

The Periodic Table of the Elements (with Electronegativities)

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|--|---|--|---|--|--|---|--|--|---|---|--|--|---|---|---|--|--|--|---|--|---|
| 1 | | | | | | | | | | | | | | | | | 18 | | | | |
| Hydrogen 1 H 1.01 2.1 | | | | | | | | | | | | | | | | | Helium 2 He 4.00 --- | | | | |
| Lithium 3 Li 6.94 1.0 | Beryllium 4 Be 9.01 1.5 | | | | | | | | | | | | | | | Boron 5 B 10.81 2.0 | Carbon 6 C 12.01 2.5 | Nitrogen 7 N 14.01 3.0 | Oxygen 8 O 16.00 3.5 | Fluorine 9 F 19.00 4.0 | Neon 10 Ne 20.18 --- |
| Sodium 11 Na 22.99 0.9 | Magnesium 12 Mg 24.31 1.2 | | | | | | | | | | | | | | | Aluminum 13 Al 26.98 1.5 | Silicon 14 Si 28.09 1.8 | Phosphorus 15 P 30.97 2.1 | Sulfur 16 S 32.07 2.5 | Chlorine 17 Cl 35.45 3.0 | Argon 18 Ar 39.95 --- |
| Potassium 19 K 39.10 0.8 | Calcium 20 Ca 40.08 1.0 | Scandium 21 Sc 44.96 1.3 | Titanium 22 Ti 47.88 1.5 | Vanadium 23 V 50.94 1.6 | Chromium 24 Cr 52.00 1.6 | Manganese 25 Mn 54.94 1.5 | Iron 26 Fe 55.85 1.8 | Cobalt 27 Co 58.93 1.8 | Nickel 28 Ni 58.69 1.8 | Copper 29 Cu 63.55 1.9 | Zinc 30 Zn 65.39 1.6 | Gallium 31 Ga 69.72 1.6 | Germanium 32 Ge 72.61 1.8 | Arsenic 33 As 74.92 2.0 | Selenium 34 Se 78.96 2.4 | Bromine 35 Br 79.90 2.8 | Krypton 36 Kr 83.80 3.0 | | | | |
| Rubidium 37 Rb 85.47 0.8 | Strontium 38 Sr 87.62 1.0 | Yttrium 39 Y 88.91 1.2 | Zirconium 40 Zr 91.22 1.4 | Niobium 41 Nb 92.91 1.6 | Molybdenum 42 Mo 95.94 1.8 | Technetium 43 Tc (98) 1.9 | Ruthenium 44 Ru 101.07 2.2 | Rhodium 45 Rh 102.91 2.2 | Palladium 46 Pd 106.42 2.2 | Silver 47 Ag 107.87 1.9 | Cadmium 48 Cd 112.41 1.7 | Indium 49 In 114.82 1.7 | Tin 50 Sn 118.71 1.8 | Antimony 51 Sb 121.76 1.9 | Tellurium 52 Te 127.60 2.1 | Iodine 53 I 126.90 2.5 | Xenon 54 Xe 131.29 2.6 | | | | |
| Cesium 55 Cs 132.91 0.7 | Barium 56 Ba 137.33 0.9 | 57-70 * | Lutetium 71 Lu 174.97 1.1 | Hafnium 72 Hf 178.49 1.3 | Tantalum 73 Ta 180.95 1.5 | Tungsten 74 W 183.84 1.7 | Rhenium 75 Re 186.21 1.9 | Osmium 76 Os 190.23 2.2 | Iridium 77 Ir 192.22 2.2 | Platinum 78 Pt 195.08 2.2 | Gold 79 Au 196.97 2.4 | Mercury 80 Hg 200.59 1.9 | Thallium 81 Tl 204.38 1.8 | Lead 82 Pb 207.20 1.8 | Bismuth 83 Bi 208.98 1.9 | Polonium 84 Po (209) 2.0 | Astatine 85 At (210) 2.2 | Radon 86 Rn (222) 2.4 | | | |
| Francium 87 Fr (223) 0.7 | Radium 88 Ra (226) 0.9 | 89-102 ** | Lawrencium 103 Lr (262) --- | Rutherfordium 104 Rf (267) --- | Dubnium 105 Db (268) --- | Seaborgium 106 Sg (271) --- | Bohrium 107 Bh (272) --- | Hassium 108 Hs (270) --- | Meitnerium 109 Mt (276) --- | Darmstadtium 110 Ds (281) --- | Roentgenium 111 Rg (280) --- | Copernicium 112 Cn (285) --- | Ununtrium 113 Uut (284) --- | Ununquadium 114 Uuq (289) --- | Ununpentium 115 Uup (288) --- | Ununhexium 116 Uuh (293) --- | Ununseptium 117 Uus (294?) --- | Ununoctium 118 Uuo (294) --- | | | |

