

The Periodic Table of the Elements

by Robert Campion version 1.4

group 1																	18		
period 1	1.00794 1312.0 2.20 H Hydrogen 1s ¹																	4.002602 2372.3 He Helium 1s ²	
2	6.941 520.2 0.98 Li Lithium 1s ² 2s ¹	9.012182 899.5 1.57 Be Beryllium 1s ² 2s ²																	20.1797 2080.7 Ne Neon 1s ² 2s ² 2p ⁶
3	22.98976 495.8 0.93 Na Sodium [Ne] 3s ¹	24.3050 737.7 1.31 Mg Magnesium [Ne] 3s ²																	39.948 1520.6 Ar Argon [Ne] 3s ² 3p ⁶
4	39.0983 418.8 0.82 K Potassium [Ar] 4s ¹	40.078 589.8 1.00 Ca Calcium [Ar] 4s ²	44.95591 633.1 1.36 Sc Scandium [Ar] 3d ¹ 4s ²	47.867 658.8 1.54 Ti Titanium [Ar] 3d ² 4s ²	50.9415 650.9 1.63 V Vanadium [Ar] 3d ³ 4s ²	51.9962 652.9 1.66 Cr Chromium [Ar] 3d ⁵ 4s ¹	54.93804 717.3 1.55 Mn Manganese [Ar] 3d ⁵ 4s ²	55.845 762.5 1.83 Fe Iron [Ar] 3d ⁶ 4s ²	58.93319 760.4 1.91 Co Cobalt [Ar] 3d ⁷ 4s ²	58.6934 737.1 1.88 Ni Nickel [Ar] 3d ⁸ 4s ²	63.546 745.5 1.90 Cu Copper [Ar] 3d ¹⁰ 4s ¹	65.38 906.4 1.65 Zn Zinc [Ar] 3d ¹⁰ 4s ²	69.723 578.8 1.81 Ga Gallium [Ar] 3d ¹⁰ 4s ² 4p ¹	72.64 762.0 2.01 Ge Germanium [Ar] 3d ¹⁰ 4s ² 4p ²	74.92160 947.0 2.18 As Arsenic [Ar] 3d ¹⁰ 4s ² 4p ³	78.96 941.0 2.55 Se Selenium [Ar] 3d ¹⁰ 4s ² 4p ⁴	79.904 1139.9 2.96 Br Bromine [Ar] 3d ¹⁰ 4s ² 4p ⁵	83.798 1350.8 3.00 Kr Krypton [Ar] 3d ¹⁰ 4s ² 4p ⁶	
5	85.4678 403.0 0.82 Rb Rubidium [Kr] 5s ¹	87.62 549.5 0.95 Sr Strontium [Kr] 5s ²	88.90585 600.0 1.22 Y Yttrium [Kr] 4d ¹ 5s ²	91.224 640.1 1.33 Zr Zirconium [Kr] 4d ² 5s ²	92.90638 652.1 1.60 Nb Niobium [Kr] 4d ⁴ 5s ¹	95.96 684.3 2.16 Mo Molybdenum [Kr] 4d ⁵ 5s ¹	(98) 702.0 1.90 Tc Technetium [Kr] 4d ⁵ 5s ²	101.07 710.2 2.20 Ru Ruthenium [Kr] 4d ⁷ 5s ¹	102.9055 719.7 2.28 Rh Rhodium [Kr] 4d ⁸ 5s ¹	106.42 804.4 2.20 Pd Palladium [Kr] 4d ¹⁰	107.8682 731.0 1.93 Ag Silver [Kr] 4d ¹⁰ 5s ¹	112.441 867.8 1.69 Cd Cadmium [Kr] 4d ¹⁰ 5s ²	114.818 558.3 1.78 In Indium [Kr] 4d ¹⁰ 5s ² 5p ¹	118.710 708.6 1.96 Sn Tin [Kr] 4d ¹⁰ 5s ² 5p ²	121.760 834.0 2.05 Sb Antimony [Kr] 4d ¹⁰ 5s ² 5p ³	127.60 869.3 2.10 Te Tellurium [Kr] 4d ¹⁰ 5s ² 5p ⁴	126.9044 1008.4 2.66 I Iodine [Kr] 4d ¹⁰ 5s ² 5p ⁵	131.293 1170.4 2.60 Xe Xenon [Kr] 4d ¹⁰ 5s ² 5p ⁶	
6	132.9054 375.7 0.79 Cs Cæsium [Xe] 6s ¹	137.327 502.9 0.89 Ba Barium [Xe] 6s ²	174.9668 523.5 1.27 Lu Lutetium [Xe] 4f ¹⁴ 5d ¹ 6s ²	178.49 658.5 1.30 Hf Hafnium [Xe] 4f ¹⁴ 5d ² 6s ²	180.9478 761.0 1.50 Ta Tantalum [Xe] 4f ¹⁴ 5d ³ 6s ²	183.84 770.0 2.36 W Tungsten [Xe] 4f ¹⁴ 5d ⁴ 6s ²	186.207 760.0 1.90 Re Rhenium [Xe] 4f ¹⁴ 5d ⁵ 6s ²	190.23 840.0 2.20 Os Osmium [Xe] 4f ¹⁴ 5d ⁶ 6s ²	192.217 880.0 2.20 Ir Iridium [Xe] 4f ¹⁴ 5d ⁷ 6s ²	195.084 870.0 2.28 Pt Platinum [Xe] 4f ¹⁴ 5d ⁹ 6s ¹	196.9665 890.1 2.54 Au Gold [Xe] 4f ¹⁴ 5d ¹⁰ 6s ¹	200.59 1007.1 2.00 Hg Mercury [Xe] 4f ¹⁴ 5d ¹⁰ 6s ²	204.3833 589.4 1.62 Tl Thallium [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹	207.2 715.6 2.33 Pb Lead [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ²	208.9804 703.0 2.02 Bi Bismuth [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ³	(210) 812.1 2.00 Po Polonium [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴	(210) 890.0 2.20 At Astatine [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁵	(220) 1037.0 Rn Radon [Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶	
7	(223) 380.0 0.70 Fr Francium [Rn] 7s ¹	(226) 509.3 0.90 Ra Radium [Rn] 7s ²	(262) 470.0 Lr Lawrencium [Rn] 5f ¹⁴ 7s ² 7p ¹	(261) 580.0 Rf Rutherfordium [Rn] 5f ¹⁴ 6d ² 7s ²	(262) Db Dubnium [Rn] 5f ¹⁴ 6d ³ 7s ²	(266) Sg Seaborgium [Rn] 5f ