CDH
A World of Fine Chemicals

Non-Metals | Alkali Metals | Alkaline Earth Metals | Transition Metals
Isotopes | Lanthanides | Actinides | Noble Gases | Other Metals

PERIODIC TABLE OF THE ELEMENTS

1/IA	2/IIA	3/IIIB	4/IVB	5/VB	6/VIB	7/VIIB	8/VIII	9/VIII	10/VIII	11/IB	12/IIB	13/IIIA	14/IVA	15/VA	16/VIA	17/VIIA	18/VIIIA/0
+1 **H** 1 1.00794 1 Hydrogen																	0 **He** 2 4.002602 2 Helium
+1 **Li** 3 6.941 2-1 Lithium	+2 **Be** 4 9.012182 2-2 Beryllium											+3 **B** 5 10.811 2-3 Boron	+2 ±4 **C** 6 12.011 2-4 Carbon	±1 ±2 ±3 +4 +5 **N** 7 14.00674 2-5 Nitrogen	-2 **O** 8 15.9994 2-6 Oxygen	-1 **F** 9 18.9984032 2-7 Fluorine	0 **Ne** 10 20.1797 2-8 Neon
+1 **Na** 11 22.989768 2-8-1 Sodium	+2 **Mg** 12 24.3050 2-8-2 Magnesium											+3 **Al** 13 26.981539 2-8-3 Aluminium	+2 ±4 **Si** 14 28.0855 2-8-4 Silicon	±3 +5 **P** 15 30.973762 2-8-5 Phosphorus	+4 +6 -2 **S** 16 32.066 2-8-6 Sulphur	±1 +5 +7 **Cl** 17 35.4527 2-8-7 Chlorine	0 **Ar** 18 39.948 2-8-8 Argon
+1 **K** 19 39.0983 -8-8-1 Potassium	+2 **Ca** 20 40.078 -8-8-2 Calcium	+3 **Sc** 21 44.955910 -8-9-2 Scandium	+2 +3 +4 **Ti** 22 47.867 -8-10-2 Titanium	+2 +3 +4 +5 **V** 23 50.9415 -8-11-2 Vanadium	+2 +3 +6 **Cr** 24 51.9961 -8-13-1 Chromium	+2 +3 +4 +7 **Mn** 25 54.93805 -8-13-2 Manganese	+2 +3 **Fe** 26 55.845 -8-14-2 Iron	+2 +3 **Co** 27 58.93320 -8-15-2 Cobalt	+2 +3 **Ni** 28 58.6934 -8-16-2 Nickel	+1 +2 **Cu** 29 63.546 -8-18-1 Copper	+2 **Zn** 30 65.39 -8-18-2 Zinc	+3 **Ga** 31 69.723 -8-18-3 Gallium	+2 +4 **Ge** 32 72.61 -8-18-4 Germanium	±3 +5 **As** 33 74.92159 -8-18-5 Arsenic	+4 +6 -2 **Se** 34 78.96 -8-18-6 Selenium	±1 +5 **Br** 35 79.904 -8-18-7 Bromine	0 **Kr** 36 83.80 -8-18-8 Krypton
+1 **Rb** 37 85.4678 -18-8-1 Rubidium	+2 **Sr** 38 87.62 -18-8-2 Strontium	+3 **Y** 39 88.90585 -18-9-2 Yttrium	+4 **Zr** 40 91.224 -18-10-2 Zirconium	+3 +5 **Nb** 41 92.90638 -18-12-1 Niobium	+6 **Mo** 42 95.94 -18-13-1 Molybdenum	+4 +6 +7 **Tc** 43 (97.9072) -18-13-2 Technetium	+3 **Ru** 44 101.07 -18-15-1 Ruthenium	+3 **Rh** 45 102.90550 -18-16-1 Rhodium	+2 +4 **Pd** 46 106.42 -18-18-0 Palladium	+1 **Ag** 47 107.8682 -18-18-1 Silver	+2 **Cd** 48 112.411 -18-18-2 Cadmium	+3 **In** 49 114.818 -18-18-3 Indium	+2 +4 **Sn** 50 118.710 -18-18-4 Tin	±3 +5 **Sb** 51 121.760 -18-18-5 Antimony	+4 +6 -2 **Te** 52 127.60 -18-18-6 Tellurium	±1 +5 +7 **I** 53 126.90447 -18-18-7 Iodine	0 **Xe** 54 131.29 -18-18-8 Xenon
+1 **Cs** 55 132.90543 -18-8-1 Cesium	+2 **Ba** 56 137.327 -18-8-2 Barium	**57-71** See Lantha- nides	+4 **Hf** 72 178.49 -32-10-2 Hafnium	+5 **Ta** 73 180.9479 -32-11-2 Tantalum	+6 **W** 74 183.84 -32-12-2 Tungsten	+4 +6 +7 **Re** 75 186.207 -32-13-2 Rhenium	+3 +4 **Os** 76 190.2 -32-14-2 Osmium	+3 +4 **Ir** 77 192.217 -32-15-2 Iridium	+2 +4 **Pt** 78 195.08 -32-16-2 Platinum	+1 +3 **Au** 79 196.96654 -32-18-1 Gold	+1 +2 **Hg** 80 200.59 -32-18-2 Mercury	+1 +3 **Tl** 81 204.3833 -32-18-3 Thallium	+2 +4 **Pb** 82 207.2 -32-18-4 Lead	+3 +5 **Bi** 83 208.98037 -32-18-5 Bismuth	+2 +4 **Po** 84 (208.9824) -32-18-6 Polonium	±1 +5 +7 **At** 85 (209.9871) -32-18-7 Astatine	0 **Rn** 86 (222.0176) -32-18-8 Radon
+1 **Fr** 87 (223.0197) -18-8-1 Francium	+2 **Ra** 88 (226.0254) -18-8-2 Radium	**89-103** See Actinides	+4 **•*Rf** 104 (261.11) -32-10-2 Rutherfordium	**•*Db** 105 (262.114) -32-11-2 Dubnium	**•*Sg** 106 (263.118) -32-12-2 Seaborgium	**•*Bh** 107 (262.12) -32-13-2 Bohrium	**•Hs** 108 -32-14-2 Hassium	**•*Mt** 109 266.00 -32-15-2 Meitnerium	**110** ***Uun** 269.00 -32-16-2 Ununnilium	**111** ***Uuu** 272.00 Unununium	**112** ***Uub** 277.00 Ununbium	**113** **Uut**	**114** ***Uuq** 285.00 Ununquadium	**115** **Uup**	**116** ***Uuh** 289.00 Ununhexium	**117** **Uus**	**118** ***Uuo** 293.00 Ununoctium

