

TABLE OF ELEMENTS AND THEIR ATOMIC WEIGHTS

| Element | Symbol | Atomic Number | Atomic Weight | Element | Symbol | Atomic Number | Atomic Weight |
|-------------|--------|---------------|---------------|--------------|--------|---------------|---------------|
| Actinium | Ac | 89 | 227.0278* | Neodymium | Nd | 60 | 144.24 |
| Aluminum | Al | 13 | 26.981539 | Neon | Ne | 10 | 20.1797 |
| Americium | Am | 95 | 243.0614* | Neptunium | Np | 93 | 237.0482* |
| Antimony | Sb | 51 | 121.760 | Nickel | Ni | 28 | 58.6934 |
| Argon | Ar | 18 | 39.948 | Niobium | Nb | 41 | 92.90638 |
| Arsenic | As | 33 | 74.92159 | Nitrogen | N | 7 | 14.00674 |
| Astatine | At | 85 | 209.9871* | Nobelium | No | 102 | 259.1009* |
| Barium | Ba | 56 | 137.327 | Osmium | Os | 76 | 190.23 |
| Berkelium | Bk | 97 | 247.0703* | Oxygen | O | 8 | 15.9994 |
| Beryllium | Be | 4 | 9.012182 | Palladium | Pd | 46 | 106.42 |
| Bismuth | Bi | 83 | 208.98037 | Phosphorus | P | 15 | 30.973762 |
| Boron | B | 5 | 10.811 | Platinum | Pt | 78 | 195.08 |
| Bromine | Br | 35 | 79.904 | Plutonium | Pu | 94 | 244.0642* |
| Cadmium | Cd | 48 | 112.411 | Polonium | Po | 84 | 208.9824* |
| Calcium | Ca | 20 | 40.078 | Potassium | K | 19 | 39.0983 |
| Californium | Cf | 98 | 251.0796* | Praseodymium | Pr | 59 | 140.90765 |
| Carbon | C | 6 | 12.011 | Promethium | Pm | 61 | 144.9127* |
| Cerium | Ce | 58 | 140.115 | Protactinium | Pa | 91 | 231.0388* |
| Cesium | Cs | 55 | 132.90543 | Radium | Ra | 88 | 226.0254* |
| Chlorine | Cl | 17 | 35.4527 | Radon | Rn | 86 | 222.0176* |
| Chromium | Cr | 24 | 51.9961 | Rhenium | Re | 75 | 186.207 |
| Cobalt | Co | 27 | 58.93320 | Rhodium | Rh | 45 | 102.90550 |
| Copper | Cu | 29 | 63.546 | Rubidium | Rb | 37 | 85.4678 |
| Curium | Cm | 96 | 247.0703* | Ruthenium | Ru | 44 | 101.07 |
| Dysprosium | Dy | 66 | 162.50 | Samarium | Sm | 62 | 150.36 |
| Einsteinium | Es | 99 | 252.083* | Scandium | Sc | 21 | 44.955910 |
| Erbium | Er | 68 | 167.26 | Selenium | Se | 34 | 78.96 |
| Europium | Eu | 63 | 151.965 | Silicon | Si | 14 | 28.0855 |
| Fermium | Fm | 100 | 257.0951* | Silver | Ag | 47 | 107.8682 |
| Fluorine | F | 9 | 18.9984032 | Sodium | Na | 11 | 22.989768 |
| Francium | Fr | 87 | 223.0197* | Strontium | Sr | 38 | 87.62 |
| Gadolinium | Gd | 64 | 157.25 | Sulfur | S | 16 | 32.066 |
| Gallium | Ga | 31 | 69.723 | Tantalum | Ta | 73 | 180.9479 |
| Germanium | Ge | 32 | 72.61 | Technetium | Tc | 43 | 97.9072* |
| Gold | Au | 79 | 196.96654 | Tellurium | Te | 52 | 127.60 |
| Hafnium | Hf | 72 | 178.49 | Terbium | Tb | 65 | 158.92534 |
| Helium | He | 2 | 4.002602 | Thallium | Tl | 81 | 204.3833 |
| Holmium | Ho | 67 | 164.93032 | Thorium | Th | 90 | 232.0381 |
| Hydrogen | H | 1 | 1.00794 | Thulium | Tm | 69 | 168.93421 |
| Indium | In | 49 | 114.818 | Tin | Sn | 50 | 118.710 |
| Iodine | I | 53 | 126.90447 | Titanium | Ti | 22 | 47.867 |
| Iridium | Ir | 77 | 192.217 | Tungsten | W | 74 | 183.84 |
| Iron | Fe | 26 | 55.845 | Unnilquadium | Unq | 104 | 261.11* |
| Krypton | Kr | 36 | 83.80 | Unnilpentium | Unp | 105 | 262.114* |
| Lanthanum | La | 57 | 138.9055 | Unnilhexium | Unh | 106 | 263.118* |
| Lawrencium | Lr | 103 | 262.11* | Unnilseptium | Uns | 107 | 262.12* |
| Lead | Pb | 82 | 207.2 | Uranium | U | 92 | 238.0289 |
| Lithium | Li | 3 | 6.941 | Vanadium | V | 23 | 50.9415 |
| Lutetium | Lu | 71 | 174.967 | Xenon | Xe | 54 | 131.29 |
| Magnesium | Mg | 12 | 24.3050 | Ytterbium | Yb | 70 | 173.04 |
| Manganese | Mn | 25 | 54.93805 | Yttrium | Y | 39 | 88.90585 |
| Mendelevium | Md | 101 | 258.10* | Zinc | Zn | 30 | 65.39 |
| Mercury | Hg | 80 | 200.59 | Zirconium | Zr | 40 | 91.224 |
| Molybdenum | Mo | 42 | 95.94 | | | | |

