# Periodic Table of the Elements

| 1 IA 1A | 2 IIA 2A | 3 IIIB 3B | 4 IVB 4B | 5 VB 5B | 6 VIB 6B | 7 VIIB 7B | 8 | 9 VIII 8 | 10 | 11 IB 1B | 12 IIB 2B | 13 IIIA 3A | 14 IVA 4A | 15 VA 5A | 16 VIA 6A | 17 VIIA 7A | 18 VIIIA 8A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 **H** Hydrogen [1.00784;1.00811] | | | | | | | | | | | | | | | | | 2 **He** Helium 4.002602(2) |
| 3 **Li** Lithium [6.938;6.997] | 4 **Be** Beryllium 9.0121831(5) | | | | | | | | | | | 5 **B** Boron [10.806;10.821] | 6 **C** Carbon [12.0096;12.0116] | 7 **N** Nitrogen [14.00643;14.00728] | 8 **O** Oxygen [15.99903;15.99977] | 9 **F** Fluorine 18.998403163(6) | 10 **Ne** Neon 20.1797(6) |
| 11 **Na** Sodium 22.98976928(2) | 12 **Mg** Magnesium [24.304,24.307] | | | | | | | | | | | 13 **Al** Aluminum 26.9815386(8) | 14 **Si** Silicon [28.084;28.086] | 15 **P** Phosphorus 30.973761998(5) | 16 **S** Sulfur [32.059;32.076] | 17 **Cl** Chlorine [35.446;35.457] | 18 **Ar** Argon 39.948(1) |
| 19 **K** Potassium 39.0983(1) | 20 **Ca** Calcium 40.078(4) | 21 **Sc** Scandium 44.955908(5) | 22 **Ti** Titanium 47.867(1) | 23 **V** Vanadium 50.9415(1) | 24 **Cr** Chromium 51.9961(6) | 25 **Mn** Manganese 54.938045(5) | 26 **Fe** Iron 55.845(2) | 27 **Co** Cobalt 58.933194(4) | 28 **Ni** Nickel 58.6934(4) | 29 **Cu** Copper 63.546(3) | 30 **Zn** Zinc 65.38(2) | 31 **Ga** Gallium 69.723(1) | 32 **Ge** Germanium 72.630(8) | 33 **As** Arsenic 74.921595(6) | 34 **Se** Selenium 78.971(8) | 35 **Br** Bromine [79.901,79.907] | 36 **Kr** Krypton 83.798(2) |
| 37 **Rb** Rubidium 85.4678(3) | 38 **Sr** Strontium 87.62(1) | 39 **Y** Yttrium 88.90584(2) | 40 **Zr** Zirconium 91.224(2) | 41 **Nb** Niobium 92.90637(2) | 42 **Mo** Molybdenum 95.95(1) | 43 **Tc** Technetium <98> | 44 **Ru** Ruthenium 101.07(2) | 45 **Rh** Rhodium 102.90550(2) | 46 **Pd** Palladium 106.42(1) | 47 **Ag** Silver 107.8682(2) | 48 **Cd** Cadmium 112.414(4) | 49 **In** Indium 114.818(1) | 50 **Sn** Tin 118.710(7) | 51 **Sb** Antimony 121.760(1) | 52 **Te** Tellurium 127.60(3) | 53 **I** Iodine 126.90447(3) | 54 **Xe** Xenon 131.293(6) |
| 55 **Cs** Cesium 132.90545196(6) | 56 **Ba** Barium 137.327(7) | 57-71 | 72 **Hf** Hafnium 178.49(2) | 73 **Ta** Tantalum 180.94788(2) | 74 **W** Tungsten 183.84(1) | 75 **Re** Rhenium 186.207(1) | 76 **Os** Osmium 190.23(3) | 77 **Ir** Iridium 192.217(3) | 78 **Pt** Platinum 195.084(9) | 79 **Au** Gold 196.966569(5) | 80 **Hg** Mercury 200.592(3) | 81 **Tl** Thallium [204.382;204.385] | 82 **Pb** Lead 207.2(1) | 83 **Bi** Bismuth 208.98040(1) | 84 **Po** Polonium <209> | 85 **At** Astatine <210> | 86 **Rn** Radon <222> |
| 87 **Fr** Francium <223> | 88 **Ra** Radium <226> | 89-103 | 104 **Rf** Rutherfordium <267> | 105 **Db** Dubnium <268> | 106 **Sg** Seaborgium <271> | 107 **Bh** Bohrium <272> | 108 **Hs** Hassium <270> | 109 **Mt** Meitnerium <276> | 110 **Ds** Darmstadtium <281> | 111 **Rg** Roentgenium <280> | 112 **Cn** Copernicium <285> | 113 **Uut** Ununtrium unknown | 114 **Fl** Flerovium <289> | 115 **Uup** Ununpentium unknown | 116 **Lv** Livermorium <293> | 117 **Uus** Ununseptium unknown | 118 **Uuo** Ununoctium unknown |

Atomic mass values reflect the IUPAC accepted values as of 09/2013.

Masses expressed in [a;b] format show the lower and upper limit of atomic mass depending on the physical and chemical history of the element.

Masses expressed in < > format are the mass numbers of the longest-lived isotope for elements with no stable nucleus.

Atomic Number

Symbol

Name

Atomic Mass

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lanthanide Series | 57 **La** Lanthanum 138.90547(7) | 58 **Ce** Cerium 140.116(1) | 59 **Pr** Praseodymium 140.90766(2) | 60 **Nd** Neodymium 144.242(3) | 61 **Pm** Promethium <145> | 62 **Sm** Samarium 150.36(2) | 63 **Eu** Europium 151.964(1) | 64 **Gd** Gadolinium 157.25(3) | 65 **Tb** Terbium 158.92535(2) | 66 **Dy** Dysprosium 162.500(1) | 67 **Ho** Holmium 164.93033(2) | 68 **Er** Erbium 167.259(3) | 69 **Tm** Thulium 168.93422(2) | 70 **Yb** Ytterbium 173.054(5) | 71 **Lu** Lutetium 174.9668(1) |
| Actinide Series | 89 **Ac** Actinium <227> | 90 **Th** Thorium 232.0377(4) | 91 **Pa** Protactinium 231.03588(2) | 92 **U** Uranium 238.02891(3) | 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> |

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