

Periodic Table of Elements

Group		1 IA																18 VIIIA			
Period	1	11.0081.1 1-1 13.60.7542 H Hydrogen 1s¹	43 [98] 2.16 Tc Technetium [Kr]4d⁵5s² 7 7.11940.55 oxidation states 1st ionisation energy[eV] affinity[eV] symbol name ground state configuration																24.0031.4 0 24.59 He Helium 1s²		
	2	36.941.82 1 5.3920.618 Li Lithium [He]2s¹	49.0121.53 2 9.323 Be Beryllium [He]2s²															1020.1801.54 0 21.56 Ne Neon [He]2s²2p⁶			
	3	1122.9902.27 1 5.1390.5479 Na Sodium [Ne]3s¹	1224.3051.73 2 7.646 Mg Magnesium [Ne]3s²															1718.9981.47 -1 17.42 F Fluorine [He]2s²2p⁵			
	4	1939.0982.75 1 4.3410.5015 K Potassium [Ar]4s¹	2040.0782.31 2 6.1130.02455 Ca Calcium [Ar]4s²	2144.9562.15 3 6.5610.188 Sc Scandium [Ar]3d¹4s²	2247.8672.11 4 6.8280.079 Ti Titanium [Ar]3d²4s²	2350.9422.07 5 6.7460.525 V Vanadium [Ar]3d³4s²	2451.9962.06 6 6.7660.666 Cr Chromium [Ar]3d⁵4s¹	2554.9382.05 7 7.434 Mn Manganese [Ar]3d⁵4s²	2655.8452.04 8 7.9020.151 Fe Iron [Ar]3d⁶4s²	2758.9332.0 9 7.8810.662 Co Cobalt [Ar]3d⁷4s²	2858.6931.97 10 7.641.156 Ni Nickel [Ar]3d⁸4s²	2963.5461.96 11 7.7261.235 Cu Copper [Ar]3d¹⁰4s¹	3065.382.01 12 9.394 Zn Zinc [Ar]3d¹⁰4s²	3169.7231.87 13 5.9990.4328 Al Aluminium [Ne]3s²3p¹	3272.6302.11 14 8.1521.389 Si Silicon [Ne]3s²3p²	3374.9221.85 15 9.7880.804 P Phosphorus [Ne]3s²3p³	3478.9711.9 16 9.7522.077 S Sulfur [Ne]3s²3p⁴	3579.9041.85 17 11.813.364 Cl Chlorine [Ne]3s²3p⁵	3683.7982.02 18 15.76 Ar Argon [Ne]3s²3p⁶		
	5	3785.4683.03 1 4.1770.4859 Rb Rubidium [Kr]5s¹	3887.622.49 2 5.6950.048 Sr Strontium [Kr]5s²	3988.9062.32 3 6.2170.307 Y Yttrium [Kr]4d¹5s²	4091.2242.23 4 6.6340.426 Zr Zirconium [Kr]4d²5s²	4192.9062.18 5 6.7590.916 Nb Niobium [Kr]4d⁴5s¹	4295.952.17 6 7.0920.748 Mo Molybdenum [Kr]4d⁵5s¹	4398.282.16 7 7.280.55 Tc Technetium [Kr]4d⁵5s²	44101.072.13 8 7.361.05 Ru Ruthenium [Kr]4d⁷5s¹	45102.9062.1 9 7.4591.137 Rh Rhodium [Kr]4d⁸5s¹	46106.422.1 10 8.3370.562 Pd Palladium [Kr]4d¹⁰	47107.8682.11 11 7.5761.302 Ag Silver [Kr]4d¹⁰5s¹	48112.4142.18 12 8.994 Cd Cadmium [Kr]4d¹⁰5s²	49114.8181.93 13 5.7860.2995 In Indium [Kr]4d¹⁰5s²5p¹	50118.7102.17 14 7.3441.112 Sn Tin [Kr]4d¹⁰5s²5p²	51121.7602.06 15 8.6081.046 Sb Antimony [Kr]4d¹⁰5s²5p³	52127.602.06 16 9.0091.971 Te Tellurium [Kr]4d¹⁰5s²5p⁴	53126.9041.98 17 10.453.059 I Iodine [Kr]4d¹⁰5s²5p⁵	54131.2932.16 18 12.13 Xe Xenon [Kr]4d¹⁰5s²5p⁶		
	6	55132.9053.43 1 3.8940.4716 Cs Caesium [Xe]6s¹	56137.3272.68 2 5.2120.1446 Ba Barium [Xe]6s²	57-71 La-Lu Lanthanide		72178.4862.23 4 6.8250.014 Hf Hafnium [Xe]4f¹⁴5d²6s²	73180.9482.22 5 7.5490.322 Ta Tantalum [Xe]4f¹⁴5d³6s²	74183.842.18 6 7.8640.8162 W Tungsten [Xe]4f¹⁴5d⁴6s²	75186.2072.16 7 7.8330.15 Re Rhenium [Xe]4f¹⁴5d⁵6s²	76190.232.16 8 8.4381.1 Os Osmium [Xe]4f¹⁴5d⁶6s²	77192.2172.13 9 8.9671.564 Ir Iridium [Xe]4f¹⁴5d⁷6s²	78195.0842.13 10 8.9592.128 Pt Platinum [Xe]4f¹⁴5d⁹6s¹	79196.9672.14 11 9.2252.309 Au Gold [Xe]4f¹⁴5d¹⁰6s¹	80200.5922.23 12 10.44 Hg Mercury [Xe]4f¹⁴5d¹⁰6s²	81204.381.96 13 6.1080.377 Tl Thallium [Xe]4f¹⁴5d¹⁰6s²6p¹	82207.22.02 14 7.4170.364 Pb Lead [Xe]4f¹⁴5d¹⁰6s²6p²	83208.9802.07 15 7.2850.9423 Bi Bismuth [Xe]4f¹⁴5d¹⁰6s²6p³	84[209]1.97 16 8.4141.9 Po Polonium [Xe]4f¹⁴5d¹⁰6s²6p⁴	85[210]2.02 17 2.8 At Astatine [Xe]4f¹⁴5d¹⁰6s²6p⁵	86[222]2.2 18 10.75 Rn Radon [Xe]4f¹⁴5d¹⁰6s²6p⁶	
