

IUPAC Periodic Table of the Elements

1 1 H hydrogen 1.007 94(7)	2 3 Li lithium 6.941(2)	4 Be beryllium 9.012 182(3)	13 5 B boron 10.811(7)	14 6 C carbon 12.0107(8)	15 7 N nitrogen 14.0067(2)	16 8 O oxygen 15.9994(3)	17 9 F fluorine 18.998 4032(5)	18 10 He helium 4.002 602(2)								
	Key: atomic number Symbol name standard atomic weight															
11 Na sodium 22.989 770(2)	12 Mg magnesium 24.0305(6)	3 Sc scandium 44.955 910(8)	4 Ti titanium 47.867(1)	5 V vanadium 50.9415(1)	6 Cr chromium 51.9961(6)	7 Mn manganese 54.938 049(9)	8 Fe iron 55.845(2)	9 Co cobalt 58.933 200(9)								
19 K potassium 39.0983(1)	20 Ca calcium 40.078(4)	21 Sc scandium 44.955 910(8)	22 Ti titanium 47.867(1)	23 V vanadium 50.9415(1)	24 Cr chromium 51.9961(6)	25 Mn manganese 54.938 049(9)	26 Fe iron 55.845(2)	27 Co cobalt 58.933 200(9)								
37 Rb rubidium 85.4678(3)	38 Sr strontium 87.62(1)	39 Y yttrium 88.905 85(2)	40 Zr zirconium 91.224(2)	41 Nb niobium 92.906 38(2)	42 Mo molybdenum 95.94(2)	43 Tc technetium [97.9072]	44 Ru ruthenium 101.07(2)	45 Rh rhodium 102.905 50(2)								
55 Cs caesium 132.905 45(2)	56 Ba barium 137.327(7)	57-71 lanthanoids 138.905 2	72 Hf hafnium 178.49(2)	73 Ta tantalum 180.9479(1)	74 W tungsten 183.84(1)	75 Re rhenium 186.207(1)	76 Os osmium 190.23(3)	77 Ir iridium 192.217(3)								
87 Fr francium [223.0197]	88 Ra radium [226.0254]	89-103 actinoids 104 Rf rutherfordium [261.1088]	105 Db dubnium [262.1141]	106 Sg seaborgium [266.1219]	107 Bh bohrium [264.12]	108 Hs hassium [277]	109 Mt meitnerium [268.1388]	110 Ds darmstadtium [271]	111 Uuu unununium [272]							
		57 La lanthanum 138.905(2)	58 Ce cerium 140.116(1)	59 Pr praseodymium 140.907 65(2)	60 Nd neodymium 144.24(3)	61 Pm promethium [144.9127]	62 Sm samarium 150.36(3)	63 Eu europium 151.964(1)	64 Gd gadolinium 157.25(3)	65 Tb terbium 158.925 34(2)	66 Dy dysprosium 162.500(1)	67 Ho holmium 164.930 32(2)	68 Er erbium 167.259(3)	69 Tm thulium 168.934 21(2)	70 Yb ytterbium 173.04(3)	71 Lu lutetium 174.967(1)
		89 Ac actinium [227.0277]	90 Th thorium 232.0381(1)	91 Pa protactinium 231.035 88(2)	92 U uranium 238.028 91(3)	93 Np neptunium [237.0482]	94 Pu plutonium [244.0642]	95 Am americium [243.0614]	96 Cm curium [247.0704]	97 Bk berkelium [247.0703]	98 Cf californium [251.0796]	99 Es einsteinium [252.0830]	100 Fm fermium [257.0951]	101 Md mendelevium [258.0984]	102 No nobelium [259.1010]	103 Lr lawrencium [262.1097]



Notes

- Aluminum and cesium are commonly used English-language spellings for aluminium and caesium.
- IUPAC 2001 standard atomic weights (mean relative atomic masses) are listed with uncertainties in the last figure in parentheses [R. D. Loss, *Pure Appl. Chem.* **75**, 1107-1122 (2003)]. These values correspond to current best knowledge of the elements in natural terrestrial sources. For elements with no IUPAC assigned standard value, the atomic mass (in unified atomic mass units) or the mass number of the nuclide with the longest known half-life is listed between square brackets.
- Element with atomic number 111 has not yet been named. The IUPAC provisional name is shown.
- Elements with atomic numbers 112, 114, and 116 have been reported but not fully authenticated.