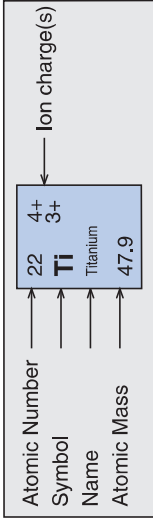


PERIODIC TABLE OF THE ELEMENTS

1 + H Hydrogen 1.0																	1 - H Hydrogen 1.0	18 0 He Helium 4.0																																																																																																																
METALS <																	> NON-METALS																																																																																																																	
3 + Li Lithium 6.9	4 2+ Be Beryllium 9.0																	17 - F Fluorine 19.0	0 - Ne Neon 20.2																																																																																																															
11 + Na Sodium 23.0	12 2+ Mg Magnesium 24.3																	16 2- O Oxygen 16.0	0 - Ar Argon 39.9																																																																																																															
19 + K Potassium 39.1	20 2+ Ca Calcium 40.1																	15 3- N Nitrogen 14.0	0 - Kr Krypton 83.8																																																																																																															
37 + Rb Rubidium 85.5	38 2+ Sr Strontium 87.6																	14 2- C Carbon 12.0	0 - Xe Xenon 131.3																																																																																																															
55 + Cs Cesium 132.9	56 2+ Ba Barium 137.3																	13 3+ B Boron 10.8	0 - Rn Radon (222)																																																																																																															
87 + Fr Francium (223)	88 2+ Ra Radium (226)																	12 3+ Al Aluminum 27.0	0 - Uuo Ununoctium (294)																																																																																																															
METALS <																	> NON-METALS																	Halogens		Noble Gases																																																																																														
																	5 B Boron 10.8	6 C Carbon 12.0	7 N Nitrogen 14.0	8 O Oxygen 16.0	9 F Fluorine 19.0	10 Ne Neon 20.2	11 Na Sodium 23.0	12 Mg Magnesium 24.3	13 Al Aluminum 27.0	14 Si Silicon 28.1	15 P Phosphorus 31.0	16 S Sulfur 32.1	17 Cl Chlorine 35.5	18 Ar Argon 39.9	19 K Potassium 39.1	20 Ca Calcium 40.1	21 Sc Scandium 45.0	22 Ti Titanium 47.9	23 V Vanadium 50.9	24 Cr Chromium 52.0	25 Mn Manganese 54.9	26 Fe Iron 55.8	27 Co Cobalt 58.9	28 Ni Nickel 58.7	29 Cu Copper 63.5	30 Zn Zinc 65.4	31 Ga Gallium 69.7	32 Ge Germanium 72.6	33 As Arsenic 74.9	34 Se Selenium 79.0	35 Br Bromine 79.9	36 Kr Krypton 83.8	37 Rb Rubidium 85.5	38 Sr Strontium 87.6	39 Y Yttrium 88.9	40 Zr Zirconium 91.2	41 Nb Niobium 92.9	42 Mo Molybdenum 95.9	43 Tc Technetium (98)	44 Ru Ruthenium 101.1	45 Rh Rhodium 102.9	46 Pd Palladium 106.4	47 Ag Silver 107.9	48 Cd Cadmium 112.4	49 In Indium 114.8	50 Sn Tin 118.7	51 Sb Antimony 121.8	52 Te Tellurium 127.6	53 I Iodine 126.9	54 Xe Xenon 131.3	55 Cs Cesium 132.9	56 Ba Barium 137.3	57 La Lanthanum 138.9	58 Ce Cerium 140.1	59 Pr Praseodymium 140.9	60 Nd Neodymium 144.2	61 Pm Promethium (145)	62 Sm Samarium 150.4	63 Eu Europium 152.0	64 Gd Gadolinium 157.3	65 Tb Terbium 158.9	66 Dy Dysprosium 162.5	67 Ho Holmium 164.9	68 Er Erbium 167.3	69 Tm Thulium 168.9	70 Yb Ytterbium 173.0	71 Lu Lutetium 175.0	72 Hf Hafnium 178.5	73 Ta Tantalum 180.9	74 W Tungsten 183.8	75 Re Rhenium 186.2	76 Os Osmium 192.2	77 Ir Iridium 192.2	78 Pt Platinum 195.1	79 Au Gold 197.0	80 Hg Mercury 200.6	81 Tl Thallium 204.4	82 Pb Lead 207.2	83 Bi Bismuth 209.0	84 Po Polonium (209)	85 At Astatine (210)	86 Rn Radon (222)	87 Fr Francium (223)	88 Ra Radium (226)	89 Ac Actinium (227)	90 Th Thorium 232.0	91 Pa Protactinium 231.0	92 U Uranium 238.0	93 Np Neptunium (237)	94 Pu Plutonium (244)	95 Am Americium (243)	96 Cm Curium (247)	97 Bk Berkelium (247)	98 Cf Californium (251)	99 Es Einsteinium (252)	100 Fm Fermium (257)	101 Md Mendelevium (258)	102 No Nobelium (259)	103 Lr Lawrencium (262)	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (263)	107 Bh Bohrium (262)	108 Hs Hassium (265)	109 Mt Meitnerium (266)	110 Ds Darmstadtium (281)	111 Rg Roentgenium (272)	112 Uub Ununbium (285)	113 Uut Ununtrium (284)	114 Uuq Ununquadium (289)	115 Uup Ununpentium (288)	116 Uuh Ununhexium (292)	117 Uus Ununseptium (?)	118 Uuo Ununoctium (294)



Based on mass of C-12 at 12.00.

Any value in parentheses is the mass of the most stable or best known isotope for elements which do not occur naturally.

NAMES, FORMULAE AND CHARGES OF SOME POLYATOMIC IONS

Positive Ions	Negative Ions
NH ₄ ⁺ Ammonium	CH ₃ COO ⁻ Acetate
	CO ₃ ²⁻ Carbonate
	ClO ₃ ⁻ Chlorate
	ClO ₂ ⁻ Chlorite
	CrO ₄ ²⁻ Chromate
	CN ⁻ Cyanide
	Cr ₂ O ₇ ²⁻ Dichromate
	HCO ₃ ⁻ Hydrogen carbonate, bicarbonate
	HSO ₄ ⁻ Hydrogen sulfate, bisulfate
	HS ⁻ Hydrogen sulfide, bisulfide
	HSO ₃ ⁻ Hydrogen sulfite, bisulfite
	OH ⁻ Hydroxide
	ClO ⁻ Hypochlorite
	NO ₃ ⁻ Nitrate
	NO ₂ ⁻ Nitrite
	ClO ₄ ⁻ Perchlorate
	MnO ₄ ⁻ Permanganate
	PO ₄ ³⁻ Phosphate
	PO ₃ ³⁻ Phosphite
	SO ₄ ²⁻ Sulfate
	SO ₃ ²⁻ Sulfite

NAMES AND FORMULAE OF COMMON ACIDS

Hydrochloric acid	HCl
Sulfuric acid	H ₂ SO ₄
Nitric acid	HNO ₃
Acetic acid	HCH ₃ COO

PREFIXES

1	mono
2	di
3	tri
4	tetra
5	penta
6	hexa
7	hepta
8	octa
9	nona
10	deca