	7	87[223]3.48 1 4.0730.46 Fr Francium [Rn]7s¹	88[226]2.83 2 5.2780.1 Ra Radium [Rn]7s²	89-103 Ac-Lr Actinide		104[267]U 3 6.001U Rf Rutherfordium [Rn]5f¹⁴6d²7s²	105[268]U 4 6.307U Db Dubnium [Rn]5f¹⁴6d³7s²	106[269]U 5 6.266U Sg Seaborgium [Rn]5f¹⁴6d⁴7s²	107[270]U 6 6.307U Bh Bohrium [Rn]5f¹⁴6d⁵7s²	108[269]U 7 6.266U Hs Hassium [Rn]5f¹⁴6d⁶7s²	109[278]U 8 6.026U Mt Meitnerium [Rn]5f¹⁴6d⁷7s²	110[281]U 9 5.974U Ds Darmstadtium [Rn]5f¹⁴6d⁹7s¹	111[280]U 10 5.991U Rg Roentgenium [Rn]5f¹⁴6d¹⁰7s¹	112[285]U 11 6.198U Cn Copernicium [Rn]5f¹⁴6d¹⁰7s²	113[286]U 12 6.42U Nh Nihonium [Rn]5f¹⁴6d¹⁰7s²7p¹	114[289]U 13 6.5U Fl Flerovium [Rn]5f¹⁴6d¹⁰7s²7p²	115[289]U 14 6.5U Mc Moscovium [Rn]5f¹⁴6d¹⁰7s²7p³	116[293]U 15 6.58U Lv Livermorium [Rn]5f¹⁴6d¹⁰7s²7p⁴	117[294]U 16 6.65U Ts Tennessine [Rn]5f¹⁴6d¹⁰7s²7p⁵	118[294]U 17 4.9 Og Oganesson [Rn]5f¹⁴6d¹⁰7s²7p⁶	
					57138.9052.43 3 5.5770.47 La Lanthanum [Xe]5d¹6s²	58140.1162.42 4 5.5390.65 Ce Cerium [Xe]4f¹5d¹6s²	59140.9082.4 4 5.4730.962 Pr Praseodymium [Xe]4f³6s²	60144.2422.39 3 5.525U Nd Neodymium [Xe]4f⁴6s²	61[145]2.38 3 5.582U Pm Promethium [Xe]4f⁵6s²	62150.362.36 3 5.644U Sm Samarium [Xe]4f⁶6s²	63151.9642.35 3 5.670.864 Eu Europium [Xe]4f⁷6s²	64157.252.34 3 6.15U Gd Gadolinium [Xe]4f⁷5d¹6s²	65158.9252.33 4 5.864U Tb Terbium [Xe]4f⁹6s²	66162.5002.31 3 5.939U Dy Dysprosium [Xe]4f¹⁰6s²	67164.9302.3 3 6.021U Ho Holmium [Xe]4f¹¹6s²	68167.2592.29 3 6.108U Er Erbium [Xe]4f¹²6s²	69168.9342.27 3 6.1841.029 Tm Thulium [Xe]4f¹³6s²	70173.0452.26 3 6.254-0.02 Yb Ytterbium [Xe]4f¹⁴6s²	71174.9672.24 3 5.4260.34 Lu Lutetium [Xe]4f¹⁴5d¹6s²		
					89[227]2.47 3 5.170.35 Ac Actinium [Rn]6d¹7s²	90232.0382.45 4 6.307U Th Thorium [Rn]6d²7s²	91231.0362.43 5 5.89U Pa Protactinium [Rn]5f²6d¹7s²	92238.0292.41 5 6.194U U Uranium [Rn]5f³6d¹7s²	93[237]2.39 5 6.266U Np Neptunium [Rn]5f⁴6d¹7s²	94[244]2.43 5 6.026U Pu Plutonium [Rn]5f⁶7s²	95[243]2.44 5 5.974U Am Americium [Rn]5f⁷7s²	96[247]2.45 4 5.991U Cm Curium [Rn]5f⁸6d¹7s²	97[247]2.44 4 6.198U Bk Berkelium [Rn]5f⁹7s²	98[251]2.45 4 6.282U Cf Californium [Rn]5f¹⁰7s²	99[252]2.45 3 6.42U Es Einsteinium [Rn]5f¹¹7s²	100[257]2.45 3 6.5U Fm Fermium [Rn]5f¹²7s²	101[258]2.46 3 6.58U Md Mendelevium [Rn]5f¹³7s²	102[259]2.46 3 6.65U No Nobelium [Rn]5f¹⁴7s²	103[262]2.46 3 4.9 Lr Lawrencium [Rn]5f¹⁴7s²7p¹		
more info https://www.rsc.org/periodic-table source and raw data at https://gitlab.com/drFaustroll/periodic																					

[Rn]5f¹⁰7s²