

The Periodic Table of Elements

IA	IIA	IIIB	IVB	VB	VIB	VII B	VIII B			IB	II B	IIIA	IVA	VA	VIA	VII A	VIIIA
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

+1																		0			
1 H Hydrogen 1.01 ∞ +1																	2 He Helium 4.00 0				
3 Li Lithium 6.94 +1	4 Be Beryllium 9.01 +2															5 B Boron 10.81 +3	6 C Carbon 12.01 +/-4	7 N Nitrogen 14.01 ∞ -3	8 O Oxygen 16.00 ∞ -2	9 F Fluorine 19.00 ∞ -1	10 Ne Neon 20.18 0
11 Na Sodium 22.99 +1	12 Mg Magnesium 24.31 +2															13 Al Aluminum 26.98 +3	14 Si Silicon 28.09 +4	15 P Phosphorus 30.97 -3	16 S Sulfur 32.07 -2	17 Cl Chlorine 35.45 ∞ -1	18 Ar Argon 39.95 0
19 K Potassium 39.10 +1	20 Ca Calcium 40.08 +2	21 Sc Scandium 44.96 +3	22 Ti Titanium 47.87 +4,3	23 V Vanadium 50.94 +5,4,3,2	24 Cr Chromium 52.00 +6,3,2	25 Mn Manganese 54.94 +7,6,4,2,3	26 Fe Iron 55.85 +2,3,6	27 Co Cobalt 58.93 +2,3	28 Ni Nickel 58.69 +2,3	29 Cu Copper 63.55 +2,1	30 Zn Zinc 65.39 +2	31 Ga Gallium 69.72 +3	32 Ge Germanium 72.61 +4	33 As Arsenic 74.92 -3	34 Se Selenium 78.96 -2	35 Br Bromine 79.90 ∞ -1	36 Kr Krypton 83.80 0				
37 Rb Rubidium 85.47 +1	38 Sr Strontium 87.62 +2	39 Y Yttrium 88.91 +3	40 Zr Zirconium 91.22 +4	41 Nb Niobium 92.91 +5,3	42 Mo Molybdenum 95.94 +6,2,3,4,5	43 Tc Technetium (98) +7	44 Ru Ruthenium 101.07 +2,3,4,6,8	45 Rh Rhodium 102.91 +2,3,4	46 Pd Palladium 106.42 +2,4	47 Ag Silver 107.87 +1	48 Cd Cadmium 112.41 +2	49 In Indium 114.82 +3	50 Sn Tin 118.71 +4,2	51 Sb Antimony 121.76 +/-3,5	52 Te Tellurium 127.60 -2	53 I Iodine 126.90 ∞ -1	54 Xe Xenon 131.29 0				
55 Cs Cesium 132.91 +1	56 Ba Barium 137.33 +2	* 71 Lu Lutetium 174.97 +3	72 Hf Hafnium 178.49 +4	73 Ta Tantalum 180.95 +5	74 W Tungsten 183.84 +6,2,3,4,5	75 Re Rhenium 186.21 +7,6,4,2	76 Os Osmium 190.23 +2,3,4,6,8	77 Ir Iridium 192.22 +2,3,4,6	78 Pt Platinum 195.08 +2,4	79 Au Gold 196.97 +3,1	80 Hg Mercury 200.59 +2,1	81 Tl Thallium 204.38 +3,1	82 Pb Lead 207.20 +4,2	83 Bi Bismuth 208.98 +3,5	84 Po Polonium (209) +4,2,6	85 At Astatine (210) -1	86 Rn Radon (222) 0				
87 Fr Francium (223) +1	* 88 Ra Radium (226) +2	* 103 Lr Lawrencium (266) +3	104 Rf Rutherfordium (267) -	105 Db Dubnium (268) -	106 Sg Seaborgium (269) -	107 Bh Bohrium (270) -	108 Hs Hassium (269) -	109 Mt Meitnerium (278) -	110 Ds Darmstadtium (281) -	111 Rg Roentgenium (280) -	112 Cn Copernicium (285) -	113 Nh Nihonium (286) -	114 Fl Flerovium (289) -	115 Mc Moscovium (289) -	116 Lv Livermorium (293) -	117 Ts Tennessine (294) -	118 Og Oganesson (294) -				

