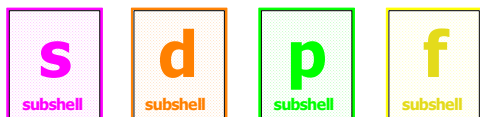


Periodic Table of the Elements

shells (energy levels)

shells (energy levels)



Note:
Atomic number = # of protons = # of electrons
Atomic mass (rounded to nearest integer) = # of protons + # of neutrons

KEY

atomic number → 8
 oxygen → element name
O → symbol
 2001 atomic mass → 15.9994(3)
 $2-$ ← most common oxidation number
 p^4 ← orbital

Note: The last significant figure is reliable to ±1 except where greater uncertainty is given in parentheses (.). Mass numbers given in brackets [] are of the longest lived isotopes.

Shells (Energy Levels)	I A	II A	III B	IV B	V B	VI B	VII B	VIII B	I B	II B	III A	IV A	V A	VI A	VII A	VIII A
	1+	2+	3+					↓	+		3+		3-	2-	1-	
1	hydrogen 1 H 1.00794(7)															helium 2 He 4.002602(2)
2	lithium 3 Li 6.941(2)	beryllium 4 Be 9.012182(3)									boron 5 B 10.811(7)	carbon 6 C 12.0107(8)	nitrogen 7 N 14.00674(7)	oxygen 8 O 15.9994(3)	fluorine 9 F 18.9984032(5)	neon 10 Ne 20.1797(6)
3	sodium 11 Na 22.989770(2)	magnesium 12 Mg 24.3050(6)									aluminium 13 Al 26.981538(2)	silicon 14 Si 28.0855(3)	phosphorus 15 P 30.973761(2)	sulfur 16 S 32.065(5)	chlorine 17 Cl 35.453(2)	argon 18 Ar 39.948(1)
4	potassium 19 K 39.0983(1)	calcium 20 Ca 40.078(4)									gallium 31 Ga 69.723(1)	germanium 32 Ge 72.64(1)	arsenic 33 As 74.92160(2)	selenium 34 Se 78.96(3)	bromine 35 Br 79.904(1)	krypton 36 Kr 83.798(2)
5	rubidium 37 Rb 85.4678(3)	strontium 38 Sr 87.62(1)									indium 49 In 114.818(3)	tin 50 Sn 118.710(7)	antimony 51 Sb 121.760(1)	tellurium 52 Te 127.60(3)	iodine 53 I 126.90447(3)	xenon 54 Xe 131.293(6)
6	caesium 55 Cs 132.90545(2)	barium 56 Ba 137.327(7)									thallium 81 Tl 204.3833(2)	lead 82 Pb 207.2(1)	bismuth 83 Bi 208.98038(2)	polonium 84 Po [209]	astatine 85 At [210]	radon 86 Rn [222]
7	francium 87 Fr [223]	radium 88 Ra [226]									ununtrium 113 Uut [284]	ununquadium 114 Uuq [289]	ununpentium 115 Uup [288]	ununhexium 116 Uuh [293]	ununseptium 117 Uus [294]	ununoctium 118 Uuo [294]
	s^1	s^2									p^1	p^2	p^3	p^4	p^5	p^6
4	* lanthanoids		lanthanum 57 La 138.9055(2)	cerium 58 Ce 140.116(1)	praseodymium 59 Pr 140.90765(2)	neodymium 60 Nd 144.24(3)	promethium 61 Pm [145]	samarium 62 Sm 150.36(3)	europium 63 Eu 151.964(1)	gadolinium 64 Gd 157.25(3)	terbium 65 Tb 158.92534(2)	dysprosium 66 Dy 162.500(1)	holmium 67 Ho 164.93032(2)	erbium 68 Er 167.259(3)	thulium 69 Tm 168.93421(2)	ytterbium 70 Yb 173.04(3)
5	** actinoids		actinium 89 Ac [227]	thorium 90 Th 232.0381(1)	protactinium 91 Pa 231.03588(2)	uranium 92 U 238.02891(3)	neptunium 93 Np [237]	plutonium 94 Pu [244]	americium 95 Am [243]	curium 96 Cm [247]	berkelium 97 Bk [247]	californium 98 Cf [251]	einsteinium 99 Es [252]	fermium 100 Fm [257]	mendelevium 101 Md [258]	nobelium 102 No [259]
			f^1	f^2	f^3	f^4	f^5	f^6	f^7	f^8	f^9	f^{10}	f^{11}	f^{12}	f^{13}	f^{14}

All atomic mass data is from WebElements: <http://www.webelements.com/>