Periodic Table of Elements

$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^{10} 6p^6 7s^2 5f^{14} 6d^{10} 7p^6$

	1 IA	2 IIA	3 IIIA	4 IVB	5 VB	6 VIB	7 VIIB	8 VIIIB	9 VIIIB	10 VIIIB	11 IB	12 IIB	13 IIIA	14 IVA	15 VA	16 VIA	17 VIIA	18 VIIIA
1	1 2.20 **H_2** Hydrogen 1.01																	2 **He** Helium 4.00
2	3 0.98 **Li** Lithium 6.94	4 1.57 **Be** Beryllium 9.01											5 2.04 **B** Boron 10.81	6 2.55 **C** Carbon 12.01	7 3.14 **N_2** Nitrogen 14.01	8 3.44 **O_2** Oxygen 16.00	9 3.98 **F_2** Fluorine 19.00	10 **Ne** Neon 20.18
3	11 0.93 **Na** Sodium 22.99	12 1.31 **Mg** Magnesium 24.31											13 1.61 **Al** Aluminium 26.98	14 1.90 **Si** Silicon 28.09	15 2.19 **P** Phosphorus 30.97	16 2.38 **S** Sulphur 32.10	17 3.16 **Cl_2** Chlorine 35.45	18 **Ar** Argon 39.95
4	19 0.82 **K** Potassium 39.10	20 1.00 **Ca** Calcium 40.08	21 1.36 **Sc** Scandium 44.96	22 1.54 **Ti** Titanium 47.87	23 1.63 **V** Vanadium 50.94	24 1.66 **Cr★** Chromium 52.00	25 1.55 **Mn** Manganese 54.94	26 1.83 **Fe** Iron 55.85	27 1.88 **Co** Cobalt 58.93	28 1.91 **Ni** Nickel 58.69	29 1.90 **Cu★** Copper 63.55	30 1.65 **Zn** Zinc$^{(2+)}$ 65.38	31 1.81 **Ga** Gallium 69.72	32 2.01 **Ge** Germanium 72.63	33 2.18 **As** Arsenic 74.92	34 2.55 **Se** Selenium 78.97	35 2.96 **Br_2** Bromine 79.90	36 3.00 **Kr** Krypton 83.80
5	37 0.82 **Rb** Rubidium 85.47	38 0.95 **Sr** Strontium 87.62	39 1.22 **Y** Yttrium 88.91	40 1.33 **Zr** Zirconium 91.22	41 1.6 **Nb★** Niobium 92.91	42 2.16 **Mo★** Molybdenum 95.95	43 1.9 **Tc** Technetium (98)	44 2.2 **Ru★** Ruthenium 101.07	45 2.28 **Rh★** Rhodium 102.91	46 2.20 **Pd★★** Palladium 106.42	47 1.93 **Ag** Silver$^{(1+)}$ 107.87	48 1.69 **Cd** Cadmium$^{(2+)}$ 112.41	49 1.78 **In** Indium 114.82	50 1.96 **Sn★** Tin 118.71	51 2.05 **Sb** Antimony 121.76	52 2.1 **Te** Tellurium 127.60	53 2.86 **I_2** Iodine 126.90	54 2.60 **Xe** Xenon 131.29
6	55 0.79 **Cs** Caesium 132.91	56 0.89 **Ba** Barium 137.33	57-71 **La-Lu** Lanthanide	72 1.3 **Hf** Hafnium 178.49	73 1.5 **Ta** Tantalum 180.95	74 2.36 **W** Tungsten 183.84	75 1.9 **Re** Rhenium 186.21	76 2.2 **Os** Osmium 190.23	77 2.20 **Ir** Iridium 192.22	78 2.28 **Pt** Platinum 195.08	79 2.54 **Au★** Gold 196.97	80 2.00 **Hg** Mercury 200.59	81 1.62 **Tl** Thallium 204.38	82 1.87 **Pb** Lead 207.2	83 2.02 **Bi** Bismuth 208.98	84 2.0 **Po** Polonium (209)	85 2.2 **At** Astatine (210)	86 2.2 **Rn** Radon (222)
7	87 0.7 **Fr** Francium (223)	88 0.9 **Ra** Radium (226)	89-103 **Ac-Lr** Actinide	104 **Rf** Rutherfordium (267)	105 **Db** Dubnium (268)	106 **Sg** Seaborgium (269)	107 **Bh** Bohrium (270)	108 **Hs** Hassium (277)	109 **Mt** Meitnerium (278)	110 **Ds** Darmstadtium (281)	111 **Rg** Roentgenium (282)	112 **Cn** Copernicium (285)	113 **Nh** Nihonium (286)	114 **Fl** Flerovium (289)	115 **Mc** Moscovium (290)	116 **Lv** Livermorium (293)	117 **Ts** Tennessine (294)	118 **Og** Oganneson (294)

Z χ (E.N.) **Symbol** Element Name Atomic Mass

La 57 1.1 Lanthanum 138.91	Ce 58 1.12 Cerium 140.12	Pr 59 1.13 Praseodymium 140.91	Nd 60 1.14 Neodymium 144.24	Pm 61 1.13 Promethium (145)	Sm 62 1.17 Samarium 150.36	Eu 63 1.2 Europium 151.96	Gd 64 1.2 Gadolinium 157.25	Tb 65 1.1 Terbium 158.93	Dy 66 1.22 Dysprosium 162.50	Ho 67 1.23 Holmium 164.93	Er 68 1.24 Erbium 167.26	Tm 69 1.25 Thulium 168.93	Yb 70 1.1 Ytterbium 173.05	Lu 71 1.27 Lutetium 174.97
Ac 89 1.1 Actinium (227)	Th 90 1.3 Thorium 232.04	Pa 91 1.5 Protactinium 231.04	U 92 1.38 Uranium 238.03	Np 93 1.36 Neptunium (237)	Pu 94 1.28 Plutonium (244)	Am 95 1.13 Americium (243)	Cm 96 1.28 Curium (247)	Bk 97 1.3 Berkelium (247)	Cf 98 1.3 Californium (251)	Es 99 1.3 Einsteinium (252)	Fm 100 1.3 Fermium (257)	Md 101 1.3 Mendelevium (258)	No 102 1.3 Nobelium (259)	Lr 103 1.3 Lawrencium (266)

- Alkali Metal
- Alkaline-Earth
- Metal
- Metalloid
- Non-metal
- Halogen
- Noble Gas
- Lanthanide/Actinide

★Aufbau Exception

Synthetic

Liquid or Gas@ Room Temp.

EN, IE, EA, & $\mathbb{Z}_{eff}$ increase →↑

Radius & Metallic increase ←↓