

IUPAC Periodic Table of the Elements

1 H hydrogen 1.008 [1.0078, 1.0082]																	18 He helium 4.0026
3 Li lithium 6.94 [6.938, 6.997]	4 Be beryllium 9.0122											13 B boron 10.81 [10.806, 10.821]	14 C carbon 12.011 [12.009, 12.012]	15 N nitrogen 14.007 [14.006, 14.008]	16 O oxygen 15.999 [15.999, 16.000]	17 F fluorine 18.998	10 Ne neon 20.180
11 Na sodium 22.990	12 Mg magnesium 24.305 [24.304, 24.307]											13 Al aluminium 26.982	14 Si silicon 28.085 [28.084, 28.086]	15 P phosphorus 30.974	16 S sulfur 32.06 [32.059, 32.076]	17 Cl chlorine 35.45 [35.446, 35.457]	18 Ar argon 39.948
19 K potassium 39.098	20 Ca calcium 40.078(4)	21 Sc scandium 44.956	22 Ti titanium 47.867	23 V vanadium 50.942	24 Cr chromium 51.996	25 Mn manganese 54.938	26 Fe iron 55.845(2)	27 Co cobalt 58.933	28 Ni nickel 58.693	29 Cu copper 63.546(3)	30 Zn zinc 65.38(2)	31 Ga gallium 69.723	32 Ge germanium 72.630(6)	33 As arsenic 74.922	34 Se selenium 78.971(8)	35 Br bromine 79.904 [79.901, 79.907]	36 Kr krypton 83.798(2)
37 Rb rubidium 85.468	38 Sr strontium 87.62	39 Y yttrium 88.906	40 Zr zirconium 91.224(2)	41 Nb niobium 92.906	42 Mo molybdenum 95.95	43 Tc technetium	44 Ru ruthenium 101.07(2)	45 Rh rhodium 102.91	46 Pd palladium 106.42	47 Ag silver 107.87	48 Cd cadmium 112.41	49 In indium 114.82	50 Sn tin 118.71	51 Sb antimony 121.76	52 Te tellurium 127.60(3)	53 I iodine 126.90	54 Xe xenon 131.29
55 Cs caesium 132.91	56 Ba barium 137.33	57-71 lanthanoids	72 Hf hafnium 178.49(2)	73 Ta tantalum 180.95	74 W tungsten 183.84	75 Re rhenium 186.21	76 Os osmium 190.23(3)	77 Ir iridium 192.22	78 Pt platinum 195.08	79 Au gold 196.97	80 Hg mercury 200.59	81 Tl thallium 204.38 [204.38, 204.39]	82 Pb lead 207.2	83 Bi bismuth 208.98	84 Po polonium	85 At astatine	86 Rn radon
87 Fr francium	88 Ra radium	89-103 actinoids	104 Rf rutherfordium	105 Db dubnium	106 Sg seaborgium	107 Bh bohrium	108 Hs hassium	109 Mt meitnerium	110 Ds darmstadtium	111 Rg roentgenium	112 Cn copernicium	113 Nh nihonium	114 Fl flerovium	115 Mc moscovium	116 Lv livermorium	117 Ts tennessine	118 Og oganeson

Key:

atomic number
Symbol
name
conventional atomic weight
standard atomic weight



INTERNATIONAL UNION OF
PURE AND APPLIED CHEMISTRY

57 La lanthanum 138.91	58 Ce cerium 140.12	59 Pr praseodymium 140.91	60 Nd neodymium 144.24	61 Pm promethium	62 Sm samarium 150.36(2)	63 Eu europium 151.96	64 Gd gadolinium 157.25(3)	65 Tb terbium 158.93	66 Dy dysprosium 162.50	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
89 Ac actinium	90 Th thorium 232.04	91 Pa protactinium 231.04	92 U uranium 238.03	93 Np neptunium	94 Pu plutonium	95 Am americium	96 Cm curium	97 Bk berkelium	98 Cf californium	99 Es einsteinium	100 Fm fermium	101 Md mendelevium	102 No nobelium	103 Lr lawrencium

For notes and updates to this table, see www.iupac.org. This version is dated 28 November 2016.
Copyright © 2016 IUPAC, the International Union of Pure and Applied Chemistry.