Key

Common Oxidation States → +1 **19** ← Atomic Number
K ← Atomic Symbol
39.0983 ← Atomic Weight
Electron Configuration of Outer Shells → 8-8-1

Elements 104-118 : Relatively recent elements. Based on 1987 IUPAC Table of standard atomic weights of the elements updated for the information available till 1997.
*Relative atomic mass of the isotope of that elements of longest known half-life. • IUPAC recommendations 1997

+3 **La** 57 138.9055 -18-9-2 Lanthanum	+3 +4 **Ce** 58 140.115 -20-8-2 Cerium	+3 **Pr** 59 140.90765 -21-8-2 Praseodymium	+3 **Nd** 60 144.24 -22-8-2 Neodymium	+3 **Pm** 61 (144.9127) -23-8-2 Promethium	+2 +3 **Sm** 62 150.36 -24-8-2 Samarium	+2 +3 **Eu** 63 151.965 -25-8-2 Europium	+3 **Gd** 64 157.25 -25-9-2 Gadolinium	+3 **Tb** 65 158.92534 -27-8-2 Terbium	+3 **Dy** 66 162.50 -28-8-2 Dysprosium	+3 **Ho** 67 164.93032 -29-8-2 Holmium	+3 **Er** 68 167.26 -30-8-2 Erbium	+3 **Tm** 69 168.93421 -31-8-2 Thulium	+2 +3 **Yb** 70 173.04 -32-8-2 Ytterbium	+3 **Lu** 71 174.967 -32-9-2 Lutetium
+3 **Ac** 89 (227.0278) -18-9-2 Actinium	+4 **Th** 90 232.0381 -18-10-2 Thorium	+4 +5 **Pa** 91 (231.0388) -20-9-2 Protactinium	+3 +4 +5 +6 **U** 92 238.0289 -21-9-2 Uranium	+3 +4 +5 +6 **Np** 93 (237.0482) -22-9-2 Neptunium	+3 +4 +5 +6 **Pu** 94 (244.0642) -24-8-2 Plutonium	+3 +4 +5 +6 **Am** 95 (243.0614) -25-8-2 Americium	+3 **Cm** 96 (247.0703) -25-9-2 Curium	+3 +4 **Bk** 97 (247.0703) -27-8-2 Berkelium	+3 **Cf** 98 (251.0796) -28-8-2 Californium	+3 **Es** 99 (252.083) -29-8-2 Einsteinium	+3 **Fm** 100 (257.0951) -30-8-2 Fermium	+2 +3 **Md** 101 (258.10) -31-8-2 Mendelevium	+2 +3 **No** 102 (259.1009) -32-8-2 Nobelium	+3 **Lr** 103 (262.11) -32-9-2 Lawrencium