Periodic Table of the Elements

1 IA 1A	2 IIA 2A	3 IIIB 3B	4 IVB 4B	5 VB 5B	6 VIB 6B	7 VIIB 7B	8	9 VIII 8	10	11 IB 1B	12 IIB 2B	13 IIIA 3A	14 IVA 4A	15 VA 5A	16 VIA 6A	17 VIIA 7A	18 VIIIA 8A
1 +1 **H** Hydrogen 1.008																	2 0 **He** Helium 4.003
3 +1 **Li** Lithium 6.941	4 +2 **Be** Beryllium 9.012											5 +3 **B** Boron 10.811	6 +4,-4 **C** Carbon 12.011	7 +5,-3 **N** Nitrogen 14.007	8 -2 **O** Oxygen 15.999	9 -1 **F** Fluorine 18.998	10 0 **Ne** Neon 20.180
11 +1 **Na** Sodium 22.990	12 +2 **Mg** Magnesium 24.305											13 +3 **Al** Aluminum 26.982	14 +4 **Si** Silicon 28.086	15 +5,+3,-3 **P** Phosphorus 30.974	16 +6,-2 **S** Sulfur 32.066	17 -1 **Cl** Chlorine 35.453	18 0 **Ar** Argon 39.948
19 +1 **K** Potassium 39.098	20 +2 **Ca** Calcium 40.078	21 +3 **Sc** Scandium 44.956	22 +4 **Ti** Titanium 47.88	23 +5,+4,+3 **V** Vanadium 50.942	24 +6,+3,+2 **Cr** Chromium 51.996	25 +7,+4,+2 **Mn** Manganese 54.938	26 +3,+2 **Fe** Iron 55.933	27 +3,+2 **Co** Cobalt 58.933	28 +2 **Ni** Nickel 58.693	29 +2,+1 **Cu** Copper 63.546	30 +2 **Zn** Zinc 65.39	31 +3 **Ga** Gallium 69.732	32 +4 **Ge** Germanium 72.61	33 +5,+3 **As** Arsenic 74.922	34 +4,-2 **Se** Selenium 78.972	35 +5,-1 **Br** Bromine 79.904	36 0 **Kr** Krypton 84.80
37 +1 **Rb** Rubidium 84.468	38 +2 **Sr** Strontium 87.62	39 +3 **Y** Yttrium 88.906	40 +4 **Zr** Zirconium 91.224	41 +5 **Nb** Niobium 92.906	42 +6,+4 **Mo** Molybdenum 95.95	43 +7,+4 **Tc** Technetium 98.907	44 +4,+3 **Ru** Ruthenium 101.07	45 +3 **Rh** Rhodium 102.906	46 +4,+2 **Pd** Palladium 106.42	47 +1 **Ag** Silver 107.868	48 +2 **Cd** Cadmium 112.411	49 +3 **In** Indium 114.818	50 +2,-4 **Sn** Tin 118.71	51 +3 **Sb** Antimony 121.760	52 +4 **Te** Tellurium 127.6	53 +5,-1 **I** Iodine 126.904	54 0 **Xe** Xenon 131.29
55 +1 **Cs** Cesium 132.905	56 +2 **Ba** Barium 137.327	57-71	72 +4 **Hf** Hafnium 178.49	73 +5 **Ta** Tantalum 180.948	74 +6,+4 **W** Tungsten 183.85	75 +5,+4,+3 **Re** Rhenium 186.207	76 +4 **Os** Osmium 190.23	77 +4,+3 **Ir** Iridium 192.22	78 +4,+2 **Pt** Platinum 195.08	79 +3 **Au** Gold 196.967	80 +2,+1 **Hg** Mercury 200.59	81 +3,+1 **Tl** Thallium 204.383	82 +2 **Pb** Lead 207.2	83 +3 **Bi** Bismuth 208.980	84 +4 **Po** Polonium [208.982]	85 -1 **At** Astatine 209.987	86 0 **Rn** Radon 222.018
87 +1 **Fr** Francium 223.020	88 +2 **Ra** Radium 226.025	89-103	104 +4 **Rf** Rutherfordium [261]	105 unk **Db** Dubnium [262]	106 unk **Sg** Seaborgium [266]	107 unk **Bh** Bohrium [264]	108 unk **Hs** Hassium [269]	109 unk **Mt** Meitnerium [268]	110 unk **Ds** Darmstadtium [269]	111 unk **Rg** Roentgenium [272]	112 unk **Cn** Copernicium [277]	113 unk **Uut** Ununtrium unknown	114 unk **Fl** Flerovium [289]	115 unk **Uup** Ununpentium unknown	116 unk **Lv** Livermorium [298]	117 unk **Uus** Ununseptium unknown	118 unk **Uuo** Ununoctium unknown

Atomic Number — Valence Charge

Symbol

Name

Atomic Mass

Lanthanide Series	57 +3 **La** Lanthanum 138.906	58 +3 **Ce** Cerium 140.115	59 +3 **Pr** Praseodymium 140.908	60 +3 **Nd** Neodymium 144.24	61 +3 **Pm** Promethium 144.913	62 +3 **Sm** Samarium 150.36	63 +3 **Eu** Europium 151.966	64 +3 **Gd** Gadolinium 157.25	65 +3 **Tb** Terbium 158.925	66 +3 **Dy** Dysprosium 162.50	67 +3 **Ho** Holmium 164.930	68 +3 **Er** Erbium 167.26	69 +3 **Tm** Thulium 168.934	70 +3 **Yb** Ytterbium 173.04	71 +3 **Lu** Lutetium 174.967
Actinide Series	89 +3 **Ac** Actinium 227.028	90 +4 **Th** Thorium 232.038	91 +5 **Pa** Protactinium 231.036	92 +6 **U** Uranium 238.029	93 +7 **Np** Neptunium 237.048	94 +7,+4 **Pu** Plutonium 244.064	95 +3 **Am** Americium 243.061	96 +3 **Cm** Curium 247.070	97 +3 **Bk** Berkelium 247.070	98 +3 **Cf** Californium 251.080	99 +3 **Es** Einsteinium [254]	100 +3 **Fm** Fermium 257.095	101 +3 **Md** Mendelevium 258.1	102 +2 **No** Nobelium 259.101	103 +3 **Lr** Lawrencium [262]

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