

# The Periodic Table of the Elements

		Groups										Groups						18	
1	1 Hydrogen <b>H</b> 1.0079 1																	2 Helium <b>He</b> 4.0026 2	
2	3 Lithium <b>Li</b> 6.941 2,1	4 Beryllium <b>Be</b> 9.0128 2,2											5 Boron <b>B</b> 10.81 2,3	6 Carbon <b>C</b> 12.011 2,4	7 Nitrogen <b>N</b> 14.0067 2,5	8 Oxygen <b>O</b> 15.9994 2,6	9 Fluorine <b>F</b> 18.9984 2,7	10 Neon <b>Ne</b> 20.179 2,8	
3	11 Sodium <b>Na</b> 22.9898 2,8,1	12 Magnesium <b>Mg</b> 24.305 2,8,2											13 Aluminum <b>Al</b> 26.9815 2,8,3	14 Silicon <b>Si</b> 28.0855 2,8,4	15 Phosphorus <b>P</b> 30.9738 2,8,5	16 Sulfur <b>S</b> 32.06 2,8,6	17 Chlorine <b>Cl</b> 35.453 2,8,7	18 Argon <b>Ar</b> 39.948 2,8,8	
4	19 Potassium <b>K</b> 39.0983 2,8,8,1	20 Calcium <b>Ca</b> 40.08 2,8,18,2	21 Scandium <b>Sc</b> 44.9559 2,8,9,2	22 Titanium <b>Ti</b> 47.88 2,8,10,2	23 Vanadium <b>V</b> 50.9415 2,8,11,2	24 Chromium <b>Cr</b> 51.996 2,8,13,1	25 Manganese <b>Mn</b> 54.9380 2,8,13,2	26 Iron <b>Fe</b> 55.847 2,8,14,2	27 Cobalt <b>Co</b> 58.9332 2,8,15,2	28 Nickel <b>Ni</b> 58.69 2,8,16,2	29 Copper <b>Cu</b> 63.546 2,8,18,1	30 Zinc <b>Zn</b> 65.39 2,8,18,2	31 Gallium <b>Ga</b> 69.72 2,8,18,3	32 Germanium <b>Ge</b> 72.59 2,8,18,4	33 Arsenic <b>As</b> 74.9216 2,8,18,5	34 Selenium <b>Se</b> 78.96 2,8,18,6	35 Bromine <b>Br</b> 79.904 2,8,18,7	36 Krypton <b>Kr</b> 83.80 2,8,18,8	
5	37 Rubidium <b>Rb</b> 85.4678 2,8,18,8,1	38 Strontium <b>Sr</b> 87.62 2,8,18,8,2	39 Yttrium <b>Y</b> 88.9059 2,8,18,9,2	40 Zirconium <b>Zr</b> 91.224 2,8,18,10,2	41 Niobium <b>Nb</b> 92.9064 2,8,18,12,1	42 Molybdenum <b>Mo</b> 95.94 2,8,18,13,1	43 Technetium <b>Tc</b> (98)	44 Ruthenium <b>Ru</b> 101.07 2,8,18,15,1	45 Rhodium <b>Rh</b> 102.906 2,8,18,16,1	46 Palladium <b>Pd</b> 106.42 2,8,18,18	47 Silver <b>Ag</b> 107.868 2,8,18,18,1	48 Cadmium <b>Cd</b> 112.41 2,8,18,18,2	49 Indium <b>In</b> 114.82 2,8,18,18,3	50 Tin <b>Sn</b> 118.71 2,8,18,18,4	51 Antimony <b>Sb</b> 121.75 2,8,18,18,5	52 Tellurium <b>Te</b> 127.60 2,8,18,18,6	53 Iodine <b>I</b> 126.905 2,8,18,18,7	54 Xenon <b>Xe</b> 131.29 2,8,18,18,8	
