

Periodic Table of the Elements

In the periodic table the elements are arranged in order of increasing atomic number. Vertical columns are headed by Roman numerals and are called *Groups*. A horizontal sequence of elements is called a *Period*. The most active elements are at the top right and bottom left of the table. The staggered line (Groups IIIA-VIIA) roughly separates metallic from non-metallic elements.

Groups—Elements within a group have similar properties and contain the same number of electrons in their outside energy shell.

—The first group (IA) includes hydrogen

and the alkali metals.

—The last (VIIA) contains the *inert gases*.

—Group VIIA includes the *halogens*.

—The elements intervening between groups IIA and IIIA are called *transition elements*.

—Short vertical columns without Roman numeral headings are called *subgroups*.

Periods—In a given period the properties of the elements gradually pass from a strong metallic to a strong non-metallic nature, with the last number of a period being an inert gas.

NON METALS

PERIODIC TABLE OF CHEMICAL ELEMENTS

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Hydrogen 1.0080 H 1	Lithium 6.939 Li 3	Beryllium 9.012 Be 4																	Helium 4.003 He 2	
Sodium 22.990 Na 11	Magnesium 24.312 Mg 12																	Fluorine 18.998 F 9	Neon 20.183 Ne 10	
Potassium 39.102 K 19	Calcium 40.08 Ca 20	Scandium 44.956 Sc 21	Titanium 47.90 Ti 22	Vanadium 50.942 V 23	Chromium 51.996 Cr 24	Manganese 54.938 Mn 25	Iron 55.847 Fe 26	Cobalt 58.933 Co 27	Nickel 58.71 Ni 28	Copper 63.54 Cu 29	Zinc 65.37 Zn 30	Gallium 69.72 Ga 31	Germanium 72.59 Ge 32	Indium 114.82 In 49	Tin 118.69 Sn 50	Antimony 121.75 Sb 51	Tellurium 127.60 Te 52	Iodine 126.90 I 53	Xenon 131.30 Xe 54	
Rubidium 85.47 Rb 37	Sr 87.62 38	Yttrium 88.905 Y 39	Zirconium 91.22 Zr 40	Niobium 92.906 Nb 41	Molybdenum 95.94 Mo 42	Technetium (99) Tc 43	Ruthenium 101.07 Ru 44	Rhodium 102.91 Rh 45	Palladium 106.4 Pd 46	Silver 107.87 Ag 47	Cadmium 112.40 Cd 48	Mercury 200.59 Hg 80	Thallium 204.37 Tl 81	Lead 207.19 Pb (82)	Bismuth 208.98 Bi 83	Po (210) 84	Astatine (210) At 85	Radon (222) Rn 86		
Cesium 132.90 Cs 55	Ba 137.34 56																			
Francium 223 Fr 87	Ra (226) 88																			
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Lanthanum 138.91 La 57	Cerium 140.12 Ce 58	Praseodymium 140.91 Pr 59	Nd 144.24 60	Pm (147) 61	Samarium 150.35 Sm 62	Europium 151.96 Eu 63	Gadolinium 157.25 Gd 64	Tb 158.92 65	Dy 162.50 66	Ho 164.93 67	Er 167.26 68	Thulium 168.93 Tm 69	Ytterbium 173.04 Yb 70	Lutetium 174.97 Lu 71					
Actinium 227 Ac 89	Th 232.04 90	Pa (231) 91	U 238.03 92	Np (237) 93	Pu (242) 94	Am (243) 95	Cm (247) 96	Bk (249) 97	Cf (251) 98	Es (254) 99	Fm (257) 100	Md (258) 101	No (259) 102	Lr (262) 103					

Key

Information	Color
Name of Element	Red
Atomic Weight	Yellow
Atomic Symbol	Black
Atomic Number	Green

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Name of Element Red
Atomic Weight Yellow
Atomic Symbol Black
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