Based on 1993 IUPAC Table of Standard Atomic Weights of the Elements.

* Relative atomic mass of the isotope of that element with the longest known half-life.

TABLE OF ELEMENTS

APP 115

| Atomic Number | Element | Symbol | Atomic Weight | Atomic Number | Element | Symbol | Atomic Weight |
|---------------|------------|--------|---------------|---------------|--------------|--------|---------------|
| 1 | Hydrogen | H | 1.00794 | 55 | Cesium | Cs | 132.90543 |
| 2 | Helium | He | 4.002602 | 56 | Barium | Ba | 137.327 |
| 3 | Lithium | Li | 6.941 | 57 | Lanthanum | La | 138.9055 |
| 4 | Beryllium | Be | 9.012182 | 58 | Cerium | Ce | 140.115 |
| 5 | Boron | B | 10.811 | 59 | Praseodymium | Pr | 140.90765 |
| 6 | Carbon | C | 12.011 | 60 | Neodymium | Nd | 144.24 |
| 7 | Nitrogen | N | 14.00674 | 61 | Promethium | Pm | 144.9127* |
| 8 | Oxygen | O | 15.9994 | 62 | Samarium | Sm | 150.36 |
| 9 | Fluorine | F | 18.9984032 | 63 | Europium | Eu | 151.965 |
| 10 | Neon | Ne | 20.1797 | 64 | Gadolinium | Gd | 157.25 |
| 11 | Sodium | Na | 22.989768 | 65 | Terbium | Tb | 158.92534 |
| 12 | Magnesium | Mg | 24.3050 | 66 | Dysprosium | Dy | 162.50 |
| 13 | Aluminum | Al | 26.981539 | 67 | Holmium | Ho | 164.93032 |
| 14 | Silicon | Si | 28.0855 | 68 | Erbium | Er | 167.26 |
| 15 | Phosphorus | P | 30.973762 | 69 | Thulium | Tm | 168.93421 |
| 16 | Sulfur | S | 32.066 | 70 | Ytterbium | Yb | 173.04 |
| 17 | Chlorine | Cl | 35.4527 | 71 | Lutetium | Lu | 174.967 |
| 18 | Argon | Ar | 39.948 | 72 | Hafnium | Hf | 178.49 |
| 19 | Potassium | K | 39.0983 | 73 | Tantalum | Ta | 180.9479 |
| 20 | Calcium | Ca | 40.078 | 74 | Tungsten | W | 183.84 |
| 21 | Scandium | Sc | 44.955910 | 75 | Rhenium | Re | 186.207 |
| 22 | Titanium | Ti | 47.867 | 76 | Osmium | Os | 190.23 |
| 23 | Vanadium | V | 50.9415 | 77 | Iridium | Ir | 192.217 |
| 24 | Chromium | Cr | 51.9961 | 78 | Platinum | Pt | 195.08 |