- Alkali metals
- Alkaline earth metals
- Transition metals
- Lanthanides
- Actinides
- Other metals
- Metalloids (semi-metal)
- Nonmetals
- Halogens
- Noble gases

Element name → Mercury ← Atomic #

80

Symbol → **Hg**

200.59 ← Avg. Mass

Electronegativity → 1.9

*lanthanides

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|--|---|---|--|--|---|---|---|--|---|--|---|--|--|
| Lanthanum 57 La 138.91 1.1 | Cerium 58 Ce 140.12 1.1 | Praseodymium 59 Pr 140.91 1.1 | Neodymium 60 Nd 144.24 1.1 | Promethium 61 Pm (145) 1.1 | Samarium 62 Sm 150.36 1.2 | Europium 63 Eu 151.97 1.1 | Gadolinium 64 Gd 157.25 1.2 | Terbium 65 Tb 158.93 1.1 | Dysprosium 66 Dy 162.50 1.2 | Holmium 67 Ho 164.93 1.2 | Erbium 68 Er 167.26 1.2 | Thulium 69 Tm 168.93 1.3 | Ytterbium 70 Yb 173.04 1.1 |
|--|---|---|--|--|---|---|---|--|---|--|---|--|--|

**actinides

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|--|--|---|---|---|---|---|--|---|---|---|--|--|---|
| Actinium 89 Ac (227) 1.1 | Thorium 90 Th 232.04 1.3 | Protactinium 91 Pa 231.04 1.5 | Uranium 92 U 238.03 1.4 | Neptunium 93 Np (237) 1.4 | Plutonium 94 Pu (244) 1.3 | Americium 95 Am (243) 1.3 | Curium 96 Cm (247) 1.3 | Berkelium 97 Bk (247) 1.3 | Californium 98 Cf (251) 1.3 | Einsteinium 99 Es (252) 1.3 | Fermium 100 Fm (257) 1.3 | Mendelevium 101 Md (258) 1.3 | Nobelium 102 No (259) 1.3 |
|--|--|---|---|---|---|---|--|---|---|---|--|--|---|

NAMES, FORMULAE, AND CHARGES OF SOME COMMON IONS

* *Aqueous solutions are readily oxidized by air.*

** *Not stable in aqueous solutions.*

| Positive Ions (Cations) | | | |
|------------------------------|---------------------------------|-----------------------------|--------------------------|
| Al^{3+} | Aluminum | Pb^{4+} | Lead(IV), plumbic |
| NH_4^+ | Ammonium | Li^+ | Lithium |
| Ba^{2+} | Barium | Mg^{2+} | Magnesium |
| Ca^{2+} | Calcium | Mn^{2+} | Manganese(II), manganous |
| Cr^{2+} | Chromium(II), chromous | Mn^{4+} | Manganese(IV) |
| Cr^{3+} | Chromium(III), chromic | Hg_2^{2+} | Mercury(I)*, mercurous |
| Cu^+ | Copper(I)*, cuprous | Hg^{2+} | Mercury(II), mercuric |
| Cu^{2+} | Copper(II), cupric | K^+ | Potassium |
| H^+ | Hydrogen | Ag^+ | Silver |
| H_3O^+ | Hydronium | Na^+ | Sodium |
| Fe^{2+} | Iron(II)*, ferrous | Sn^{2+} | Tin(II)*, stannous |
| Fe^{3+} | Iron(III), ferric | Sn^{4+} | Tin(IV), stannic |
| Pb^{2+} | Lead(II), plumbous | Zn^{2+} | Zinc |
| Negative Ions (Anions) | | | |
| Br^- | Bromide | OH^- | Hydroxide |
| CO_3^{2-} | Carbonate | ClO^- | Hypochlorite |
| ClO_3^- | Chlorate | I^- | Iodide |
| Cl^- | Chloride | HPO_4^{2-} | Monohydrogen phosphate |
| ClO_2^- | Chlorite | NO_3^- | Nitrate |
| CrO_4^{2-} | Chromate | NO_2^- | Nitrite |
| CN^- | Cyanide | $\text{C}_2\text{O}_4^{2-}$ | Oxalate |
| $\text{Cr}_2\text{O}_7^{2-}$ | Dichromate | O^{2-} | Oxide** |
| H_2PO_4^- | Dihydrogen phosphate | ClO_4^- | Perchlorate |
| CH_3COO^- | Ethanoate, acetate | MnO_4^- | Permanganate |
| F^- | Fluoride | PO_4^{3-} | Phosphate |
| HCO_3^- | Hydrogen carbonate, bicarbonate | SO_4^{2-} | Sulphate |
| HC_2O_4^- | Hydrogen oxalate, binoxalate | S^{2-} | Sulphide |
| HSO_4^- | Hydrogen sulphate, bisulphate | SO_3^{2-} | Sulphite |
| HS^- | Hydrogen sulphide, bisulphide | SCN^- | Thiocyanate |
| HSO_3^- | Hydrogen sulphite, bisulphite | | |