

Periodic Table of the Elements

1 IA																	18 VIIIA
1 H Hydrogen 1.00794	2 IIA											13 IIIA	14 IVA	15 VA	16 VIA	17 VIIA	2 He Helium 4.00260
3 Li Lithium 6.941	4 Be Beryllium 9.01218											5 B Boron 10.811	6 C Carbon 12.011	7 N Nitrogen 14.0067	8 O Oxygen 15.9994	9 F Fluorine 18.9984	10 Ne Neon 20.1797
11 Na Sodium 22.9898	12 Mg Magnesium 24.305	3	4	5	6	7	8	9	10	11	12	13 Al Aluminum 26.98154	14 Si Silicon 28.0855	15 P Phosphorous 30.97376	16 S Sulfur 32.066	17 Cl Chlorine 35.4527	18 Ar Argon 39.948
19 K Potassium 39.0983	20 Ca Calcium 40.078	21 Sc Scandium 44.9559	22 Ti Titanium 47.87	23 V Vanadium 50.9415	24 Cr Chromium 51.996	25 Mn Manganese 54.9380	26 Fe Iron 55.845	27 Co Cobalt 58.9332	28 Ni Nickel 58.6934	29 Cu Copper 63.546	30 Zn Zinc 65.39	31 Ga Gallium 69.723	32 Ge Germanium 72.61	33 As Arsenic 74.9216	34 Se Selenium 78.96	35 Br Bromine 79.904	36 Kr Krypton 83.80
37 Rb Rubidium 85.4678	38 Sr Strontium 87.62	39 Y Yttrium 88.9059	40 Zr Zirconium 91.224	41 Nb Niobium 92.9064	42 Mo Molybdenum 95.94	43 Tc Technetium (98)	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.9055	46 Pd Palladium 106.42	47 Ag Silver 107.868	48 Cd Cadmium 112.41	49 In Indium 114.82	50 Sn Tin 118.710	51 Sb Antimony 121.760	52 Te Tellurium 127.60	53 I Iodine 126.9045	54 Xe Xenon 131.29
55 Cs Cesium 132.9054	56 Ba Barium 137.33	57 La Lanthanum 138.9055	72 Hf Hafnium 178.49	73 Ta Tantalum 180.9479	74 W Tungsten 183.84	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.22	78 Pt Platinum 195.08	79 Au Gold 196.9665	80 Hg Mercury 200.59	81 Tl Thallium 204.383	82 Pb Lead 207.2	83 Bi Bismuth 208.9804	84 Po Polonium (209)	85 At Astatine (210)	86 Rn Radon (222)
87 Fr Francium (223)	88 Ra Radium (226)	89 Ac Actinium (227)	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (263)	107 Bh Bohrium (262)	108 Hs Hassium (265)	109 Mt Meitnerium (266)	110 Ds Darmstadtium (269)	111 Rg Roentgenium (272)	112 Cn Copernicium (277)	113 Uut Ununtrium (286)	114 Fl Flerovium (289)	115 Uup Ununpentium (289)	116 Lv Livermorium (292)	117 Uus Ununseptium (294)	118 Uuo Ununoctium (294)

58 Ce Cerium 140.12	59 Pr Praseodymium 140.9077	60 Nd Neodymium 144.24	61 Pm Promethium (145)	62 Sm Samarium 150.36	63 Eu Europium 151.964	64 Gd Gadolinium 157.25	65 Tb Terbium 158.9253	66 Dy Dysprosium 162.50	67 Ho Holmium 164.9303	68 Er Erbium 167.26	69 Tm Thulium 168.9342	70 Yb Ytterbium 173.04	71 Lu Lutetium 174.967
90 Th Thorium 232.0381	91 Pa Protactinium 231.0359	92 U Uranium 238.029	93 Np Neptunium (237)	94 Pu Plutonium (244)	95 Am Americium (243)	96 Cm Curium (247)	97 Bk Berkelium (247)	98 Cf Californium (251)	99 Es Einsteinium (252)	100 Fm Fermium (257)	101 Md Mendelevium (258)	102 No Nobelium (259)	103 Lr Lawrencium (262)

