

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

1 1.01 1+, 1- H hydrogen	3 6.94 1+ Li lithium	4 9.01 2+ Be beryllium
11 22.99 1+ Na sodium	12 24.31 2+ Mg magnesium	
19 39.10 1+ K potassium	20 40.08 2+ Ca calcium	21 44.96 3+ Sc scandium
37 85.47 1+ Rb rubidium	38 87.62 2+ Sr strontium	39 88.91 3+ Y yttrium
55 132.91 1+ Cs cesium	56 137.33 2+ Ba barium	57 138.91 3+ La lanthanum
87 (223) 1+ Fr francium	88 (226) 2+ Ra radium	89 (227) 3+ Ac actinium

Table of Common Polyatomic Ions

acetate (ethanoate)	CH ₃ COO ⁻	chromate	CrO ₄ ²⁻	phosphate	PO ₄ ³⁻
ammonium	NH ₄ ⁺	dichromate	Cr ₂ O ₇ ²⁻	hydrogen phosphate	HPO ₄ ²⁻
benzoate	C ₆ H ₅ COO ⁻	cyanide	CN ⁻	dihydrogen phosphate	H ₂ PO ₄ ⁻
borate	BO ₃ ³⁻	hydroxide	OH ⁻	silicate	SiO ₃ ²⁻
carbide	C ₂ ²⁻	iodate	IO ₃ ⁻	sulfate	SO ₄ ²⁻
carbonate	CO ₃ ²⁻	nitrate	NO ₃ ⁻	hydrogen sulfate	HSO ₄ ⁻
hydrogen carbonate	HCO ₃ ⁻	nitrite	NO ₂ ⁻	sulfite	SO ₃ ²⁻
perchlorate	ClO ₄ ⁻	oxalate	O ₂ C ₂ O ₄ ²⁻	hydrogen sulfite	HSO ₃ ⁻
chlorate	ClO ₃ ⁻	hydrogen oxalate	HO ₂ C ₂ O ₄ ⁻	hydrogen sulfide	HS ⁻
chlorite	ClO ₂ ⁻	permanganate	MnO ₄ ⁻	thiocyanate	SCN ⁻
hypochlorite	OCl ⁻ or ClO ⁻	peroxide	O ₂ ²⁻	thiosulfate	S ₂ O ₃ ²⁻
		persulfide	S ₂ ²⁻		

10	11	12	13	14	15	16	17	18
----	----	----	----	----	----	----	----	----

Legend for Elements

	Metallic solids		Gases
	Non-metallic solids		Liquids

Note: The legend denotes the physical state of the elements at exactly 101.325 kPa and 298.15 K.

Key	
Atomic number →	26
Electronegativity →	1.8
Symbol	Fe
Name	iron

Atomic molar mass (g/mol)*
55.85
 Most stable ion charges
3+, 2+

* Based on ¹²/₆ C
 () Indicates mass of the most stable isotope

5 10.81 2.0 B boron	6 12.01 2.6 C carbon	7 14.01 3.0 N nitrogen	8 16.00 3.4 O oxygen	9 19.00 4.0 F fluorine	10 20.18 — He helium
13 26.98 1.6 Al aluminium	14 28.09 1.9 Si silicon	15 30.97 2.2 P phosphorus	16 32.07 2.6 S sulfur	17 35.45 3.2 Cl chlorine	18 39.95 — Ar argon
28 58.69 1.9 Ni nickel	29 63.55 1.9 Cu copper	30 65.41 1.7 Zn zinc	31 69.72 1.8 Ga gallium	32 72.64 2.0 Ge germanium	33 74.92 2.2 As arsenic
46 106.42 2.2 Pd palladium	47 107.87 1.9 Ag silver	48 112.41 1.7 Cd cadmium	49 114.82 1.8 In indium	50 118.71 2.0 Sn tin	51 121.76 2.1 Sb antimony
78 195.08 2.2 Pt platinum	79 196.97 2.4 Au gold	80 200.59 1.9 Hg mercury	81 204.38 1.8 Tl thallium	82 207.2* 1.8 Pb lead	83 208.98 1.9 Bi bismuth
110 (271) Ds darmstadtium	111 (272) Rg roentgenium	* The isotopic mix of naturally occurring lead is more variable than other elements, preventing precision to greater than tenths of a gram per mole.			

References

- Lide, D.R. 2005. *CRC Handbook of Chemistry and Physics*. 86th ed. Boca Raton: CRC Press.
- Speight, James G. 2005. *Lange's Handbook of Chemistry*. 16th ed. New York: McGraw-Hill, Inc.
- IUPAC commission on atomic weights and isotopic abundances. 2002. <http://www.chem.qmw.ac.uk/iupac/AIW/index.html>.

58 140.12 1.1 Ce cerium	59 140.91 1.1 Pr praseodymium	60 144.24 1.1 Nd neodymium	61 (145) — Pm promethium	62 150.36 1.2 Sm samarium
90 232.04 1.3 Th thorium	91 231.04 1.5 Pa protactinium	92 238.03 1.7 U uranium	93 (237) 1.3 Np neptunium	94 (244) 1.3 Pu plutonium

63 151.96 — Eu europium	64 157.25 1.2 Gd gadolinium	65 158.93 — Tb terbium	66 162.50 1.2 Dy dysprosium	67 164.93 1.2 Ho holmium	68 167.26 1.2 Er erbium	69 168.93 1.3 Tm thulium	70 173.04 — Yb ytterbium	71 174.97 1.0 Lu lutetium
95 (243) — Am americium	96 (247) — Cm curium	97 (247) — Bk berkelium	98 (251) — Cf californium	99 (252) — Es einsteinium	100 (257) — Fm fermium	101 (258) — Md mendelevium	102 (259) — No nobelium	103 (262) — Lr lawrencium