1	1 1.0079 H 1s1 Hydrogen	2 IIA											13 IIIA	14 IVA	15 VA	16 VIA	17 VIIA	2 4.0026 He 1s ² Helium
2	3 6.941 Li 2s¹ Lithium	Be 2s ² Beryllium											5 10.811 B 2s ² 2p ¹ Boron	6 12.011 C 2s ² 2p ² Carbon	7 14.007 N 2s ² 2p ³ Nitrogen	8 15.999 O 2s ² 2p ⁴ Oxygen	9 18.998 F 2s ² 2p ⁵ Fluorine	10 20.180 Ne 2s ² 2p ⁶ Neon
3	11 22.990 Na 3s ¹ Sodium	Mg 3s ² Magnesium	3 IIIA	4 IVB	5 VB	6 VIB	7 VIIB	8 VIIIB	9 VIIIB	10 VIIIB	11 IB	12 IIB	26.982 Al 3s ² 3p ¹ Aluminium	28.085 Si 3s ² 3p ² Silicon	P 3s ² 3p ³ Phosphorus	32.065 S 3s ² 3p ⁴ Sulphur	35.453 Cl 3s ² 3p ⁵ Chlorine	39.948 Ar 3s ² 3p ⁶ Argon
4	19 39.098 K 4s ¹ Potassium	20 40.078 Ca 4s ² Calcium	21 44.956 Sc 3d ¹ 4s ² Scandium	22 47.867 Ti 3d ² 4s ² Titanium	23 50.942 V 3d ³ 4s ² Vanadium	24 51.996 Cr 3d ⁵ 4s ¹ Chromium	25 54.938 Mn 3d ⁵ 4s ² Manganese	26 55.845 Fe 3d ⁶ 4s ² Iron	27 58.933 Co 3d ⁷ 4s ² Cobalt	28 58.693 Ni 3d ⁸ 4s ² Nickel	29 63.546 Cu 3d ¹⁰ 4s ¹ Copper	30 65.38 Zn 3d ¹⁰ 4s ² Zinc	Ga 4s ² 4p ¹ Gallium	Ge 4s ² 4p ² Germanium	AS 4s ² 4p ³ Arsenic	Se 4s ² 4p ⁴ Selenium	35 79.904 Br 4s ² 4p ⁵ Bromine	Kr 4s ² 4p ⁶ Krypton
5	Rb 5s ¹ Rubidium	38 87.62 Sr 5s ² Strontium	39 88.906 Y 4d ¹ 5s ² Yttrium	Zr 4d ² 5s ² Zirconium	Nb 4d ⁴ 5s ¹ Niobium	Mo 4d ⁵ 5s ¹ Molybdenum	43 (98) Tc $4d^55s^2$ Technetium	Ru 4d ⁷ 5s ¹ Ruthenium	Rh 4d ⁸ 5s ¹ Rhodium	Pd 4d ¹⁰ Palladium	Ag 4d ¹⁰ 5s ¹ Silver	Cd 4d ¹⁰ 5s ² Cadmium	49 114.82 In 5s ² 5p ¹ Indium	50 118.71 Sn 5s ² 5p ² Tin	51 121.76 Sb 5s ² 5p ³ Antimony	Te 5s ² 5p ⁴ Tellurium	53 126.90	54 131.29 Xe 5s ² 5p ⁶ Xenon
6	55 132.91 Cs 6s¹ Caesium	56 137.33 Ba 6s² Barium	57-71 La-Lu Lanthanide	72 178.49 Hf 5d ² 6s ² Hafnium	73 180.95 Ta 5d ³ 6s ² Tantalum	74 183.84 W 5d ⁴ 6s ² Tungsten	75 186.21 Re 5d ⁵ 6s ² Rhenium	76 190.23 Os 5d ⁶ 6s ² Osmium	77 192.22 Ir 5d ⁷ 6s ² Iridium	78 195.08 Pt 5d ⁹ 6s ¹ Platinum	79 196.97 Au 5d ¹⁰ 6s ¹ Gold	80 200.59 Hg 5d ¹⁰ 6s ² Mercury	81 204.38 TI 6s ² 6p ¹ Thallium	Pb 6s ² 6p ² Lead	83 208.98 Bi 6s ² 6p ³ Bismuth	Po 6s ² 6p ⁴ Polonium	At 6s ² 6p ⁵ Astatine	Rn 6s ² 6p ⁶ Radon
7	Fr 7s ¹ Francium	Ra 7s² Radium	89-103 AC-Lr Actinide	Rf (6d ² 7s ²) Rutherfordium	105 (268) Db (6d ³ 7s ²) Dubnium	106 (269) Sg Seaborgium	107 (270) Bh Bohrium	108 (277) HS Hassium	109 (278) Mt Meitnerium	110 (281) DS Darmstadtium	111 (282) Rg Roentgenium	112 (285) Cn Copernicium	113 (286) Nh Nihonium	114 (289) Fl Flerovium	115 (290) MC Moscovium	116 (293) LV Livermorium	117 (294) Ts Tennessine	118 (294) Og Oganesson
	Alkali Metal Alkaline Earth Metal Metalloid Non-metal Halogen	Metal		57 138.91 La 5d ¹ 6s ² Lanthanum	58 140.12 Ce 4f¹5d¹6s² Cerium	Pr 4f ³ 6s ² Praseodymium	60 144.24 Nd 4f ⁴ 6s ² Neodymium	61 (145) Pm 4f ⁵ 6s ² Promethium	62 150.36 Sm 4f ⁶ 6s ² Samarium	63 151.96 Eu 4f ⁷ 6s ² Europium	64 157.25 Gd 4f ⁷ 5d ¹ 6s ² Gadolinium	65 158.93 Tb 4f ⁹ 6s ² Terbium	66 162.50 Dy 4f ¹⁰ 6s ² Dysprosium	67 164.93 HO 4f ¹¹ 6s ² Holmium	68 167.26 Er 4f ¹² 6s ² Erbium	69 168.93 Tm 4f ¹³ 6s ² Thulium	70 173.05 Yb 4f ¹⁴ 6s ² Ytterbium	71 174.97 Lu 4f ¹⁴ 5d ¹ 6s ² Lutetium
	Noble Gas Lanthanide/Act Z mass Symbol configuration Name	tinide black: natural gray: synthetic		AC 6d ¹ 7s ² Actinium	90 232.04 Th 6d ² 7s ² Thorium	Pa 5f ² 6d ¹ 7s ² Protactinium	92 238.03 U 5f ³ 6d ¹ 7s ² Uranium	93 (237) Np 5f ⁴ 6d ¹ 7s ² Neptunium	Pu 5f ⁶ 7s ² Plutonium	95 (243) Am 5f ⁷ 7s ² Americium	96 (247) Cm 5f ⁵ 6d ¹ 7s ² Curium	97 (247) Bk 5f ⁹ 7s ² Berkelium	98 (251) Cf 5f ¹⁰ 7s ² Californium	99 (252) ES 5f ¹¹ 7s ² Einsteinium	100 (257) Fm 5f ¹² 7s ² Fermium	101 (258) Md (5f ¹³ 7s ²) Mendelevium	102 (259) No (5f ¹⁴ 7s ²) Nobelium	103 (266) Lr (5f ¹⁴ 6d ¹ 7s ²) Lawrencium