

# PERIODIC TABLE OF ELEMENTS IN CHEMISTRY

## Canadian Edition

Teacher Version

Atomic Number	Valence Charge
Symbol	Element Name
Molar Mass	

1 IA 1A																	2 IIIA 3A	13 IIIA 3A	14 IVA 4A	15 VA 5A	16 VIA 6A	17 VIIA 7A	18 VIIIA 8A												
1 -1, +1																	2 0	5 +3	6 +4,+3,+2,+1 -4,-3 -2,-1	7 +5,+3,-3	8 -2	9 -1	10 0												
1 H Hydrogen 1.008																	2 He Helium 4.003	5 B Boron 10.811	6 C Carbon 12.011	7 N Nitrogen 14.007	8 O Oxygen 15.999	9 F Fluorine 18.998	10 Ne Neon 20.180												
3 +1	4 +2											11 +1	12 +2																	13 +3	14 +4,+4	15 +5,+3,-3	16 +6,+4,+2,-2	17 +7,+5,+3,+1 -1	18 0
3 Li Lithium 6.941	4 Be Beryllium 9.012											11 Na Sodium 22.990	12 Mg Magnesium 24.305																	13 Al Aluminum 26.982	14 Si Silicon 28.086	15 P Phosphorus 30.974	16 S Sulfur 32.066	17 Cl Chlorine 35.453	18 Ar Argon 39.948
19 +1	20 +2	21 +3	22 +4	23 +5	24 +6,+3	25 +7,+4,+2	26 +6,+3,+2	27 +3,+2	28 +2	29 +2	30 +2	31 +3	32 +4,+2,-4	33 +5,+3,-3	34 +6,+4,+2,-2	35 +7,+5,+3,+1 -1	36 +2,0																		
19 K Potassium 39.098	20 Ca Calcium 40.078	21 Sc Scandium 44.956	22 Ti Titanium 47.88	23 V Vanadium 50.942	24 Cr Chromium 51.996	25 Mn Manganese 54.938	26 Fe Iron 55.845	27 Co Cobalt 58.933	28 Ni Nickel 58.693	29 Cu Copper 63.546	30 Zn Zinc 65.38	31 Ga Gallium 69.723	32 Ge Germanium 72.631	33 As Arsenic 74.922	34 Se Selenium 78.971	35 Br Bromine 79.904	36 Kr Krypton 84.798																		
37 +1	38 +2	39 +3	40 +4	41 +5	42 +6,+4	43 +7,+4	44 +4,+3	45 +3	46 +4,+2	47 +1	48 +2	49 +3	50 +4,+2,-4	51 +5,+3,-3	52 +6,+4,+2,-2	53 +7,+5,+3,+1 -1	54 +6,+4,+2,0																		
37 Rb Rubidium 85.468	38 Sr Strontium 87.62	39 Y Yttrium 88.906	40 Zr Zirconium 91.224	41 Nb Niobium 92.906	42 Mo Molybdenum 95.95	43 Tc Technetium 98.907	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.906	46 Pd Palladium 106.42	47 Ag Silver 107.868	48 Cd Cadmium 112.414	49 In Indium 114.818	50 Sn Tin 118.711	51 Sb Antimony 121.760	52 Te Tellurium 127.6	53 I Iodine 126.904	54 Xe Xenon 131.294																		
55 +1	56 +2	57-71 continued...	72 +4	73 +5	74 +6,+4	75 +4	76 +4	77 +4,+3	78 +4,+2	79 +3	80 +2,+1	81 +3,+1	82 +4,+2	83 +3	84 +4,+2,-2	85 +1,-1	86 +2,0																		
55 Cs Cesium 132.905	56 Ba Barium 137.328	57-71 continued...	72 Hf Hafnium 178.49	73 Ta Tantalum 180.948	74 W Tungsten 183.85	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.22	78 Pt Platinum 195.08	79 Au Gold 196.967	80 Hg Mercury 200.59	81 Tl Thallium 204.383	82 Pb Lead 207.2	83 Bi Bismuth 208.980	84 Po Polonium [208.982]	85 At Astatine 209.987	86 Rn Radon 222.018																		
87 +1	88 +2	89-103 continued...	104 +4	105 +5	106 +6	107 +7	108 +8	109 unknown	110 unknown	111 unknown	112 +2	113 unknown	114 unknown	115 unknown	116 unknown	117 unknown	118 unknown																		
87 Fr Francium 223.020	88 Ra Radium 226.025	89-103 continued...	104 Rf Rutherfordium [261]	105 Db Dubnium [262]	106 Sg Seaborgium [266]	107 Bh Bohrium [264]	108 Hs Hassium [269]	109 unknown Mt Meitnerium [278]	110 unknown Ds Darmstadtium [281]	111 unknown Rg Roentgenium [280]	112 Cn Copernicium [285]	113 unknown Nh Nihonium [286]	114 unknown Fl Flerovium [289]	115 unknown Mc Moscovium [289]	116 unknown Lv Livermorium [293]	117 unknown Ts Tennessine [294]	118 unknown Og Oganesson [294]																		

Lanthanide Series	57 +3	58 +4,+3	59 +3	60 +3	61 +3	62 +3	63 +3,+2	64 +3	65 +3	66 +3	67 +3	68 +3	69 +3	70 +3	71 +3
Lanthanide Series	57 La Lanthanum 138.905	58 Ce Cerium 140.116	59 Pr Praseodymium 140.908	60 Nd Neodymium 144.243	61 Pm Promethium 144.913	62 Sm Samarium 150.36	63 Eu Europium 151.964	64 Gd Gadolinium 157.25	65 Tb Terbium 158.925	66 Dy Dysprosium 162.500	67 Ho Holmium 164.930	68 Er Erbium 167.259	69 Tm Thulium 168.934	70 Yb Ytterbium 173.055	71 Lu Lutetium 174.967
Actinide Series	89 +3	90 +4	91 +5	92 +6	93 +5	94 +4	95 +3	96 +3	97 +3	98 +3	99 +3	100 +3	101 +3	102 +2	103 +3
Actinide Series	89 Ac Actinium 227.028	90 Th Thorium 232.038	91 Pa Protactinium 231.036	92 U Uranium 238.029	93 Np Neptunium 237.048	94 Pu Plutonium 244.064	95 Am Americium 243.061	96 Cm Curium 247.070	97 Bk Berkelium 247.070	98 Cf Californium 251.080	99 Es Einsteinium [254]	100 Fm Fermium 257.095	101 Md Mendelevium 258.1	102 No Nobelium 259.101	103 Lr Lawrencium [262]

- Alkali Metal
- Alkaline Earth
- Transition Metal
- Basic Metal
- Metalloid
- Nonmetal
- Halogen
- Noble Gas
- Lanthanide
- Actinide