



Periodic Table of the Elements

Group 1

18

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 2.00 H hydrogen 1.008	2 4 1.57 Be beryllium 9.0122	3 0.98 Li lithium 6.9675	4 1.36 Sc scandium 44.956	5 1.33 Ti titanium 47.867	6 1.54 V vanadium 50.942	7 1.63 Cr chromium 51.996	8 1.66 Mn manganese 54.938	9 1.83 Fe iron 55.845	10 2.00 Co cobalt 58.933	11 2.19 Ni nickel 58.693	12 2.36 Cu copper 63.546	13 2.41 Zn zinc 65.38	14 2.55 Ga gallium 69.723	15 2.69 Ge germanium 72.63	16 2.81 As arsenic 74.922	17 2.96 Se selenium 78.971	18 3.04 Br bromine 79.904
19 0.82 K potassium 39.098	20 0.82 Ca calcium 40.078	21 0.82 Sc scandium 44.956	22 0.82 Ti titanium 47.867	23 0.82 V vanadium 50.942	24 0.82 Cr chromium 51.996	25 0.82 Mn manganese 54.938	26 0.82 Fe iron 55.845	27 0.82 Co cobalt 58.933	28 0.82 Ni nickel 58.693	29 0.82 Cu copper 63.546	30 0.82 Zn zinc 65.38	31 0.82 Ga gallium 69.723	32 0.82 Ge germanium 72.63	33 0.82 As arsenic 74.922	34 0.82 Se selenium 78.971	35 0.82 Br bromine 79.904	36 0.82 Kr krypton 83.798
37 0.82 Rb rubidium 85.468	38 0.82 Sr strontium 87.62	39 0.82 Y yttrium 88.906	40 0.82 Zr zirconium 91.224	41 0.82 Nb niobium 92.906	42 0.82 Mo molybdenum 95.95	43 0.82 Tc technetium (97)	44 0.82 Ru ruthenium 101.07	45 0.82 Rh rhodium 102.91	46 0.82 Pd palladium 106.42	47 0.82 Ag silver 107.87	48 0.82 Cd cadmium 112.41	49 0.82 In indium 114.82	50 0.82 Sn tin 118.71	51 0.82 Sb antimony 121.76	52 0.82 Te tellurium 127.6	53 0.82 I iodine 126.9	54 0.82 Xe xenon 131.29
55 0.79 Cs caesium 132.91	56 0.79 Ba barium 137.33	57 0.79 La lanthanum 138.91	58 0.79 Ce cerium 140.12	59 0.79 Pr praseodymium 140.91	60 0.79 Nd neodymium 144.24	61 0.79 Pm promethium (145)	62 0.79 Sm samarium 150.36	63 0.79 Eu europium 151.96	64 0.79 Gd gadolinium 157.25	65 0.79 Tb terbium 158.93	66 0.79 Dy dysprosium 162.5	67 0.79 Ho holmium 164.93	68 0.79 Er erbium 167.26	69 0.79 Tm thulium 168.93	70 0.79 Yb ytterbium 173.05	71 0.79 Lu lutetium 174.97	72 0.79 Hf hafnium 178.49
87 0.79 Fr francium (223)	88 0.79 Ra radium (226)	89 0.79 Ac actinium (227)	90 0.79 Th thorium 232.04	91 0.79 Pa protactinium 231.04	92 0.79 U uranium 238.03	93 0.79 Np neptunium (237)	94 0.79 Pu plutonium (244)	95 0.79 Am americium (243)	96 0.79 Cm curium (247)	97 0.79 Bk berkelium (247)	98 0.79 Cf californium (251)	99 0.79 Es einsteinium (252)	100 0.79 Fm fermium (257)	101 0.79 Md mendelevium (258)	102 0.79 No nobelium (259)	103 0.79 Lr lawrencium (260)	104 0.79 Rf rutherfordium (261)

