

Period	1	Group 1		Group 2											Group 18
	2	3 Li Lithium 6.941 [He]2s ¹	4 Be Beryllium 9.012 182 [He]2s ²										10 Ne Neon 20.1797 [He]2s ² 2p ⁶		
	3	11 Na Sodium 22.989 770 [Ne]3s ¹	12 Mg Magnesium 24.3050 [Ne]3s ²										18 Ar Argon 39.948 [Ne]3s ² 3p ⁶		
	4	19 K Potassium 39.0983 [Ar]4s ¹	20 Ca Calcium 40.078 [Ar]4s ²	21 Sc Scandium 44.955 910 [Ar]3d ¹ 4s ²	22 Ti Titanium 47.867 [Ar]3d ² 4s ²	23 V Vanadium 50.9415 [Ar]3d ³ 4s ²	24 Cr Chromium 51.9961 [Ar]3d ⁵ 4s ¹	25 Mn Manganese 54.938 049 [Ar]3d ⁵ 4s ²	26 Fe Iron 55.845 [Ar]3d ⁶ 4s ²	27 Co Cobalt 58.933 200 [Ar]3d ⁷ 4s ²			36 Kr Krypton 83.798 [Ar]3d ¹⁰ 4s ² 4p ⁶		
	5	37 Rb Rubidium 85.4678 [Kr]5s ¹	38 Sr Strontium 87.62 [Kr]5s ²	39 Y Yttrium 88.905 85 [Kr]4d ¹ 5s ²	40 Zr Zirconium 91.224 [Kr]4d ² 5s ²	41 Nb Niobium 92.906 38 [Kr]4d ⁴ 5s ¹	42 Mo Molybdenum 95.94 [Kr]4d ⁵ 5s ¹	43 Tc Technetium (98) [Kr]4d ⁵ 5s ¹	44 Ru Ruthenium 101.07 [Kr]4d ⁷ 5s ¹	45 Rh Rhodium 102.905 50 [Kr]4d ⁸ 5s ¹			54 Xe Xenon 131.293 [Kr]4d ¹⁰ 5s ² 5p ⁶		
	6	55 Cs Cesium 132.905 43 [Xe]6s ¹	56 Ba Barium 137.327 [Xe]6s ²	57 La Lanthanum 138.9055 [Xe]5d ¹ 6s ²	72 Hf Hafnium 178.49 [Xe]4f ¹⁴ 5d ² 6s ²	73 Ta Tantalum 180.9479 [Xe]4f ¹⁴ 5d ³ 6s ²	74 W Tungsten 183.84 [Xe]4f ¹⁴ 5d ⁴ 6s ²	75 Re Rhenium 186.207 [Xe]4f ¹⁴ 5d ⁵ 6s ²	76 Os Osmium 190.23 [Xe]4f ¹⁴ 5d ⁶ 6s ²	77 Ir Iridium 192.217 [Xe]4f ¹⁴ 5d ⁷ 6s ²			86 Rn Radon (222) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶		
	7	87 Fr Francium (223) [Rn]7s ¹	88 Ra Radium (226) [Rn]7s ²	89 Ac Actinium (227) [Rn]6d ¹ 7s ²	104 Rf Rutherfordium (261) [Rn]5f ¹⁴ 6d ² 7s ²	105 Db Dubnium (262) [Rn]5f ¹⁴ 6d ³ 7s ²	106 Sg Seaborgium (266) [Rn]5f ¹⁴ 6d ⁴ 7s ²	107 Bh Bohrium (264) [Rn]5f ¹⁴ 6d ⁵ 7s ²	108 Hs Hassium (277) [Rn]5f ¹⁴ 6d ⁶ 7s ²	109 Mt Meitnerium (268) [Rn]5f ¹⁴ 6d ⁷ 7s ²					

Key:

Atomic number — 6

Symbol — **C**

Name — **Carbon**

Average atomic mass — 12.0107

Electron configuration — [He]2s²2p²

Hydrogen
Semiconductors
(also known as metalloids)

- Metals**
- Alkali metals
 - Alkaline-earth metals
 - Transition metals
 - Other metals
- Nonmetals**
- Halogens
 - Noble gases
 - Other nonmetals

