

Periodic Table of the Elements

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1 H hydrogen 1.008																	2 He helium 4.0026						
3 Li lithium 6.94	4 Be beryllium 9.0122											5 B boron 10.81	6 C carbon 12.011	7 N nitrogen 14.007	8 O oxygen 15.999	9 F fluorine 18.998	10 Ne neon 20.180						
11 Na sodium 22.990	12 Mg magnesium 24.305																	13 Al aluminium 26.982	14 Si silicon 28.085	15 P phosphorus 30.974	16 S sulfur 32.06	17 Cl chlorine 35.45	18 Ar argon 39.95
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	33 As arsenic 74.922	34 Se selenium 78.971	35 Br bromine 79.904	36 Kr krypton 83.798						
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 (97.907) ¹	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	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 192.217(2)	78 Pt platinum 195.08	79 Au gold 196.97	80 Hg mercury 200.59	81 Tl thallium 204.38	82 Pb lead 207.2	83 Bi bismuth 208.98	84 Po polonium (208.982) ¹	85 At astatine (209.987) ¹	86 Rn radon (222.018) ¹					
87 Fr francium (223.02) ¹	88 Ra radium (226.025) ¹	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 oganesson					

Key:

Atomic #	Z
Symbol	
name	
conventional atomic weight	

Metalloids

Lanthanoids (La to Lu) is preferred over lanthanide, and although lanthanoid means 'like lanthanum' and so should not include lanthanum, lanthanum has become included by common usage. Actinoids include Ac to Lr³

57 La lanthanum 138.91	58 Ce cerium 140.12	59 Pr praseodymium 140.91	60 Nd neodymium 144.24	61 Pm promethium (144.913) ¹	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 (227.028) ¹	90 Th thorium 232.04	91 Pa protactinium 231.04	92 U uranium 238.03	93 Np neptunium (237.048) ¹	94 Pu plutonium (244.064) ¹	95 Am americium (243.061) ¹	96 Cm curium (247.07) ¹	97 Bk berkelium (247.07) ¹	98 Cf californium (251.08) ¹	99 Es einsteinium (252.083) ¹	100 Fm fermium (257.095) ¹	101 Md mendelevium (258.098) ¹	102 No nobelium (259.101) ¹	103 Lr lawrencium (261g.107) ¹

1. Elements lack isotopes with characteristics isotopic abundance in natural terrestrial samples.

Data gathered from PubChem. <https://pubchem.ncbi.nlm.nih.gov/>

2. Charge and/or oxidation number for common multivalent atoms.

<http://www.chymist.com/Formulas.pdf>

3. IUPAC Periodic Table Note 6.

<https://iupac.org/what-we-do/periodic-table-of-elements/>

For notes and updates to original table, see www.iupac.org. This version is dated 1 December 2018.

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Notes: Modified by C.Kleier | SimplyChemistry™ | Fall 2019 Removed Standard Atomic Mass Range, added common oxidation states/charges including the oxidation states of transition metals, and identified metalloids. Numbers in () represents the range of atomic mass in the last unit. Those numbers colored **BLUE** and **BOLD** are the most common ion

HH

droge