Z	X	ss
	Sy	element saw

Z: atomic number
X: Pauling electronegativity
ss: last occupied subshell
Sy: symbol
element: element name
saw: standard atomic weight†



2	13										17										1s								
He helium 4.0026																													
10	2p		6		2.55		2p		7		3.04		2p		8		3.44		2p		9		3.98		2p		10		Ne neon 20.18
	B	boron 10.8135	C	carbon 12.0105								N	nitrogen 14.007							O	oxygen 15.9995						F	fluorine 18.998	
13	3p		14		1.90		3p		15		2.19		3p		16		2.58		3p		17		3.16		3p		18		Ar argon 39.8775
	Al	aluminium 26.982	Si	silicon 28.085								P	phosphorus 30.974							S	sulfur 32.0675						Cl	chlorine 35.4515	
31	4p		32		2.01		4p		33		2.18		4p		34		2.55		4p		35		2.96		4p		36		Kr krypton 83.798
	Ga	gallium 69.723	Ge	germanium 72.63								As	arsenic 74.922							Se	selenium 78.971						Br	bromine 79.904	
49	5p		50		1.96		5p		51		2.05		5p		52		2.1		5p		53		2.66		5p		54		Xe xenon 131.29
	In	indium 114.82	Sn	tin 118.71								Sb	antimony 121.76							Te	tellurium 127.6						I	iodine 126.9	
81	6p		82		1.8		6p		83		2.02		6p		84		2.0		6p		85		2.2		6p		86		Rn radon (222)
	Tl	thallium 204.385	Pb	lead 207.2								Bi	bismuth 208.98							Po	polonium (209)						At	astatine (210)	
113	7p		114		7p		115		7p		116		7p		117		7p		118		7p		7p		7p		118		Og oganeson (294)
	Nh	nihonium (286)	Fl	flerovium (289)								Mc	moscovium (290)							Lv	livermorium (293)						Ts	tennessine (294)	

57 La lanthanum 138.91	58 Ce cerium 140.12	59 Pr praseodymium 140.91	60 Nd neodymium 144.24	61 Pm promethium (145)	62 Sm samarium 150.36	63 Eu europium 151.96	64 Gd gadolinium 157.25	65 Tb terbium 158.93	66 Dy dysprosium 162.5	67 Ho holmium 164.93	68 Er erbium 167.26	69 Tm thulium 168.93	70 Yb ytterbium 173.05	71 Lu lutetium 174.97	72 Hf hafnium 178.49	73 Ta tantalum 180.95	74 W tungsten 183.84	75 Re rhenium 186.21	76 Os osmium 190.23	77 Ir iridium 192.22	78 Pt platinum 195.08	79 Au gold 196.97	80 Hg mercury 200.59	81 Tl thallium 204.385	82 Pb lead 207.2	83 Bi bismuth 208.98	84 Po polonium (209)	85 At astatine (210)	86 Rn radon (222)	87 Fr francium (223)	88 Ra radium (226)	89 Ac actinium (227)	90 Th thorium 232.04	91 Pa protactinium 231.04	92 U uranium 238.03	93 Np neptunium (237)	94 Pu plutonium (244)	95 Am americium (243)	96 Cm curium (247)	97 Bk berkelium (247)	98 Cf californium (251)	99 Es einsteinium (252)	100 Fm fermium (257)	101 Md mendelevium (258)	102 No nobelium (259)	103 Lr lawrencium (260)
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†Standard atomic weights (average terrestrial atomic weight) taken from the Commission on Isotopic Abundances and Atomic Weights (<http://www.ciaaw.org/abridged-atomic-weights.htm>). If CIAAW indicates a range for the standard atomic weight of an element, I used the arithmetic mean of the boundaries of the range. Elements with atomic weight in parentheses (e.g., Francium (223)) have no known stable isotopes and it is therefore impossible to provide a standard atomic weight. For these elements, the mass of a representative isotope is provided.

*Indicates an anomalous (Aufbau rule-breaking) ground state electron configuration.

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