

Periodic Table of the Elements

Atomic mass	28.0855	-4	+2	+4	Selected Oxidation States
Symbol	Si				
Atomic number	14				
Electron configuration	$[Ne]3s^23p^2$				
* The bracketed area represents the electron configuration of a noble gas.	Silicon				Name

	Group	1	2											13	14	15	16	17	18	
1		1.00794 H 1 <small>1s</small> Hydrogen															4.00260 He 2 <small>1s²</small> Helium			
2		6.941 +1 Li 3 <small>1s²2s¹</small> Lithium	9.01218 +2 Be 4 <small>1s²2s²</small> Beryllium	Transition Elements										10.81 +3 B 5 <small>1s²2s²2p¹</small> Boron	12.0111 -4 +2 +4 C 6 <small>1s²2s²2p²</small> Carbon	14.0067 -3 -2 -1 +1 +2 +3 +4 +5 N 7 <small>1s²2s²2p³</small> Nitrogen	15.9994 -2 O 8 <small>1s²2s²2p⁴</small> Oxygen	18.998403 -1 F 9 <small>1s²2s²2p⁵</small> Fluorine	20.179 0 Ne 10 <small>1s²2s²2p⁶</small> Neon	
3		22.98977 +1 Na 11 <small>[Ne]3s¹</small> Sodium	24.305 +2 Mg 12 <small>[Ne]3s²</small> Magnesium											26.98154 +3 Al 13 <small>[Ne]3s²3p¹</small> Aluminum	28.0855 +2 +3 +4 Si 14 <small>[Ne]3s²3p²</small> Silicon	30.97376 -3 -2 +3 +4 +5 P 15 <small>[Ne]3s²3p³</small> Phosphorus	32.06 -2 +4 +6 S 16 <small>[Ne]3s²3p⁴</small> Sulfur	35.453 -1 +1 +3 +5 +7 Cl 17 <small>[Ne]3s²3p⁵</small> Chlorine	39.948 0 Ar 18 <small>[Ne]3s²3p⁶</small> Argon	
4		39.0983 +1 K 19 <small>[Ar]4s¹</small> Potassium	40.08 +2 Ca 20 <small>[Ar]4s²</small> Calcium	44.9559 +3 Sc 21 <small>[Ar]3d¹4s²</small> Scandium	47.88 +2 +3 +4 Ti 22 <small>[Ar]3d²4s²</small> Titanium	50.9415 +2 +3 +4 +5 V 23 <small>[Ar]3d³4s²</small> Vanadium	51.996 +2 +3 +6 Cr 24 <small>[Ar]3d⁵4s¹</small> Chromium	54.9380 +2 +3 +4 +7 Mn 25 <small>[Ar]3d⁵4s²</small> Manganese	55.847 +2 +3 Fe 26 <small>[Ar]3d⁶4s²</small> Iron	58.9332 +2 +3 Co 27 <small>[Ar]3d⁷4s²</small> Cobalt	58.69 +2 +3 Ni 28 <small>[Ar]3d⁸4s²</small> Nickel	63.546 +1 +2 Cu 29 <small>[Ar]3d¹⁰4s¹</small> Copper	65.39 +2 Zn 30 <small>[Ar]3d¹⁰4s²</small> Zinc	69.72 +3 Ga 31 <small>[Ar]3d¹⁰4s²4p¹</small> Gallium	72.59 +2 +4 Ge 32 <small>[Ar]3d¹⁰4s²4p²</small> Germanium	74.9216 -3 -2 +3 +5 As 33 <small>[Ar]3d¹⁰4s²4p³</small> Arsenic	78.96 -2 +4 +6 Se 34 <small>[Ar]3d¹⁰4s²4p⁴</small> Selenium	79.904 -1 +1 +5 Br 35 <small>[Ar]3d¹⁰4s²4p⁵</small> Bromine	83.80 0 +2 Kr 36 <small>[Ar]3d¹⁰4s²4p⁶</small> Krypton	
