# Periodic Table of the Elements

Ernest Orlando Lawrence Berkeley National Laboratory

atomic number → 14; atomic weight → 28.09; symbol: Si; name → Silicon

- black: solid
- blue: liquid
- red: gas
- white: synthetically prepared *most stable isotope*

- alkali metals
- alkaline earth metals
- transitional metals
- other metals
- nonmetals
- noble gases

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 1.01 H Hydrogen | | | | | | | | | | | | | | | | | 2 4.003 He Helium |
| 3 6.94 Li Lithium | 4 9.01 Be Beryllium | | | | | | | | | | | 5 10.81 B Boron | 6 12.01 C Carbon | 7 14.01 N Nitrogen | 8 15.999 O Oxygen | 9 18.998 F Fluorine | 10 20.18 Ne Neon |
| 11 22.99 Na Sodium | 12 24.31 Mg Magnesium | | | | | | | | | | | 13 26.98 Al Aluminum | 14 28.09 Si Silicon | 15 30.97 P Phosphorus | 16 32.06 S Sulfur | 17 35.45 Cl Chlorine | 18 39.95 Ar Argon |
| 19 39.10 K Potassium | 20 40.08 Ca Calcium | 21 44.96 Sc Scandium | 22 47.90 Ti Titanium | 23 50.94 V Vanadium | 24 51.996 Cr Chromium | 25 54.94 Mn Manganese | 26 55.85 Fe Iron | 27 58.93 Co Cobalt | 28 58.70 Ni Nickel | 29 63.55 Cu Copper | 30 65.37 Zn Zinc | 31 69.72 Ga Gallium | 32 72.59 Ge Germanium | 33 74.92 As Arsenic | 34 78.96 Se Selenium | 35 79.90 Br Bromine | 36 83.80 Kr Krypton |
| 37 85.47 Rb Rubidium | 38 87.62 Sr Strontium | 39 88.91 Y Yttrium | 40 91.22 Zr Zirconium | 41 92.91 Nb Niobium | 42 95.94 Mo Molybdenum | 43 (98) Tc Technetium | 44 101.07 Ru Ruthenium | 45 102.91 Rh Rhodium | 46 106.40 Pd Palladium | 47 107.87 Ag Silver | 48 112.41 Cd Cadmium | 49 114.82 In Indium | 50 118.69 Sn Tin | 51 121.75 Sb Antimony | 52 127.60 Te Tellurium | 53 126.90 I Iodine | 54 131.30 Xe Xenon |
| 55 132.91 Cs Cesium | 56 137.33 Ba Barium | 57 138.91 La ▸ Lanthanum | 72 178.49 Hf Hafnium | 73 180.95 Ta Tantalum | 74 183.85 W Tungsten | 75 186.21 Re Rhenium | 76 190.20 Os Osmium | 77 192.22 Ir Iridium | 78 195.09 Pt Platinum | 79 196.97 Au Gold | 80 200.59 Hg Mercury | 81 204.37 Tl Thallium | 82 207.19 Pb Lead | 83 208.98 Bi Bismuth | 84 (209) Po Polonium | 85 (210) At Astatine | 86 (222) Rn Radon |
| 87 (223) Fr Francium | 88 226.03 Ra Radium | 89 227.03 Ac ▸ Actinium | 104 (261) Rf Rutherfordium | 105 (262) Ha Hahnium | 106 (266) Sg Seaborgium | 107 (262) Bh Bohrium | 108 (265) Hs Hassium | 109 (266) Mt Meitnerium | 110 (271) | 111 (272) | 112 (277) | (113) | 114 (285) | (115) | 116 (289) | (117) | 118 (293) |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lanthanide series ▸ | 58 140.12 Ce Cerium | 59 140.91 Pr Praseodymium | 60 144.24 Nd Neodymium | 61 (145) Pm Promethium | 62 150.40 Sm Samarium | 63 151.96 Eu Europium | 64 157.25 Gd Gadolinium | 65 158.93 Tb Terbium | 66 162.50 Dy Dysprosium | 67 164.93 Ho Holmium | 68 167.26 Er Erbium | 69 168.93 Tm Thulium | 70 173.04 Yb Ytterbium | 71 174.97 Lu Lutetium |
| Actinide series ▸ | 90 232.04 Th Thorium | 91 231.04 Pa Protactinium | 92 238.03 U Uranium | 93 237.05 Np Neptunium | 94 (244) Pu Plutonium | 95 (243) Am Americium | 96 (247) Cm Curium | 97 (247) Bk Berkelium | 98 (251) Cf Californium | 99 (252) Es Einsteinium | 100 (257) Fm Fermium | 101 (260) Md Mendelevium | 102 (259) No Nobelium | 103 (262) Lr Lawrencium |

© 1998 Lawrence Berkeley National Laboratory
XBD9805-01424.ILR