

Periodic Table of the Elements

(based on $^{12}_6\text{C} = 12.0000$)

| Group | | | | | | | | | | | | Representative Elements | | | | | | | | |
|-----------------------------|--|--------------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|---------------------------------|-------------------------------|------------------------------|--|
| 1 1A | | Transition Metals | | | | | | | | | | | | | | | 18 8A | | | |
| 1 H Hydrogen 1.008 | | 2 2A | | | | | | | | | | | | 13 3A | 14 4A | 15 5A | 16 6A | 17 7A | 18 He Helium 4.003 | |
| | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | | |
| | | Li Lithium 6.941 | Be Beryllium 9.012 | 3B | 4B | 5B | 6B | 7B | 8B | 10B | 11B | 12B | Al Aluminum 26.982 | Si Silicon 28.086 | P Phosphorus 30.974 | S Sulfur 32.06 | Cl Chlorine 35.453 | Ar Argon 39.948 | | |
| 2 | | 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 55.847 | 27 Co Cobalt 58.933 | 28 Ni Nickel 58.693 | 29 Cu Copper 63.546 | 30 Zn Zinc 65.39 | 31 Ga Gallium 69.723 | 32 Ge Germanium 72.61 | 33 As Arsenic 74.922 | 34 Se Selenium 78.96 | 35 Br Bromine 79.904 | 36 Kr Krypton 83.80 | |
| 3 | | 37 Rb Rubidium 85.468 | 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 | 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 114.82 | 50 Sn Tin 118.710 | 51 Sb Antimony 121.757 | 52 Te Tellurium 127.60 | 53 I Iodine 126.905 | 54 Xe Xenon 131.29 | |
| 4 | | 55 Cs Cesium 132.905 | 56 Ba Barium 137.327 | 57 La Lanthanum 138.905 | 72 Hf Hafnium 178.49 | 73 Ta Tantalum 180.948 | 74 W Tungsten 183.85 | 75 Re Rhenium 186.207 | 76 Os Osmium 190.2 | 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 208.982 | 85 At Astatine 210 | 86 Rn Radon 222 | |
| 5 | | 87 Fr Francium 223 | 88 Ra Radium 226.025 | 89 Ac Actinium 227.028 | 104 Rf Rutherfordium (261) | 105 Db Dubnium (262) | 106 Sg Seaborgium (263) | 107 Bh Bohrium (264) | 108 Hs Hassium (265) | 109 Mt Meitnerium (268) | | | | | | | | | | |
| 6 | | 7 | | | | | | | | | | | | | | | | | | |

14 — Atomic number
Si — Symbol
 Silicon — Name
 28.086 — Average Atomic Mass



Inner Transition Metals

Lanthanide series

| | | | | | | | | | | | | | |
|---------------------------------------|--|--|--|---|---|---|---|---|---|--|--|---|---|
| 58 Ce Cerium 140.12 | 59 Pr Praseodymium 140.908 | 60 Nd Neodymium 144.24 | 61 Pm Promethium 144.913 | 62 Sm Samarium 150.36 | 63 Eu Europium 151.96 | 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 |
| 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 252.083 | 100 Fm Fermium 257.095 | 101 Md Mendelevium 258.099 | 102 No Nobelium 259.101 | 103 Lr Lawrencium 260.105 |

Actinide series