl ⁻
Chlorite	ClO ₂ ⁻
Chromate	CrO ₄ ²⁻
Dichromate	Cr ₂ O ₇ ²⁻
Fluoride	F ⁻
Hydroxide	OH ⁻
Hypochlorite	ClO ⁻
Iodide	I ⁻
Nitrate	NO ₃ ⁻
Nitrite	NO ₂ ⁻
Oxalate	C ₂ O ₄ ²⁻
Hydrogen oxalate, (binoxalate)	HC ₂ O ₄ ⁻
Oxide	O ²⁻
Perchlorate	ClO ₄ ⁻
Pemanganate	MnO ₄ ⁻
Phosphate	PO ₄ ³⁻
Monohydrogen phosphate	HPO ₄ ²⁻
Dihydrogen phosphate	H ₂ PO ₄ ⁻
Sulphate	SO ₄ ²⁻
Hydrogen sulphate, bisulphate	HSO ₄ ⁻
Sulphide	S ²⁻
Hydrogen sulphide, bisulphide	HS ⁻
Sulphite	SO ₃ ²⁻
Hydrogen sulphite, bisulphite	HSO ₃ ⁻

PERIODIC TABLE OF THE ELEMENTS

1 I A																									18 VIII
1 H 1.01												13 III A	14 IV A	15 V A	16 VI A	17 VII A	2 He 4.00								
3 Li 6.94	4 Be 9.01											5 B 10.8	6 C 12.0	7 N 14.0	8 O 16.0	9 F 19.0	10 Ne 20.2								
11 Na 23.0	12 Mg 24.3	3 III B	4 IV B	5 V B	6 VI B	7 VII B	8 VIII	9 VIII	10 VIII	11 I B	12 II B	13 Al 27.0	14 Si 28.1	15 P 31.0	16 S 32.1	17 Cl 35.5	18 Ar 39.9								
19 K 39.1	20 Ca 40.1	21 Sc 45.0	22 Ti 47.9	23 V 50.9	24 Cr 52.0	25 Mn 54.9	26 Fe 55.8	27 Co 58.9	28 Ni 58.7	29 Cu 63.5	30 Zn 65.4	31 Ga 69.7	32 Ge 72.6	33 As 74.9	34 Se 79.0	35 Br 79.9	36 Kr 83.8								
37 Rb 85.5	38 Sr 87.6	39 Y 88.9	40 Zr 91.2	41 Nb 92.9	42 Mo 95.9	43 Tc (98)	44 Ru 101.1	45 Rh 102.9	46 Pd 106.4	47 Ag 107.9	48 Cd 112.4	49 In 114.8	50 Sn 118.7	51 Sb 121.7	52 Te 127.6	53 I 126.9	54 Xe 131.3								
55 Cs 132.9	56 Ba 137.3	57 La 138.9	72 Hf 178.5	73 Ta 180.9	74 W 183.8	75 Re 186.2	76 Os 190.2	77 Ir 192.2	78 Pt 195.1	79 Au 187.0	80 Hg 200.6	81 Tl 204.4	82 Pb 207.2	83 Bi 209.0	84 Po (210)	85 At (210)	86 Rn (222)								
87 Fr (223)	88 Ra (226)	89 Ac (227)	104	105	106	107	108	109																	

Lanthanum Series

58 Ce 140.1	59 Pr 140.9	60 Nd 144.2	61 Pm (145)	62 Sm 150.4	63 Eu 152.0	64 Gd 157.2	65 Tb 158.9	66 Dy 162.5	67 Ho 164.9	68 Er 167.3	69 Tm 168.9	70 Yb 173.0	71 Lu 175.0
90 Th 232.0	91 Pa (231)	92 U 238.0	93 Np (237)	94 Pu (244)	95 Am (243)	96 Cm (247)	97 Bk (247)	98 Cf (251)	99 Es (254)	100 Fm (257)	101 Md (256)	102 No (259)	103 Lr (257)

Actinium Series