Periodic Table of the Elements

atomic # → 29 +2,1 ← ions commonly formed
atomic symbol → Cu
English element name → copper
63.55 ← atomic mass (rounded)

Gases | Liquids | Metalloids

Period		1 I A	2 II A	3 III B	4 IV B	5 V B	6 VI B	7 VII B	8 VIII B	9 VIII B	10 VIII B	11 I B	12 II B	13 III A	14 IV A	15 V A	16 VI A	17 VII A	18 VIII A
1	1s	1 ±1 H hydrogen 1.008																	2 He helium 4.003
2	2s	3 +1 Li lithium 6.968	4 +2 Be beryllium 9.012											2p	5 +3 B boron 10.81	6 −4 C carbon 12.01	7 −3 N nitrogen 14.01	8 −2 O oxygen 16.00	9 −1 F fluorine 19.00	10 Ne neon 20.18
3	3s	11 +1 Na sodium 22.99	12 +2 Mg magnesium 24.31											3p	13 +3 Al aluminum 26.98	14 −4 Si silicon 28.09	15 −3 P phosphorus 30.97	16 −2 S sulfur 32.07	17 −1 Cl chlorine 35.45	18 Ar argon 39.95
4	4s	19 +1 K potassium 39.10	20 +2 Ca calcium 40.08	3d	21 +3 Sc scandium 44.96	22 +4,3,2 Ti titanium 47.87	23 +5,2,3,4 V vanadium 50.94	24 +3,2,6 Cr chromium 52.00	25 +2,3,4,6,7 Mn manganese 54.94	26 +3,2 Fe iron 55.85	27 +2,3 Co cobalt 58.93	28 +2,3 Ni nickel 58.69	29 +2,1 Cu copper 63.55	30 +2 Zn zinc 65.38	4p	31 +3 Ga gallium 69.72	32 +4,2 Ge germanium 72.63	33 −3 As arsenic 74.92	34 −2 Se selenium 78.97	35 −1 Br bromine 79.90	36 Kr krypton 83.80
5	5s	37 +1 Rb rubidium 85.47	38 +2 Sr strontium 87.62	4d	39 +3 Y yttrium 88.91	40 +4 Zr zirconium 91.22	41 +5,3 Nb niobium 92.91	42 +6,3,5 Mo molybdenum 95.95	43 +7,4,6 Tc technetium 98	44 +4,3,6,8 Ru ruthenium 101.1	45 +3,4,6 Rh rhodium 102.9	46 +2,4 Pd palladium 106.4	47 +1 Ag silver 107.9	48 +2 Cd cadmium 112.4	5p	49 +3 In indium 114.8	50 +4,2 Sn tin 118.7	51 +3,5 Sb antimony 121.8	52 −2 Te tellurium 127.6	53 −1 I iodine 126.9	54 Xe xenon 131.3
6	6s	55 +1 Cs cesium 132.9	56 +2 Ba barium 137.3	† 5d	71 +3 Lu lutetium 175.0	72 +4 Hf hafnium 178.5	73 +5 Ta tantalum 180.9	74 +6,4 W tungsten 183.8	75 +7,4,6 Re rhenium 186.2	76 +4,6,8 Os osmium 190.2	77 +4,3,6 Ir iridium 192.2	78 +4,2 Pt platinum 195.1	79 +3,1 Au gold 197.0	80 +2,1 Hg mercury 200.6	6p	81 +1,3 Tl thallium 204.4	82 +2,4 Pb lead 207.2	83 +3,5 Bi bismuth 209.0	84 +4,2 Po polonium 209	85 At astatine 210	86 Rn radon 222
7	7s	87 +1 Fr francium 223	88 +2 Ra radium 226	‡ 6d	## +3 Lr lawrencium 262	## Rf rutherfordium 267	## Db dubnium 268	## Sg seaborgium 271	## Bh bohrium 272	## Hs hassium 270	## Mt meitnerium 276	## Ds darmstadtium 281	## Rg roentgentium 280	## Cn copernicum 285	7p	## Nh nihonium 284	## Fl flerovium 289	## Mc moscovium 288	## Lv livermorium 293	## Ts tennessine 292	## Og oganesson 294

lanthanides (rare earth metals)	† 4f	57 +3 La lanthanum 138.9	58 +3,4 Ce cerium 140.1	59 +3,4 Pr praseodymium 140.9	60 +3 Nd neodymium 144.2	61 +3 Pm promethium 145	62 +3,2 Sm samarium 150.4	63 +3,2 Eu europium 152.0	64 +3 Gd gadolinium 157.3	65 +3,4 Tb terbium 158.9	66 +3 Dy dysprosium 162.5	67 +3 Ho holmium 164.9	68 +3 Er erbium 167.3	69 +3,2 Tm thulium 168.9	70 +3,2 Yb ytterbium 173.1
actinides	‡ 5f	89 +3 Ac actinium 227	90 +4 Th thorium 232.0	91 +5,4 Pa protactinium 231.0	92 +6,3,4,5 U uranium 238.0	93 +5,3,4,6 Np neptunium 237	94 +4,3,5,6 Pu plutonium 244	95 +3,4,5,6 Am americium 243	96 +3 Cm curium 247	97 +3,4 Bk berkelium 247	98 +3 Cf californium 251	99 +3 Es einsteinium 252	100 +3 Fm fermium 257	101 +3,2 Md mendelevium 258	102 +2,3 No nobelium 259