

The Periodic Table of Elements

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

1 H Hydrogen 1.01 ∞ +1 3 Li Lithium 6.94 +1 4 Be Beryllium 9.01 +2 11 Na Sodium 22.99 +1 12 Mg Magnesium 24.31 +2																	
19 K Potassium 39.10 +1 20 Ca Calcium 40.08 +2																	
37 Rb Rubidium 85.47 +1 38 Sr Strontium 87.62 +2																	
55 Cs Cesium 132.91 +1 56 Ba Barium 137.33 +2																	
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 (271) - 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) -																	

Atomic Number

Symbol

Name of Element

Atomic Weight

Radioactive

Diatomic

19

K

Potassium

39.10

+1

Solid

Liquid

Gas

Synthetic

Charge on Ion

	Metal
	Metalloid
	Nonmetal

Lanthanides*

Actinides**

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
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, **C₂H₃O₂⁻¹**

Bicarbonate, **HCO₃⁻¹**

Bisulfate, **HSO₄⁻¹**

Bisulfite, **HSO₃⁻¹**

Bromate, **BrO₃⁻¹**

Chlorate, **ClO₃⁻¹**

Chlorite, **ClO₂⁻¹**

Cyanide, **CN⁻¹**

Hydroxide, **OH⁻¹**

Hypochlorite, **ClO⁻¹**

Iodate, **IO₃⁻¹**

Nitrate, **NO₃⁻¹**

Nitrite, **NO₂⁻¹**

Perchlorate, **ClO₄⁻¹**

Permanganate, **MnO₄⁻¹**

Thiocyanate, **SCN⁻¹**

-2 Anions

Carbonate, **CO₃⁻²**

Chromate, **CrO₄⁻²**

Dichromate, **Cr₂O₇⁻²**

Oxalate, **C₂O₄⁻²**

Peroxide, **O₂⁻²**

Selenate, **SeO₄⁻²**

Silicate, **SiO₃⁻²**

Sulfate, **SO₄⁻²**

Sulfite, **SO₃⁻²**

Thiosulfate, **S₂O₃⁻²**

-3 Anions

Arsenate, **AsO₄⁻³**

Arsenite, **AsO₃⁻³**

Phosphate, **PO₄⁻³**

Phosphite, **PO₃⁻³**

+1 Cations

Ammonium, **NH₄⁺¹**

Hydronium, **H₃O⁺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