

Periodic Table of the Elements

| 1 IA 1A | | | | | | | | | | | | | 13 IIIA 3A | 14 IVA 4A | 15 VA 5A | 16 VIA 6A | 17 VIIA 7A | 18 VIIIA 8A | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---------------------------------------|---------------------------------------|--|--|---|---|--|---|---|--|--|---|--|---|--|---|--|-----------------------------------|-----------------|--|----------------|--|---------------|---------------------------------------|--------------------------------------|--|------------------------------------|---------------------------------------|------------------------------------|--|----------------|--|-----------------|--|----------------|--|-----------------|--|
| 1 H Hydrogen 1.008 | | | | | | | | | | | | | 5 B Boron 10.811 | 6 C Carbon 12.011 | 7 N Nitrogen 14.007 | 8 O Oxygen 15.999 | 9 F Fluorine 18.998 | 10 Ne Neon 20.180 | | | | | | | | | | | | | | | | | | | | |
| 3 Li Lithium 6.941 | 4 Be Beryllium 9.012 | | | | | | | | | | | 11 Na Sodium 22.990 | 12 Mg Magnesium 24.305 | | | | | | | | | | | 13 Al Aluminum 26.982 | 14 Si Silicon 28.086 | 15 P Phosphorus 30.974 | 16 S Sulfur 32.066 | 17 Cl Chlorine 35.453 | 18 Ar Argon 39.948 | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | 3 IIIB 3B | | 4 IVB 4B | | 5 VB 5B | | 6 VIB 6B | | 7 VIIB 7B | | 8 VIII 8 | | 9 VIII 8 | | 10 VIII 8 | | 11 IB 1B | | 12 IIB 2B | |
| 19 K Potassium 39.098 | 20 Ca Calcium 40.078 | 21 Sc Scandium 44.956 | 22 Ti Titanium 47.88 | 23 V Vanadium 50.942 | 24 Cr Chromium 51.996 | 25 Mn Manganese 54.938 | 26 Fe Iron 55.933 | 27 Co Cobalt 58.933 | 28 Ni Nickel 58.693 | 29 Cu Copper 63.546 | 30 Zn Zinc 65.39 | 31 Ga Gallium 69.732 | 32 Ge Germanium 72.61 | 33 As Arsenic 74.922 | 34 Se Selenium 78.09 | 35 Br Bromine 79.904 | 36 Kr Krypton 84.30 | | | | | | | | | | | | | | | | | | | | | |
| 37 Rb Rubidium 84.468 | 38 Sr Strontium 87.62 | 39 Y Yttrium 88.906 | 40 Zr Zirconium 91.224 | 41 Nb Niobium 92.906 | 42 Mo Molybdenum 95.94 | 43 Tc Technetium 98.907 | 44 Ru Ruthenium 101.07 | 45 Rh Rhodium 102.906 | 46 Pd Palladium 106.42 | 47 Ag Silver 107.868 | 48 Cd Cadmium 112.411 | 49 In Indium 114.818 | 50 Sn Tin 118.71 | 51 Sb Antimony 121.760 | 52 Te Tellurium 127.6 | 53 I Iodine 126.904 | 54 Xe Xenon 131.29 | | | | | | | | | | | | | | | | | | | | | |
| 55 Cs Cesium 132.905 | 56 Ba Barium 137.327 | 57-71 | 72 Hf Hafnium 178.49 | 73 Ta Tantalum 180.948 | 74 W Tungsten 183.85 | 75 Re Rhenium 186.207 | 76 Os Osmium 190.23 | 77 Ir Iridium 192.22 | 78 Pt Platinum 195.08 | 79 Au Gold 196.967 | 80 Hg Mercury 200.59 | 81 Tl Thallium 204.383 | 82 Pb Lead 207.2 | 83 Bi Bismuth 208.980 | 84 Po Polonium [209] | 85 At Astatine 209 | 86 Rn Radon 222.018 | | | | | | | | | | | | | | | | | | | | | |
| 87 Fr Francium 223 | 88 Ra Radium 226 | 89-103 | 104 Rf Rutherfordium [261] | 105 Db Dubnium [262] | 106 Sg Seaborgium [266] | 107 Bh Bohrium [264] | 108 Hs Hassium [269] | 109 Mt Meitnerium [268] | 110 Ds Darmstadtium [269] | 111 Rg Roentgenium [272] | 112 Cn Copernicium [277] | 113 Uut Ununtrium unknown | 114 Fl Flerovium [289] | 115 Uup Ununpentium unknown | 116 Lv Livermorium [298] | 117 Uus Ununseptium unknown | 118 Uuo Ununoctium unknown | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | |
|-------------------|--|---|---------------------------------------|--|--|--|---|---|---|---|---|---|--|--|---|---|
| Lanthanide Series | | 57 La Lanthanum 138.906 | 58 Ce Cerium 140.115 | 59 Pr Praseodymium 140.908 | 60 Nd Neodymium 144.24 | 61 Pm Promethium 144.913 | 62 Sm Samarium 150.36 | 63 Eu Europium 151.966 | 64 Gd Gadolinium 157.25 | 65 Tb Terbium 158.925 | 66 Dy Dysprosium 162.50 | 67 Ho Holmium 164.930 | 68 Er Erbium 167.26 | 69 Tm Thulium 168.934 | 70 Yb Ytterbium 173.04 | 71 Lu Lutetium 174.967 |
| Actinide Series | | 89 Ac Actinium 227.028 | 90 Th Thorium 232.038 | 91 Pa Protactinium 231.036 | 92 U Uranium 238.029 | 93 Np Neptunium 237.048 | 94 Pu Plutonium 244.064 | 95 Am Americium 243.061 | 96 Cm Curium 247.070 | 97 Bk Berkelium 247.070 | 98 Cf Californium 251.080 | 99 Es Einsteinium [254] | 100 Fm Fermium 257.095 | 101 Md Mendelevium 258.1 | 102 No Nobelium 259.101 | 103 Lr Lawrencium [262] |

| | | | | | | | | | |
|--------------|----------------|------------------|-------------|-----------|----------|---------|-----------|------------|----------|
| Alkali Metal | Alkaline Earth | Transition Metal | Basic Metal | Semimetal | Nonmetal | Halogen | Noble Gas | Lanthanide | Actinide |
|--------------|----------------|------------------|-------------|-----------|----------|---------|-----------|------------|----------|