

# Periodic Table of the Elements

Group →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Period ↓																		
1	hydrogen 1 <b>H</b> 1.0079																	helium 2 <b>He</b> 4.0026
2	lithium 3 <b>Li</b> 6.941	beryllium 4 <b>Be</b> 9.0122											borate ion <b>BO<sub>3</sub><sup>3-</sup></b>	carbonate ion <b>CO<sub>3</sub><sup>2-</sup></b>	nitrate <b>NO<sub>3</sub><sup>1-</sup></b>	oxygen 8 <b>O</b> 15.999	fluorine 9 <b>F</b> 18.998	neon 10 <b>Ne</b> 20.180
3	sodium 11 <b>Na</b> 22.990	magnesium 12 <b>Mg</b> 24.305											aluminium 13 <b>Al</b> 26.982	silicate <b>SiO<sub>3</sub><sup>2-</sup></b>	phosphate <b>PO<sub>4</sub><sup>3-</sup></b>	sulfate <b>SO<sub>4</sub><sup>2-</sup></b>	chlorate <b>ClO<sub>3</sub><sup>1-</sup></b>	argon 18 <b>Ar</b> 39.948
4	potassium 19 <b>K</b> 39.098	calcium 20 <b>Ca</b> 40.078	scandium 21 <b>Sc</b> 44.956	titanium 22 <b>Ti</b> 47.867	vanadium 23 <b>V</b> 50.942	chromium 24 <b>Cr</b> 51.996	manganese 25 <b>Mn</b> 54.938	iron 26 <b>Fe</b> 55.845	cobalt 27 <b>Co</b> 58.933	nickel 28 <b>Ni</b> 58.693	copper 29 <b>Cu</b> 63.546	zinc 30 <b>Zn</b> 65.38	gallium 31 <b>Ga</b> 69.723	germanium 32 <b>Ge</b> 72.64	arsenate <b>AsO<sub>4</sub><sup>3-</sup></b>	selenate <b>SeO<sub>4</sub><sup>2-</sup></b>	bromate <b>BrO<sub>3</sub><sup>1-</sup></b>	krypton 36 <b>Kr</b> 83.798
5	rubidium 37 <b>Rb</b> 85.468	strontium 38 <b>Sr</b> 87.62	yttrium 39 <b>Y</b> 88.906	zirconium 40 <b>Zr</b> 91.224	niobium 41 <b>Nb</b> 92.906	molybdenum 42 <b>Mo</b> 95.96	technetium 43 <b>Tc</b> [97.91]	ruthenium 44 <b>Ru</b> 101.07	rhodium 45 <b>Rh</b> 102.91	palladium 46 <b>Pd</b> 106.42	silver 47 <b>Ag</b> 107.87	cadmium 48 <b>Cd</b> 112.41	indium 49 <b>In</b> 114.82	tin 50 <b>Sn</b> 118.71	antimony 51 <b>Sb</b> 121.76	tellurate <b>TeO<sub>4</sub><sup>2-</sup></b>	iodate <b>IO<sub>3</sub><sup>1-</sup></b>	xenon 54 <b>Xe</b> 131.29
6	caesium 55 <b>Cs</b> 132.91	barium 56 <b>Ba</b> 137.33	lutetium 71 <b>Lu</b> 174.97	hafnium 72 <b>Hf</b> 178.49	tantalum 73 <b>Ta</b> 180.95	tungsten 74 <b>W</b> 183.84	rhenium 75 <b>Re</b> 186.21	osmium 76 <b>Os</b> 190.23	iridium 77 <b>Ir</b> 192.22	platinum 78 <b>Pt</b> 195.08	gold 79 <b>Au</b> 196.97	mercury 80 <b>Hg</b> 200.59	thallium 81 <b>Tl</b> 204.38	lead 82 <b>Pb</b> 207.2	bismuth 83 <b>Bi</b> 208.98	polonium 84 <b>Po</b> [208.98]	astatate 85 <b>At</b> [209.99]	radon 86 <b>Rn</b> [222.02]
7	francium 87 <b>Fr</b> [223.02]	radium 88 <b>Ra</b> [226.03]	lawrencium 103 <b>Lr</b> [262.11]	rutherfordium 104 <b>Rf</b> [265.12]	dubnium 105 <b>Db</b> [268.13]	seaborgium 106 <b>Sg</b> [271.13]	bohrium 107 <b>Bh</b> [270]	hassium 108 <b>Hs</b> [277.15]	meitnerium 109 <b>Mt</b> [276.15]	darmstadtium 110 <b>Ds</b> [281.16]	roentgenium 111 <b>Rg</b> [280.16]	copernicium 112 <b>Cn</b> [285.17]	ununtrium 113 <b>Uut</b> [284.18]	flerovium 114 <b>Fl</b> [289.19]	ununpentium 115 <b>Uup</b> [288.19]	livermorium 116 <b>Lv</b> [293]	ununseptium 117 <b>Uus</b> [294]	ununoctium 118 <b>Uuo</b> [294]
Lanthanide Series			lanthanum 57 <b>La</b> 138.91	cerium 58 <b>Ce</b> 140.12	praseodymium 59 <b>Pr</b> 140.91	neodymium 60 <b>Nd</b> 144.24	promethium 61 <b>Pm</b> [144.91]	samarium 62 <b>Sm</b> 150.36	europium 63 <b>Eu</b> 151.96	gadolinium 64 <b>Gd</b> 157.25	terbium 65 <b>Tb</b> 158.93	dysprosium 66 <b>Dy</b> 162.50	holmium 67 <b>Ho</b> 164.93	erbium 68 <b>Er</b> 167.26	thulium 69 <b>Tm</b> 168.93	ytterbium 70 <b>Yb</b> 173.05		
Actinide Series			actinium 89 <b>Ac</b> [227.03]	thorium 90 <b>Th</b> 232.04	protactinium 91 <b>Pa</b> 231.04	uranium 92 <b>U</b> 238.03	neptunium 93 <b>Np</b> [237.05]	plutonium 94 <b>Pu</b> [244.06]	americium 95 <b>Am</b> [243.06]	curium 96 <b>Cm</b> [247.07]	berkelium 97 <b>Bk</b> [247.07]	californium 98 <b>Cf</b> [251.08]	einsteinium 99 <b>Es</b> [252.08]	fermium 100 <b>Fm</b> [257.10]	mendelevium 101 <b>Md</b> [258.10]	nobelium 102 <b>No</b> [259.10]		

**Name** — hydrogen  
**Atomic Number** — 1  
**Symbol** — **H**  
**Atomic Mass** — 1.0079

1 Mole = 6.02 x 10<sup>23</sup>