Periodic Table of the Elements

1 1A Hydrogen H 1.008	2 1A Helium He 4.003	3 2A Lithium Li 6.941	4 2A Beryllium Be 9.012	5 3B Scandium Sc 44.956	6 3B Titanium Ti 47.88	7 3B Vanadium V 50.942	8 3B Chromium Cr 51.996	9 3B Manganese Mn 54.938	10 3B Iron Fe 55.933	11 3B Cobalt Co 58.933	12 3B Nickel Ni 58.693	13 3B Copper Cu 63.546	14 3B Zinc Zn 65.39	15 3B Gallium Ga 69.72	16 3B Germanium Ge 72.61	17 3B Arsenic As 74.922	18 3B Selenium Se 78.972	19 3B Bromine Br 79.904	20 3B Krypton Kr 84.80	21 4B Yttrium Y 88.906	22 4B Zirconium Zr 91.224	23 4B Niobium Nb 92.906	24 4B Molybdenum Mo 95.95	25 4B Technetium Tc 98.907	26 4B Ruthenium Ru 101.07	27 4B Rhodium Rh 102.906	28 4B Palladium Pd 106.42	29 4B Silver Ag 107.868	30 4B Cadmium Cd 112.411	31 4B Indium In 114.818	32 4B Tin Sn 118.71	33 4B Antimony Sb 121.760	34 4B Tellurium Te 127.6	35 4B Iodine I 126.904	36 4B Xenon Xe 131.29	37 4B Rubidium Rb 84.468	38 4B Strontium Sr 87.62	39 4B Yttrium Y 88.906	40 4B Zirconium Zr 91.224	41 4B Niobium Nb 92.906	42 4B Molybdenum Mo 95.95	43 4B Technetium Tc 98.907	44 4B Ruthenium Ru 101.07	45 4B Rhodium Rh 102.906	46 4B Palladium Pd 106.42	47 4B Silver Ag 107.868	48 4B Cadmium Cd 112.411	49 4B Indium In 114.818	50 4B Tin Sn 118.71	51 4B Antimony Sb 121.760	52 4B Tellurium Te 127.6	53 4B Iodine I 126.904	54 4B Xenon Xe 131.29	55 5B Cesium Cs 132.905	56 5B Barium Ba 137.327	57-71 5B Lanthanum Series	72 5B Hafnium Hf 178.49	73 5B Tantalum Ta 180.948	74 5B Tungsten W 183.85	75 5B Rhenium Re 186.207	76 5B Osmium Os 190.23	77 5B Iridium Ir 192.22	78 5B Platinum Pt 195.08	79 5B Gold Au 196.967	80 5B Mercury Hg 200.59	81 5B Thallium Tl 204.383	82 5B Lead Pb 207.2	83 5B Bismuth Bi 208.980	84 5B Polonium Po [208.982]	85 5B Astatine At [209.987]	86 5B Radon Rn [222.018]	87 6B Francium Fr [223.020]	88 6B Radium Ra [226.025]	89-103 6B Actinide Series	104 6B Rutherfordium Rf [261]	105 6B Dubnium Db [262]	106 6B Seaborgium Sg [266]	107 6B Bohrium Bh [264]	108 6B Hassium Hs [269]	109 6B Meitnerium Mt [268]	110 6B Darmstadtium Ds [269]	111 6B Roentgenium Rg [272]	112 6B Copernicium Cn [277]	113 6B Ununtrium Uut [289]	114 6B Flerovium Fl [289]	115 6B Unpentium Uup [298]	116 6B Livermorium Lv [298]	117 6B Unseptium Uus [298]	118 6B Ununoctium Uuo [298]
-----------------------------------	----------------------------------	-----------------------------------	-------------------------------------	-------------------------------------	------------------------------------	------------------------------------	-------------------------------------	--------------------------------------	----------------------------------	------------------------------------	------------------------------------	------------------------------------	---------------------------------	------------------------------------	--------------------------------------	-------------------------------------	--------------------------------------	-------------------------------------	------------------------------------	------------------------------------	---------------------------------------	-------------------------------------	---------------------------------------	--	---------------------------------------	--------------------------------------	---------------------------------------	-------------------------------------	--------------------------------------	-------------------------------------	---------------------------------	---------------------------------------	--------------------------------------	------------------------------------	-----------------------------------	--------------------------------------	--------------------------------------	------------------------------------	---------------------------------------	-------------------------------------	---------------------------------------	--	---------------------------------------	--------------------------------------	---------------------------------------	-------------------------------------	--------------------------------------	-------------------------------------	---------------------------------	---------------------------------------	--------------------------------------	------------------------------------	-----------------------------------	-------------------------------------	-------------------------------------	---------------------------------	-------------------------------------	---------------------------------------	-------------------------------------	--------------------------------------	------------------------------------	-------------------------------------	--------------------------------------	-----------------------------------	-------------------------------------	---------------------------------------	---------------------------------	--------------------------------------	---	---	--------------------------------------	---	---------------------------------------	---------------------------------	---	-------------------------------------	--	-------------------------------------	-------------------------------------	--	--	---	---	--	---------------------------------------	--	---	--	---

Atomic Number

Symbol

Name

Electron Configuration

- Alkali Metal
- Alkaline Earth
- Transition Metal
- Basic Metal
- Semimetal
- Nonmetal
- Halogen
- Noble Gas
- Lanthanide
- Actinide

Configurations denoted with a * are unknown and the listed values are predicted.