Key

- Solid
- Liquid
- Gas
- Synthetic

Atomic Number: 19
Symbol: K
Name of Element: Potassium
Atomic Weight: 39.10
Charge on Ion: +1

Radioactive:
Diatomic: ∞

Metal													
Metalloid													
Nonmetal													
Lanthanides*													
57 La Lanthanum 138.91 +3	58 Ce Cerium 140.12 +3,4	59 Pr Praseodymium 140.91 +3,4	60 Nd Neodymium 144.24 +3	61 Pm Promethium (145) +3	62 Sm Samarium 150.36 +3,2	63 Eu Europium 151.97 +3,2	64 Gd Gadolinium 157.25 +3	65 Tb Terbium 158.93 +3,4	66 Dy Dysprosium 162.50 +3	67 Ho Holmium 164.93 +3	68 Er Erbium 167.26 +3	69 Tm Thulium 168.93 +3,2	70 Yb Ytterbium 173.05 +3,2
Actinides**													
89 Ac Actinium (227) +3	90 Th Thorium 232.04 +4	91 Pa Protactinium 231.04 +5,4	92 U Uranium 238.03 +6,5,4,3	93 Np Neptunium (237) +6,5,4,3	94 Pu Plutonium (244) +6,5,4,3	95 Am Americium (243) +6,5,4,3	96 Cm Curium (247) +3	97 Bk Berkelium (247) +4,3	98 Cf Californium (251) -	99 Es Einsteinium (252) +3	100 Fm Fermium (257) +3	101 Md Mendelevium (258) +3	102 No Nobelium (259) +2,3

Common Polyatomic Ions and Charges

-1 Anions

Acetate, $\text{C}_2\text{H}_3\text{O}_2^{-1}$

Bicarbonate, HCO_3^{-1}

Bisulfate, HSO_4^{-1}

Bisulfite, HSO_3^{-1}

Bromate, BrO_3^{-1}

Chlorate, ClO_3^{-1}

Chlorite, ClO_2^{-1}

Cyanide, CN^{-1}

Hydroxide, OH^{-1}

Hypochlorite, ClO^{-1}

Iodate, IO_3^{-1}

Nitrate, NO_3^{-1}

Nitrite, NO_2^{-1}

Perchlorate, ClO_4^{-1}

Permanganate, MnO_4^{-1}

Thiocyanate, SCN^{-1}

-2 Anions

Carbonate, CO_3^{-2}

Chromate, CrO_4^{-2}

Dichromate, $\text{Cr}_2\text{O}_7^{-2}$

Oxalate, $\text{C}_2\text{O}_4^{-2}$

Peroxide, O_2^{-2}

Selenate, SeO_4^{-2}

Silicate, SiO_3^{-2}

Sulfate, SO_4^{-2}

Sulfite, SO_3^{-2}

Thiosulfate, $\text{S}_2\text{O}_3^{-2}$

-3 Anions

Arsenate, AsO_4^{-3}

Arsenite, AsO_3^{-3}

Phosphate, PO_4^{-3}

Phosphite, PO_3^{-3}

+1 Cations

Ammonium, NH_4^{+1}

Hydronium, H_3O^{+1}

Prefixes

1	Mono-
2	Di-
3	Tri-
4	Tetra-
5	Penta-
6	Hexa-
7	Hepta
8	Octa-
9	Nona-
10	Deca-

Roman Numerals

1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII
8	VIII
9	IX
10	X

SR Activity Series

Metals

Li	Lithium
K	Potassium
Sr	Strontium
Ca	Calcium
Na	Sodium
Mg	Magnesium
Al	Aluminum
Zn	Zinc
Cr	Chromium
Fe	Iron
Cd	Cadmium
Co	Cobalt
Ni	Nickel
Sn	Tin
Pb	Lead
H	Hydrogen
Sb	Antimony
As	Arsenic
Bi	Bismuth
Cu	Copper
Hg	Mercury
Ag	Silver
Pd	Palladium
Pt	Platinum
Au	Gold

Nonmetals

F	Fluorine
Cl	Chlorine
O	Oxygen
Br	Bromine
I	Iodine

More Reactive ↑

Less Reactive ↓