

Periodic Table of the Elements

1 1A 1A	2 IIA 2A											13 IIIA 3A	14 IVA 4A	15 VA 5A	16 VIA 6A	17 VIIA 7A	18 VIIIA 8A
1 1 H Hydrogen 1.008 1s ¹	2 4 Be Beryllium 9.012 [He]2s ²											5 5 B Boron 10.811 [He]2s ² 2p ¹	6 6 C Carbon 12.011 [He]2s ² 2p ²	7 7 N Nitrogen 14.007 [He]2s ² 2p ³	8 8 O Oxygen 15.999 [He]2s ² 2p ⁴	9 9 F Fluorine 18.998 [He]2s ² 2p ⁵	10 10 Ne Neon 20.180 [He]2s ² 2p ⁶
2 3 Li Lithium 6.941 [He]2s ¹	4 4 Be Beryllium 9.012 [He]2s ²											13 13 Al Aluminum 26.982 [Ne]3s ² 3p ¹	14 14 Si Silicon 28.086 [Ne]3s ² 3p ²	15 15 P Phosphorus 30.974 [Ne]3s ² 3p ³	16 16 S Sulfur 32.066 [Ne]3s ² 3p ⁴	17 17 Cl Chlorine 35.453 [Ne]3s ² 3p ⁵	18 18 Ar Argon 39.948 [Ne]3s ² 3p ⁶
3 11 Na Sodium 22.990 [Ne]3s ¹	12 12 Mg Magnesium 24.305 [Ne]3s ²	3 III B 3B	4 IV B 4B	5 VB 5B	6 VIB 6B	7 VIIB 7B	8 8	9 VIII 8	10 10	11 IB 1B	12 IIB 2B	13 13 Al Aluminum 26.982 [Ne]3s ² 3p ¹	14 14 Si Silicon 28.086 [Ne]3s ² 3p ²	15 15 P Phosphorus 30.974 [Ne]3s ² 3p ³	16 16 S Sulfur 32.066 [Ne]3s ² 3p ⁴	17 17 Cl Chlorine 35.453 [Ne]3s ² 3p ⁵	18 18 Ar Argon 39.948 [Ne]3s ² 3p ⁶
4 19 K Potassium 39.098 [Ar]4s ¹	20 20 Ca Calcium 40.078 [Ar]4s ²	21 21 Sc Scandium 44.956 [Ar]3d ¹ 4s ²	22 22 Ti Titanium 47.88 [Ar]3d ² 4s ²	23 23 V Vanadium 50.942 [Ar]3d ³ 4s ²	24 24 Cr Chromium 51.996 [Ar]3d ⁵ 4s ¹	25 25 Mn Manganese 54.938 [Ar]3d ⁵ 4s ²	26 26 Fe Iron 55.845 [Ar]3d ⁶ 4s ²	27 27 Co Cobalt 58.933 [Ar]3d ⁷ 4s ²	28 28 Ni Nickel 58.693 [Ar]3d ⁸ 4s ²	29 29 Cu Copper 63.546 [Ar]3d ¹⁰ 4s ¹	30 30 Zn Zinc 65.38 [Ar]3d ¹⁰ 4s ²	31 31 Ga Gallium 69.723 [Ar]3d ¹⁰ 4s ² 4p ¹	32 32 Ge Germanium 72.631 [Ar]3d ¹⁰ 4s ² 4p ²	33 33 As Arsenic 74.922 [Ar]3d ¹⁰ 4s ² 4p ³	34 34 Se Selenium 78.971 [Ar]3d ¹⁰ 4s ² 4p ⁴	35 35 Br Bromine 79.904 [Ar]3d ¹⁰ 4s ² 4p ⁵	36 36 Kr Krypton 83.798 [Ar]3d ¹⁰ 4s ² 4p ⁶
5 37 Rb Rubidium 85.468 [Kr]5s ¹	38 38 Sr Strontium 87.62 [Kr]5s ²	39 39 Y Yttrium 88.906 [Kr]4d ¹ 5s ²	40 40 Zr Zirconium 91.224 [Kr]4d ² 5s ²	41 41 Nb Niobium 92.906 [Kr]4d ⁴ 5s ¹	42 42 Mo Molybdenum 95.95 [Kr]4d ⁵ 5s ¹	43 43 Tc Technetium 98.907 [Kr]4d ⁵ 5s ²	44 44 Ru Ruthenium 101.07 [Kr]4d ⁷ 5s ¹	45 45 Rh Rhodium 102.906 [Kr]4d ⁸ 5s ¹	46 46 Pd Palladium 106.42 [Kr]4d ¹⁰	47 47 Ag Silver 107.868 [Kr]4d ¹⁰ 5s ¹	48 48 Cd Cadmium 112.414 [Kr]4d ¹⁰ 5s ²	49 49 In Indium 114.818 [Kr]4d ¹⁰ 5s ² 5p ¹	50 50 Sn Tin 118.711 [Kr]4d ¹⁰ 5s ² 5p ²	51 51 Sb Antimony 121.760 [Kr]4d ¹⁰ 5s ² 5p ³	52 52 Te Tellurium 127.6 [Kr]4d ¹⁰ 5s ² 5p ⁴	53 53 I Iodine 126.904 [Kr]4d ¹⁰ 5s ² 5p ⁵	54 54 Xe Xenon 131.29 [Kr]4d ¹⁰ 5s ² 5p ⁶
6 55 Cs Cesium 132.905 [Xe]6s ¹	56 56 Ba Barium 137.328 [Xe]6s ²	57-71 57-71 Lanthanide Series	72 72 Hf Hafnium 178.49 [Xe]4f ¹⁴ 5d ² 6s ²	73 73 Ta Tantalum 180.948 [Xe]4f ¹⁴ 5d ³ 6s ²	74 74 W Tungsten 183.84 [Xe]4f ¹⁴ 5d ⁴ 6s ²	75 75 Re Rhenium 186.207 [Xe]4f ¹⁴ 5d ⁵ 6s ²	76 76 Os Osmium 190.23 [Xe]4f ¹⁴ 5d ⁶ 6s ²	77 77 Ir Iridium 192.217 [Xe]4f ¹⁴ 5d ⁷ 6s ²	78 78 Pt Platinum 195.085 [Xe]4f ¹⁴ 5d ⁹ 6s ¹	79 79 Au Gold 196.967 [Xe]4f ¹⁴ 5d ¹⁰ 6s ¹	80 80 Hg Mercury 200.592 [Xe]4f ¹⁴ 5d ¹⁰ 6s ²	81 81 Tl Thallium 204.383 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹	82 82 Pb Lead 207.2 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ²	83 83 Bi Bismuth 208.980 [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ³	84 84 Po Polonium [209] [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴	85 85 At Astatine [209] [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁵	86 86 Rn Radon [222] [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶
7 87 Fr Francium 223.020 [Rn]7s ¹	88 88 Ra Radium 226.025 [Rn]7s ²	89-103 89-103 Actinide Series	104 104 Rf Rutherfordium [261] [Rn]5f ¹⁴ 6d ² 7s ²	105 105 Db Dubnium [262] [Rn]5f ¹⁴ 6d ³ 7s ²	106 106 Sg Seaborgium [266] [Rn]5f ¹⁴ 6d ⁴ 7s ²	107 107 Bh Bohrium [264] [Rn]5f ¹⁴ 6d ⁵ 7s ²	108 108 Hs Hassium [269] [Rn]5f ¹⁴ 6d ⁶ 7s ²	109 109 Mt Meitnerium [278] [Rn]5f ¹⁴ 6d ⁷ 7s ²	110 110 Ds Darmstadtium [281] [Rn]5f ¹⁴ 6d ⁸ 7s ²	111 111 Rg Roentgenium [280] [Rn]5f ¹⁴ 6d ⁹ 7s ²	112 112 Cn Copernicium [285] [Rn]5f ¹⁴ 6d ¹⁰ 7s ²	113 113 Nh Nihonium [286] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ¹	114 114 Fl Flerovium [289] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ²	115 115 Mc Moscovium [289] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ³	116 116 Lv Livermorium [293] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁴	117 117 Ts Tennessine [294] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁵	118 118 Og Oganesson [294] [Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁶

