

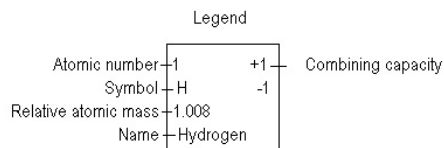
I A																		VIII	
1 +1 H -1 1.008 Hydrogen	II A											2 0 He 4.003 Helium							
3 +1 Li 6.939 Lithium	4 +2 Be 9.012 Beryllium											5 +3 B 10.81 Boron	6 +4 C 12.01 Carbon	7 -3 N 14.01 Nitrogen	8 -2 O 16.00 Oxygen	9 -1 F 19.00 Fluorine	10 0 Ne 20.18 Neon		
11 +1 Na 22.99 Sodium	12 +2 Mg 24.31 Magnesium	III A	IV B	V B	VI B	VII B	VIII ----			IB	II B	13 +3 Al 26.98 Aluminum	14 +4 Si 28.09 Silicon	15 -3 P 30.97 Phosphorus	16 -2 S +4 32.06 +6 Sulphur	17 -1 Cl 35.45 Chlorine	18 0 Ar 39.95 Argon		
19 +1 K 39.10 Potassium	20 +2 Ca 40.08 Calcium	21 +3 Sc 44.96 Scandium	22 +2 Ti +3 47.90 +4 Titanium	23 +2 V +3 50.94 +4 Vanadium	24 +2 Cr +3 52.00 Chromium	25 +2 Mn +3 54.94 Manganese	26 +2 Fe +3 55.85 Iron	27 +2 Co +3 58.93 Cobalt	28 +2 Ni +3 58.71 Nickel	29 +1 Cu +2 63.55 Copper	30 +2 Zn 65.38 Zinc	31 +3 Ga 69.72 Gallium	32 +4 Ge 72.59 Germanium	33 -3 As +5 74.92 Arsenic	34 -2 Se +4 78.96 +6 Selenium	35 -1 Br 79.91 Bromine	36 0 Kr 83.80 Krypton		
37 +1 Rb 85.47 Rubidium	38 +2 Sr 87.62 Strontium	39 +3 Y 88.91 Yttrium	40 +4 Zr 91.22 Zirconium	41 +3 Nb +5 92.91 Niobium	42 +2 Mo +3 95.94 Molybdenum	43 +7 Tc 98.91 Technetium	44 +3 Ru +4 101.1 Ruthenium	45 +3 Rh +4 102.9 Rhodium	46 +2 Pd +4 106.4 Palladium	47 +1 Ag 107.9 Silver	48 +2 Cd 112.4 Cadmium	49 +3 In 114.8 Indium	50 +2 Sn +4 118.7 Tin	51 -3 Sb +5 121.8 Antimony	52 -2 Te +4 127.6 +6 Tellurium	53 -1 I 126.9 Iodine	54 0 Xe 131.3 Xenon		
55 +1 Cs 132.9 Cesium	56 +2 Ba 137.3 Barium	71 +3 Lu 175.0 Lutetium	72 +4 Hf 178.5 Hafnium	73 +5 Ta 180.9 Tantalum	74 +6 W 183.9 Tungsten	75 +4 Re +7 186.2 Rhenium	76 +3 Os +4 190.2 Osmium	77 +3 Ir +4 192.2 Iridium	78 +2 Pt +4 195.1 Platinum	79 +1 Au +3 197.0 Gold	80 +1 Hg +2 200.6 Mercury	81 +1 Tl +3 204.4 Thallium	82 +2 Pb +4 207.2 Lead	83 -3 Bi +5 209.0 Bismuth	84 +2 Po +4 (209) Polonium	85 -1 At (210) Astatine	86 0 Rn (222) Radon		
87 +1 Fr (223) Francium	88 +2 Ra 226.0 Radium	103 +3 Lr (262) Lawrencium	104 Rf 261.11 Rutherfordium	105 Db 262.11 Dubnium	106 Sg 263.12 Seaborgium	107 Bh 262.12 Bohrium	108 Hs (265) Hassium	109 Mt (266) Meitnerium	110 Ds (281) Darmstadtium	111 Rg (272) Roentgenium	112 Uub (285) Ununbium	113 Uut (284) Ununtrium	114 Uuq (289) Ununquadium	115 Uup (288) Ununpentium	116 Uuh (292) Ununhexium		118 Uuo (293) Ununoctium		
		57 +3 La 138.9 Lanthanum	58 +3 Ce +4 140.01 Cerium	59 +3 Pr +4 140.9 Praseodymium	60 +3 Nd 144.2 Neodymium	61 +3 Pm (145) Promethium	62 +2 Sm +4 150.4 Samarium	63 +2 Eu +3 152.0 Europium	64 +3 Gd 157.3 Gadolinium	65 +3 Tb +4 158.9 Terbium	66 +3 Dy 162.5 Dysprosium	67 +3 Ho 164.9 Holmium	68 +3 Er 167.3 Erbium	69 +2 Tm +3 168.9 Thulium	70 +2 Yb +3 173.0 Ytterbium				
		89 +3 Ac (227) Actinium	90 +4 Th 232.0 Thorium	91 +4 Pa +5 (231) Protactinium	92 +4 U +5 238.03 +6 Uranium	93 +3 Np +4 (237) +5 +6 Neptunium	94 +3 Pu +4 (244) +5 +6 Plutonium	95 +3 Am +4 (243) +5 +6 Americium	96 +3 Cm (247) Curium	97 +3 Bk +4 (247) Berkelium	98 +3 Cf (251) Californium	99 +3 Es (252) Einsteinium	100 +3 Fm (257) Fermium	101 +2 Md +3 (258) Mendelevium	102 +2 No +3 (259) Nobelium				

Colour Legend:

Solid Liquid Gas Synthetic

Non metals
Alkali metals
Alkaline earth metals
Transition metals

Other metals
Halogens
Noble gases
Lanthanides
Actinides



Polyatomic Ions

(CNDS BC P PHANS)

ClO_3^{-1} = chlorate NO_3^{-1} = nitrate
 $\text{Cr}_2\text{O}_7^{-2}$ = dichromate SO_4^{-2} = sulphate
 HCO_3^{-1} = bicarbonate CO_3^{-2} = carbonate
 PO_4^{-3} = phosphate PO_3^{-3} = phosphite
 OH^{-1} = hydroxide NH_4^{+1} = ammonium
 NO_2^{-1} = nitrite SO_3^{-2} = sulfite

http://www.nrc-cnrc.gc.ca/randd/education/elements/index_e.html

Periodic Table of the Elements - National Research Council Canada

<http://members.shaw.ca/cpf99/Periodic-Table-Info-Anvil-City-Science-Academy.htm>

Predicting Types of Bonds (capacity).

Anvil City Science Academy, Nome, Alaska