6	55 Cesium <b>Cs</b> 132.905 2,8,18,18,8,1	56 Barium <b>Ba</b> 137.33 2,8,18,18,8,2	Elements 57 to 71*		72 Hafnium <b>Hf</b> 178.49 2,8,18,32,10,2	73 Tantalum <b>Ta</b> 180.948 2,8,18,32,11,2	74 Tungsten <b>W</b> 183.85 2,8,18,32,12,2	75 Rhenium <b>Re</b> 186.207 2,8,18,32,13,2	76 Osmium <b>Os</b> 190.2 2,8,18,32,14,2	77 Iridium <b>Ir</b> 192.22 2,8,18,32,15,2	78 Platinum <b>Pt</b> 195.08 2,8,18,32,17,1	79 Gold <b>Au</b> 196.967 2,8,18,32,18,1	80 Mercury <b>Hg</b> 200.59 2,8,18,32,18,2	81 Thallium <b>Tl</b> 204.383 2,8,18,32,18,3	82 Lead <b>Pb</b> 207.2 2,8,18,32,18,4	83 Bismuth <b>Bi</b> 208.980 2,8,18,32,18,5	84 Polonium <b>Po</b> (209)	85 Astatine <b>At</b> (210)	86 Radon <b>Rn</b> (222)
7	87 Francium <b>Fr</b> (223)	88 Radium <b>Ra</b> 226.025 2,8,18,32,18,8,2	Elements 89 to 103**		104 Rutherfordium <b>Rf</b> 261.0 (259)	105 Dubnium <b>Db</b> 262.0 (261)	106 Seaborgium <b>Sg</b> 262.0 259	107 Bohrium <b>Bh</b> (262)	108 Hassium <b>Hs</b> (265.0)	109 Meitnerium <b>Mt</b> (266.0)	110 Ununnilium <b>Uun</b> (269.0)	111 Unununium <b>Uuu</b> (272.0)	112 Ununbium <b>Uub</b> (277.0)						
Periods	6	* 57 Lanthanum <b>La</b> 138.906 2,8,18,18,9,2	58 Cerium <b>Ce</b> 140.12 2,8,18,20,8,2	59 Praseodymium <b>Pr</b> 140.908 2,8,18,21,8,2	60 Neodymium <b>Nd</b> 144.24 2,8,18,22,8,2	61 Promethium <b>Pm</b> (145)	62 Samarium <b>Sm</b> 150.36 2,8,18,24,8,2	63 Europium <b>Eu</b> 151.96 2,8,18,25,8,2	64 Gadolinium <b>Gd</b> 157.25 2,8,18,25,9,2	65 Terbium <b>Tb</b> 158.925 2,8,18,27,8,2	66 Dysprosium <b>Dy</b> 162.50 2,8,18,28,8,2	67 Holmium <b>Ho</b> 164.930 2,8,18,29,8,2	68 Erbium <b>Er</b> 167.26 2,8,18,30,8,2	69 Thulium <b>Tm</b> 168.934 2,8,18,31,8,2	70 Ytterbium <b>Yb</b> 173.04 2,8,18,32,8,2	71 Lutetium <b>Lu</b> 174.967 2,8,18,32,9,2			
	7	** 89 Actinium <b>Ac</b> 227.028 2,8,18,32,18,9,2	90 Thorium <b>Th</b> 232.038 2,8,18,32,18,10,2	91 Protactinium <b>Pa</b> 231.036 2,8,18,32,20,9,2	92 Uranium <b>U</b> 238.029 2,8,18,32,21,9,2	93 Neptunium <b>Np</b> 237.048 2,8,18,32,22,9,2	94 Plutonium <b>Pu</b> (244)	95 Americium <b>Am</b> (243)	96 Curium <b>Cm</b> (247)	97 Berkelium <b>Bk</b> (247)	98 Californium <b>Cf</b> (251)	99 Einsteinium <b>Es</b> (252)	100 Fermium <b>Fm</b> (257)	101 Mendelevium <b>Md</b> (258)	102 Nobelium <b>No</b> (259)	103 Lawrencium <b>Lr</b> (260)			