			Group 13	Group 14	Group 15	Group 16	Group 17			
			5 B Boron 10.811 [He]2s ² 2p ¹	6 C Carbon 12.0107 [He]2s ² 2p ²	7 N Nitrogen 14.0067 [He]2s ² 2p ³	8 O Oxygen 15.9994 [He]2s ² 2p ⁴	9 F Fluorine 18.998 4032 [He]2s ² 2p ⁵			
			13 Al Aluminum 26.981 538 [Ne]3s ² 3p ¹	14 Si Silicon 28.0855 [Ne]3s ² 3p ²	15 P Phosphorus 30.973 761 [Ne]3s ² 3p ³	16 S Sulfur 32.065 [Ne]3s ² 3p ⁴	17 Cl Chlorine 35.453 [Ne]3s ² 3p ⁵			
Group 10	Group 11	Group 12	31 Ga Gallium 69.723 [Ar]3d ¹⁰ 4s ² 4p ¹	32 Ge Germanium 72.64 [Ar]3d ¹⁰ 4s ² 4p ²	33 As Arsenic 74.921 60 [Ar]3d ¹⁰ 4s ² 4p ³	34 Se Selenium 78.96 [Ar]3d ¹⁰ 4s ² 4p ⁴	35 Br Bromine 79.904 [Ar]3d ¹⁰ 4s ² 4p ⁵			
46 Pd Palladium 106.42 [Kr]4d ¹⁰ 5s ⁰	47 Ag Silver 107.8682 [Kr]4d ¹⁰ 5s ¹	48 Cd Cadmium 112.411 [Kr]4d ¹⁰ 5s ²	49 In Indium 114.818 [Kr]4d ¹⁰ 5s ² 5p ¹	50 Sn Tin 118.710 [Kr]4d ¹⁰ 5s ² 5p ²	51 Sb Antimony 121.760 [Kr]4d ¹⁰ 5s ² 5p ³	52 Te Tellurium 127.60 [Kr]4d ¹⁰ 5s ² 5p ⁴	53 I Iodine 126.904 47 [Kr]4d ¹⁰ 5s ² 5p ⁵			
78 Pt Platinum 195.078 [Xe]4f ¹⁴ 5d ⁹ 6s ¹	79 Au Gold 196.966 55 [Xe]4f ¹⁴ 5d ¹⁰ 6s ¹	80 Hg Mercury 200.59 [Xe]4f ¹⁴ 5d ¹⁰ 6s ²	81 Tl Thallium 204.3833 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹	82 Pb Lead 207.2 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ²	83 Bi Bismuth 208.980 38 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ³	84 Po Polonium (209) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴	85 At Astatine (210) [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁵			
110 Ds Darmstadtium (281) [Rn]5f ¹⁴ 6d ⁷ 7s ¹	111 Uuu* Unununium (272) [Rn]5f ¹⁴ 6d ¹⁰ 7s ¹	112 Uub* Ununbium (285) [Rn]5f ¹⁴ 6d ¹⁰ 7s ²	113 Uut* Ununtrium (284) [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ¹	114 Uuq* Ununquadium (289) [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ²	115 Uup* Ununpentium (288) [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ³					

A team at Lawrence Berkeley National Laboratories reported the discovery of elements 116 and 118 in June 1999. The same team retracted the discovery in July 2001. The discovery of elements 113, 114, and 115 has been reported but not confirmed.

* The systematic names and symbols for elements greater than 110 will be used until the approval of trivial names by IUPAC.

58 Ce Cerium 140.116 [Xe]4f ¹ 5d ¹ 6s ²	59 Pr Praseodymium 140.907 65 [Xe]4f ³ 6s ²	60 Nd Neodymium 144.24 [Xe]4f ⁴ 6s ²	61 Pm Promethium (145) [Xe]4f ⁵ 6s ²	62 Sm Samarium 150.36 [Xe]4f ⁶ 6s ²
90 Th Thorium 232.0381 [Rn]6d ² 7s ²	91 Pa Protactinium 231.035 88 [Rn]5f ² 6d ¹ 7s ²	92 U Uranium 238.028 91 [Rn]5f ³ 6d ¹ 7s ²	93 Np Neptunium (237) [Rn]5f ⁴ 6d ¹ 7s ²	94 Pu Plutonium (244) [Rn]5f ⁶ 7s ²

63 Eu Europium 151.964 [Xe]4f ⁷ 6s ²	64 Gd Gadolinium 157.25 [Xe]4f ⁷ 5d ¹ 6s ²	65 Tb Terbium 158.925 34 [Xe]4f ⁹ 6s ²	66 Dy Dysprosium 162.500 [Xe]4f ¹⁰ 6s ²	67 Ho Holmium 164.930 32 [Xe]4f ¹¹ 6s ²	68 Er Erbium 167.259 [Xe]4f ¹² 6s ²	69 Tm Thulium 168.934 21 [Xe]4f ¹³ 6s ²	70 Yb Ytterbium 173.04 [Xe]4f ¹⁴ 6s ²	71 Lu Lutetium 174.967 [Xe]4f ¹⁴ 5d ¹ 6s ²
95 Am Americium (243) [Rn]5f ⁷ 7s ²	96 Cm Curium (247) [Rn]5f ⁷ 6d ¹ 7s ²	97 Bk Berkelium (247) [Rn]5f ⁷ 7s ²	98 Cf Californium (251) [Rn]5f ¹⁰ 7s ²	99 Es Einsteinium (252) [Rn]5f ¹¹ 7s ²	100 Fm Fermium (257) [Rn]5f ¹² 7s ²	101 Md Mendelevium (258) [Rn]5f ¹³ 7s ²	102 No Nobelium (259) [Rn]5f ¹⁴ 7s ²	103 Lr Lawrencium (262) [Rn]5f ¹⁴ 6d ¹ 7s ²

The atomic masses listed in this table reflect the precision of current measurements. (Values listed in parentheses are those of the element's most stable or most common isotope.)