Common Type I CationsCommon +1 Cations

H⁺ hydrogen
Li⁺ lithium
Na⁺ sodium
K⁺ potassium
Cs⁺ cesium
Ag⁺ silver

Common +2 Cations

Be²⁺ beryllium
Mg²⁺ magnesium
Ca²⁺ calcium
Sr²⁺ strontium
Ba²⁺ barium
Zn²⁺ zinc

Common +3 Cations

Al³⁺ aluminum
Ga³⁺ gallium
In³⁺ indium

Common Type II Cations

Ti³⁺ titanium (III)
Ti⁴⁺ titanium (IV)
Cr²⁺ chromium (II)
Cr³⁺ chromium (III)
Cr⁶⁺ chromium (VI)
Fe²⁺ iron (II)
Fe³⁺ iron (III)

Co²⁺ cobalt (II)
Co³⁺ cobalt (III)
Ni²⁺ nickel (II)
Cu⁺ copper (I)
Cu²⁺ copper (II)
Au³⁺ gold (III)
Mn²⁺ manganese (II)

Hg₂²⁺ mercury (I)
Hg²⁺ mercury (II)
Sn²⁺ tin (II)
Sn⁴⁺ tin (IV)
Pb²⁺ lead (II)
Pb⁴⁺ lead (IV)
Cd²⁺ cadmium (II)

H⁻ hydride
O²⁻ oxide
S²⁻ sulfide
Se²⁻ selenide

N³⁻ nitride
P³⁻ phosphide
As³⁻ arsenide
C⁴⁻ carbide

F⁻ fluoride
Cl⁻ chloride
Br⁻ bromide
I⁻ iodide

Common Monatomic AnionsCommon Polyatomic Ions

NH₄⁺ ammonium
OH⁻ hydroxide
O₂²⁻ peroxide
CO₃²⁻ carbonate
HCO₃⁻ bicarbonate
C₂O₄²⁻ oxalate
C₂H₃O₂⁻ acetate
C₆H₅O₇³⁻ citrate
C₂²⁻ carbide

PO₄³⁻ phosphate
HPO₄²⁻ hydrogen phosphate
H₂PO₄⁻ dihydrogen phosphate

SO₄²⁻ sulfate
SO₃²⁻ sulfite
HSO₄⁻ bisulfate (or hydrogen sulfate)

ClO⁻ hypochlorite
ClO₂⁻ chlorite
ClO₃⁻ chlorate
ClO₄⁻ perchlorate

MnO₄⁻ permanganate
CrO₄²⁻ chromate
Cr₂O₇²⁻ dichromate

CN⁻ cyanide
SCN⁻ thiocyanate

N₃⁻ azide
NO₃⁻ nitrate
NO₂⁻ nitrite
IO₃⁻ iodate
BrO₃⁻ bromate

Common Acids:

HF hydrofluoric acid
HCl hydrochloric acid
HBr hydrobromic acid
HI hydroiodic acid
HNO₃ nitric acid
H₂SO₄ sulfuric acid
H₃PO₄ phosphoric acid
H₂CO₃ carbonic acid
HC₂H₃O₂ acetic acid
H₃C₆H₅O₇ citric acid
HNO₂ nitrous acid
H₂SO₃ sulfurous acid
HClO₄ perchloric acid
HClO₃ chloric acid
HClO₂ chlorous acid
HClO hypochlorous acid

Common Bases:

MOH hydroxide salts
MCO₃ carbonate salts
NH₃ ammonia

Common Organic Compounds:

CH₄ methane
C₂H₆ ethane
C₃H₈ propane
C₄H₁₀ butane
C₂H₂ acetylene
C₆H₆ benzene