| 25 | Manganese | Mn | 54.93805 | 79 | Gold | Au | 196.96654 |
| 26 | Iron | Fe | 55.845 | 80 | Mercury | Hg | 200.59 |
| 27 | Cobalt | Co | 58.93320 | 81 | Thallium | Tl | 204.3833 |
| 28 | Nickel | Ni | 58.6934 | 82 | Lead | Pb | 207.2 |
| 29 | Copper | Cu | 63.546 | 83 | Bismuth | Bi | 208.98037 |
| 30 | Zinc | Zn | 65.39 | 84 | Polonium | Po | 208.9824* |
| 31 | Gallium | Ga | 69.723 | 85 | Astatine | At | 209.9871* |
| 32 | Germanium | Ge | 72.61 | 86 | Radon | Rn | 222.0176* |
| 33 | Arsenic | As | 74.92159 | 87 | Francium | Fr | 223.0197* |
| 34 | Selenium | Se | 78.96 | 88 | Radium | Ra | 226.0254* |
| 35 | Bromine | Br | 79.904 | 89 | Actinium | Ac | 227.0278* |
| 36 | Krypton | Kr | 83.80 | 90 | Thorium | Th | 232.0381* |
| 37 | Rubidium | Rb | 85.4678 | 91 | Protactinium | Pa | 231.0388* |
| 38 | Strontium | Sr | 87.62 | 92 | Uranium | U | 238.0289 |
| 39 | Yttrium | Y | 88.90585 | 93 | Neptunium | Np | 237.0482* |
| 40 | Zirconium | Zr | 91.224 | 94 | Plutonium | Pu | 244.0642* |
| 41 | Niobium | Nb | 92.90638 | 95 | Americium | Am | 243.0614* |
| 42 | Molybdenum | Mo | 95.94 | 96 | Curium | Cm | 247.0703* |
| 43 | Technetium | Tc | 97.9072* | 97 | Berkelium | Bk | 247.0703* |
| 44 | Ruthenium | Ru | 101.07 | 98 | Californium | Cf | 251.0796* |
| 45 | Rhodium | Rh | 102.90550 | 99 | Einsteinium | Es | 252.083* |
| 46 | Palladium | Pd | 106.42 | 100 | Fermium | Fm | 257.0951* |
| 47 | Silver | Ag | 107.8682 | 101 | Mendelevium | Md | 258.10* |
| 48 | Cadmium | Cd | 112.411 | 102 | Nobelium | No | 259.1009* |
| 49 | Indium | In | 114.818 | 103 | Lawrencium | Lr | 262.11* |
| 50 | Tin | Sn | 118.710 | 104 | Unnilquadium | Unq | 261.11* |
| 51 | Antimony | Sb | 121.760 | 105 | Unnilpentium | Unp | 262.114* |
| 52 | Tellurium | Te | 127.60 | 106 | Unnilhexium | Unh | 263.118* |
| 53 | Iodine | I | 126.90447 | 107 | Unnilseptium | Uns | 262.12* |
| 54 | Xenon | Xe | 131.29 | | | | |