57 138.905 Lanthanum [Xe]5d ¹ 6s ²	58 140.116 Cerium [Xe]4f ¹ 5d ¹ 6s ²	59 140.908 Praseodymium [Xe]4f ³ 6s ²	60 144.243 Neodymium [Xe]4f ⁴ 6s ²	61 144.913 Promethium [Xe]4f ⁵ 6s ²	62 150.36 Samarium [Xe]4f ⁶ 6s ²	63 151.964 Europium [Xe]4f ⁷ 6s ²	64 157.25 Gadolinium [Xe]4f ⁷ 5d ¹ 6s ²	65 158.925 Terbium [Xe]4f ⁹ 6s ²	66 162.500 Dysprosium [Xe]4f ¹⁰ 6s ²	67 164.930 Holmium [Xe]4f ¹¹ 6s ²	68 167.259 Erbium [Xe]4f ¹² 6s ²	69 168.934 Thulium [Xe]4f ¹³ 6s ²	70 173.055 Ytterbium [Xe]4f ¹⁴ 6s ²	71 174.967 Lutetium [Xe]4f ¹⁴ 5d ¹ 6s ²
89 227.028 Actinium [Rn]6d ¹ 7s ²	90 232.038 Thorium [Rn]6d ² 7s ²	91 231.036 Protactinium [Rn]5f ² 6d ¹ 7s ²	92 238.029 Uranium [Rn]5f ³ 6d ¹ 7s ²	93 237.048 Neptunium [Rn]5f ⁴ 6d ¹ 7s ²	94 244.064 Plutonium [Rn]5f ⁶ 7s ²	95 243.061 Americium [Rn]5f ⁷ 7s ²	96 247.070 Curium [Rn]5f ⁷ 6d ¹ 7s ²	97 247.070 Berkelium [Rn]5f ⁹ 7s ²	98 251.080 Californium [Rn]5f ¹⁰ 7s ²	99 [254] Einsteinium [Rn]5f ¹¹ 7s ²	100 257.095 Fermium [Rn]5f ¹² 7s ²	101 258.1 Mendelevium [Rn]5f ¹³ 7s ²	102 259.101 Nobelium [Rn]5f ¹⁴ 7s ²	103 [262] Lawrencium [Rn]5f ¹⁴ 6d ¹ 7s ²

- Alkali Metal
- Alkaline Earth
- Transition Metal
- Basic Metal
- Metalloid
- Nonmetal
- Halogen
- Noble Gas
- Lanthanide
- Actinide

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