5		85.4678 +1 Rb 37 <small>[Kr]5s¹</small> Rubidium	87.62 +2 Sr 38 <small>[Kr]5s²</small> Strontium	88.9059 +3 Y 39 <small>[Kr]4d¹5s²</small> Yttrium	91.224 +4 Zr 40 <small>[Kr]4d²5s²</small> Zirconium	92.9064 +3 +5 Nb 41 <small>[Kr]4d⁴5s¹</small> Niobium	95.94 +3 +6 Mo 42 <small>[Kr]4d⁵5s¹</small> Molybdenum	(98) +4 +6 +7 Tc 43 <small>[Kr]4d⁶5s¹</small> Technetium	101.07 +3 Ru 44 <small>[Kr]4d⁷5s¹</small> Ruthenium	102.906 +3 Rh 45 <small>[Kr]4d⁸5s¹</small> Rhodium	106.42 +2 +4 Pd 46 <small>[Kr]4d¹⁰5s⁰</small> Palladium	107.868 +1 Ag 47 <small>[Kr]4d¹⁰5s¹</small> Silver	112.41 +2 Cd 48 <small>[Kr]4d¹⁰5s²</small> Cadmium	114.82 +3 In 49 <small>[Kr]4d¹⁰5s²5p¹</small> Indium	118.71 +2 +4 Sn 50 <small>[Kr]4d¹⁰5s²5p²</small> Tin	121.75 -3 -2 +3 +5 Sb 51 <small>[Kr]4d¹⁰5s²5p³</small> Antimony	127.60 -2 +4 +6 Te 52 <small>[Kr]4d¹⁰5s²5p⁴</small> Tellurium	126.905 -1 +1 +5 +7 I 53 <small>[Kr]4d¹⁰5s²5p⁵</small> Iodine	131.29 0 +2 +4 +6 Xe 54 <small>[Kr]4d¹⁰5s²5p⁶</small> Xenon	
6		132.905 +1 Cs 55 <small>[Xe]6s¹</small> Cesium	137.33 +2 Ba 56 <small>[Xe]6s²</small> Barium	138.906 +3 La 57 <small>[Xe]5d¹6s²</small> Lanthanum	178.49 +4 Hf 72 <small>[Xe]4f¹⁴5d²6s²</small> Hafnium	180.948 +5 Ta 73 <small>[Xe]4f¹⁴5d³6s²</small> Tantalum	183.85 +6 W 74 <small>[Xe]4f¹⁴5d⁴6s²</small> Tungsten	186.207 +4 +6 +7 Re 75 <small>[Xe]4f¹⁴5d⁵6s²</small> Rhenium	190.2 +3 +4 Os 76 <small>[Xe]4f¹⁴5d⁶6s²</small> Osmium	192.22 +3 +4 Ir 77 <small>[Xe]4f¹⁴5d⁷6s²</small> Iridium	195.08 +2 +4 Pt 78 <small>[Xe]4f¹⁴5d⁹6s¹</small> Platinum	196.967 +1 +3 Au 79 <small>[Xe]4f¹⁴5d¹⁰6s¹</small> Gold	200.59 +1 +2 Hg 80 <small>[Xe]4f¹⁴5d¹⁰6s²</small> Mercury	204.383 +1 +3 Tl 81 <small>[Xe]4f¹⁴5d¹⁰6s²6p¹</small> Thallium	207.2 +2 +4 Pb 82 <small>[Xe]4f¹⁴5d¹⁰6s²6p²</small> Lead	208.980 +3 +5 Bi 83 <small>[Xe]4f¹⁴5d¹⁰6s²6p³</small> Bismuth	(209) +2 +4 Po 84 <small>[Xe]4f¹⁴5d¹⁰6s²6p⁴</small> Polonium	(210) +2 +4 At 85 <small>[Xe]4f¹⁴5d¹⁰6s²6p⁵</small> Astatine	(222) 0 Rn 86 <small>[Xe]4f¹⁴5d¹⁰6s²6p⁶</small> Radon	
7		(223) +1 Fr 87 <small>[Rn]7s¹</small> Francium	226.025 +2 Ra 88 <small>[Rn]7s²</small> Radium	227.028 +3 Ac 89 <small>[Rn]6d¹7s²</small> Actinium	(261) +4 Rf 104 <small>[Rn]5f¹⁴6d²7s²</small> Rutherfordium	(262) +4 Db 105 <small>[Rn]5f¹⁴6d³7s²</small> Dubnium	(263) +3 +4 +5 +6 Sg 106 <small>[Rn]5f¹⁴6d⁴7s²</small> Seaborgium	(262) +3 +4 +5 +6 Bh 107 <small>[Rn]5f¹⁴6d⁵7s²</small> Bohrium	(265) +3 +4 +5 +6 Hs 108 <small>[Rn]5f¹⁴6d⁶7s²</small> Hassium	(266?) +3 +4 +5 +6 Mt 109 <small>[Rn]5f¹⁴6d⁷7s²</small> Meitnerium	Mass numbers in parentheses are those of the most stable or most common isotope.									

