

The Periodic Table of Elements

1 Atomic Number Valence Symbol Element Name Atomic Mass (u)																		Alkali metals Alkaline earth metals Transition metals Post-transition metals Metalloid				Lanthanides Actinides Nonmetals Halogens Noble gases			
1	1 ^{-1,+1} H Hydrogen 1.008	2																2 ⁰ He Helium 4.003							
2	3 ⁺¹ Li Lithium 6.941	4 ⁺² Be Beryllium 9.012																5 ⁺³ B Boron 10.811	6 ^{+4,+3,+2,+1 -4,-3 -2,-1} C Carbon 12.011	7 ^{+5,+3,-3} N Nitrogen 14.007	8 ⁻² O Oxygen 15.999	9 ⁻¹ F Fluorine 18.998	10 ⁰ Ne Neon 20.180		
3	11 ⁺¹ Na Sodium 22.990	12 ⁺² Mg Magnesium 24.305																13 ⁺³ Al Aluminium 26.982	14 ^{+4,-4} Si Silicon 28.086	15 ^{+5,+3,-3} P Phosphorus 30.974	16 ^{+6,+4,+2,-2} S Sulfur 32.066	17 ^{+7,+5,+3,+1} Cl Chlorine 35.453	18 ⁰ Ar Argon 39.948		
4	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 V Vanadium 50.942	24 ^{+6,+3} Cr Chromium 51.996	25 ^{+7,+4,+2} Mn Manganese 54.938	26 ^{+6,+3,+2} Fe Iron 55.845	27 ^{+3,+2} Co Cobalt 58.933	28 ⁺² Ni Nickel 58.693	29 ⁺² Cu Copper 63.546	30 ⁺² Zn Zinc 65.38	31 ⁺³ Ga Gallium 69.723	32 ^{+4,+2,-4} Ge Germanium 72.631	33 ^{+5,+3,-3} As Arsenic 74.922	34 ^{+6,+4,+2,-2} Se Selenium 78.971	35 ^{+5,+3,+1,-1} Br Bromine 79.904	36 ^{+2,0} Kr Krypton 84.798							
5	37 ⁺¹ Rb Rubidium 85.468	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 112.414	49 ⁺³ In Indium 114.818	50 ^{+4,+2,-4} Sn Tin 118.711	51 ^{+5,+3,-3} Sb Antimony 121.760	52 ^{+5,+3,-3} Te Tellurium 127.6	53 ^{+6,+4,+2,-2} I Iodine 126.904	54 ^{+6,+4,+2,0} Xe Xenon 131.294							
6	55 ⁺¹ Cs Cesium 132.905	56 ⁺² Ba Barium 137.328	57-71 *	72 ⁺⁴ Hf Hafnium 178.49	73 ⁺⁵ Ta Tantalum 180.948	74 ^{+6,+4} W Tungsten 183.85	75 ⁺⁴ 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 ^{+4,+2} Pb Lead 207.2	83 ⁺³ Bi Bismuth 208.980	84 ^{+4,+2,-2} Po Polonium [208.982]	85 ^{+1,-1} At Astatine 209.987	86 ^{+2,0} Rn Radon 222.018							
7	87 ⁺¹ Fr Francium 223.020	88 ⁺² Ra Radium 226.025	89-103 **	104 ⁺⁴ Rf Rutherfordium [261]	105 ⁺⁵ Db Dubnium [262]	106 ⁺⁶ Sg Seaborgium [266]	107 ⁺⁷ Bh Bohrium [264]	108 ⁺⁸ Hs Hassium [269]	109 ^{Unknown} Mt Meitnerium [278]	110 ^{Unknown} Ds Darmstadtium [281]	111 ^{Unknown} Rg Roentgenium [280]	112 ⁺² Cn Copernicium [285]	113 ^{Unknown} Nh Nihonium [286]	114 ^{Unknown} Fl Flerovium [289]	115 ^{Unknown} Mc Moscovium [289]	116 ^{Unknown} Lv Livermorium [293]	117 ^{Unknown} Ts Tennessine [294]	118 ^{Unknown} Og Oganesson [294]							

Lanthanide Series*

57 ⁺³ La Lanthanum 138.905	58 ^{+4,+3} Ce Cerium 140.116	59 ⁺³ Pr Praseodymium 140.908	60 ⁺³ Nd Neodymium 144.243	61 ⁺³ Pm Promethium 144.913	62 ⁺³ Sm Samarium 150.36	63 ^{+3,+2} Eu Europium 151.964	64 ⁺³ Gd Gadolinium 157.25	65 ⁺³ Tb Terbium 158.925	66 ⁺³ Dy Dysprosium 162.500	67 ⁺³ Ho Holmium 164.930	68 ⁺³ Er Erbium 167.259	69 ⁺³ Tm Thulium 168.934	70 ⁺³ Yb Ytterbium 173.055	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 ⁺⁵ Np Neptunium 237.048	94 ⁺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]
--	---	--	--	---	---	---	--	---	---	---	--	--	---	---