




1	⁺¹ H Hydrogen 1.008 1																			2	⁰ He Helium 4.003 2					
2	⁺¹ Li Lithium 6.941 3	⁺² Be Beryllium 9.012 4																			⁺³ B Boron 10.811 5	⁺⁴ C Carbon 12.011 6	⁺⁵ N Nitrogen 14.007 7	⁻² O Oxygen 15.999 8	⁻¹ F Fluorine 18.998 9	⁰ Ne Neon 20.180 10
3	⁺¹ Na Sodium 22.990 11	⁺² Mg Magnesium 24.305 12																			⁺³ Al Aluminum 26.982 13	⁺⁴ Si Silicon 28.086 14	⁺⁵ P Phosphorus 30.974 15	⁺⁶ S Sulfur 32.066 16	⁺⁷ Cl Chlorine 35.453 17	⁰ Ar Argon 39.948 18
4	⁺¹ K Potassium 39.098 19	⁺² Ca Calcium 40.078 20	⁺³ Sc Scandium 44.956 21	⁺⁴ Ti Titanium 47.867 22	⁺⁵ V Vanadium 50.942 23	⁺⁶ Cr Chromium 51.996 24	⁺⁷ Mn Manganese 54.938 25	⁺⁶ Fe Iron 55.845 26	⁺² Co Cobalt 58.933 27	⁺² Ni Nickel 58.693 28	⁺² Cu Copper 63.546 29	⁺² Zn Zinc 65.38 30	⁺³ Ga Gallium 69.723 31	⁺⁴ Ge Germanium 72.631 32	⁺⁵ As Arsenic 74.922 33	⁺⁶ Se Selenium 78.971 34	⁺⁵ Br Bromine 79.904 35	⁺² Kr Krypton 83.798 36								
5	⁺¹ Rb Rubidium 85.468 37	⁺² Sr Strontium 87.62 38	⁺³ Y Yttrium 88.906 39	⁺⁴ Zr Zirconium 91.224 40	⁺⁵ Nb Niobium 92.906 41	⁺⁶ Mo Molybdenum 95.95 42	⁺⁷ Tc Technetium 98.907 43	⁺⁴ Ru Ruthenium 101.07 44	⁺³ Rh Rhodium 102.906 45	⁺⁴ Pd Palladium 106.42 46	⁺³ Ag Silver 107.868 47	⁺² Cd Cadmium 112.414 48	⁺³ In Indium 114.818 49	⁺⁴ Sn Tin 118.710 50	⁺⁵ Sb Antimony 121.760 51	⁺⁶ Te Tellurium 127.6 52	⁺⁷ I Iodine 126.904 53	⁺⁶ Xe Xenon 131.293 54								
6	⁺¹ Cs Cesium 132.905 55	⁺² Ba Barium 137.328 56	57-71 Lanthanoids		⁺⁴ Hf Hafnium 178.49 72	⁺⁵ Ta Tantalum 180.948 73	⁺⁶ W Tungsten 183.84 74	⁺⁴ Re Rhenium 186.207 75	⁺⁴ Os Osmium 190.23 76	⁺⁴ Ir Iridium 192.217 77	⁺³ Pt Platinum 195.085 78	⁺³ Au Gold 196.967 79	⁺² Hg Mercury 200.592 80	⁺³ Tl Thallium 204.383 81	⁺⁴ Pb Lead 207.2 82	⁺³ Bi Bismuth 208.980 83	⁺⁴ Po Polonium [208.982] 84	⁺¹ At Astatine 209.987 85	⁺² Rn Radon 222.018 86							
7	⁺¹ Fr Francium 223.020 87	⁺² Ra Radium 226.025 88	89-103 Actinoids		⁺⁴ Rf Rutherfordium [261] 104	⁺⁵ Db Dubnium [262] 105	⁺⁶ Sg Seaborgium [266] 106	⁺⁷ Bh Bohrium [264] 107	⁺⁸ Hs Hassium [269] 108	⁺⁸ Mt Meitnerium [278] 109	⁺² Ds Darmstadtium [281] 110	⁺³ Rg Roentgenium [280] 111	⁺² Cn Copernicium [285] 112	⁺³ Nh Nihonium [286] 113	⁺⁴ Fl Flerovium [289] 114	⁺³ Mc Moscovium [289] 115	⁺⁴ Lv Livermorium [293] 116	⁺¹ Ts Tennessine [294] 117	⁺² Og Oganesson [294] 118							

 **Metals**
 **Nonmetals**
 **Metalloids**

Lanthanoids	⁺³ La Lanthanum 138.905 57	⁺³ Ce Cerium 140.116 58	⁺³ Pr Praseodymium 140.908 59	⁺³ Nd Neodymium 144.243 60	⁺³ Pm Promethium 144.913 61	⁺³ Sm Samarium 150.36 62	⁺³ Eu Europium 151.964 63	⁺³ Gd Gadolinium 157.25 64	⁺³ Tb Terbium 158.925 65	⁺³ Dy Dysprosium 162.500 66	⁺³ Ho Holmium 164.930 67	⁺³ Er Erbium 167.259 68	⁺³ Tm Thulium 168.934 69	⁺³ Yb Ytterbium 173.055 70	⁺³ Lu Lutetium 174.967 71
Actinoids	⁺³ Ac Actinium 227.028 89	⁺⁴ Th Thorium 232.038 90	⁺⁵ Pa Protactinium 231.036 91	⁺⁶ U Uranium 238.029 92	⁺⁵ Np Neptunium 237.048 93	⁺⁴ Pu Plutonium 244.064 94	⁺³ Am Americium 243.061 95	⁺³ Cm Curium 247.070 96	⁺³ Bk Berkelium 247.070 97	⁺³ Cf Californium 251.080 98	⁺³ Es Einsteinium [254] 99	⁺³ Fm Fermium 257.095 100	⁺³ Md Mendelevium 258.1 101	⁺² No Nobelium 259.101 102	⁺³ Lr Lawrencium [262] 103