Lanthanoid Series

Actinoid Series

140.12 +3 +4 Ce 58 <small>[Xe]4f¹5d¹6s²</small> Cerium	140.908 +3 Pr 59 <small>[Xe]4f³6s²</small> Praseodymium	144.24 +3 Nd 60 <small>[Xe]4f⁴6s²</small> Neodymium	(145) +3 Pm 61 <small>[Xe]4f⁶6s²</small> Promethium	150.36 +2 +3 Sm 62 <small>[Xe]4f⁶6s²</small> Samarium	151.96 +2 +3 Eu 63 <small>[Xe]4f⁷6s²</small> Europium	157.25 +3 Gd 64 <small>[Xe]4f⁷5d¹6s²</small> Gadolinium	158.925 +3 Tb 65 <small>[Xe]4f⁹6s²</small> Terbium	162.50 +3 Dy 66 <small>[Xe]4f¹⁰6s²</small> Dysprosium	164.930 +3 Ho 67 <small>[Xe]4f¹¹6s²</small> Holmium	167.26 +3 Er 68 <small>[Xe]4f¹²6s²</small> Erbium	168.934 +3 Tm 69 <small>[Xe]4f¹³6s²</small> Thulium	173.04 +2 +3 Yb 70 <small>[Xe]4f¹⁴6s²</small> Ytterbium	174.967 +3 Lu 71 <small>[Xe]4f¹⁴5d¹6s²</small> Lutetium
232.038 +4 Th 90 <small>[Rn]6d²7s²</small> Thorium	231.036 +4 +5 Pa 91 <small>[Rn]5f²6d¹7s²</small> Protactinium	238.029 +3 +4 +5 +6 U 92 <small>[Rn]5f³6d¹7s²</small> Uranium	237.048 +3 +4 +5 +6 Np 93 <small>[Rn]5f⁴6d¹7s²</small> Neptunium	(244) +3 +4 +5 +6 Pu 94 <small>[Rn]5f⁶7s²</small> Plutonium	(243) +3 +4 +5 +6 Am 95 <small>[Rn]5f⁷7s²</small> Americium	(247) +3 Cm 96 <small>[Rn]5f⁷6d¹7s²</small> Curium	(247) +3 +4 Bk 97 <small>[Rn]5f⁹7s²</small> Berkelium	(251) +3 Cf 98 <small>[Rn]5f¹⁰7s²</small> Californium	(252) +3 Es 99 <small>[Rn]5f¹¹7s²</small> Einsteinium	(257) +3 Fm 100 <small>[Rn]5f¹²7s²</small> Fermium	(258) +3 Md 101 <small>[Rn]5f¹³7s²</small> Mendelevium	(259) +3 No 102 <small>[Rn]5f¹⁴7s²</small> Nobelium	(260) +3 Lr 103 <small>[Rn]5f¹⁴6d¹7s²</small> Lawrencium

Metals ← → Nonmetals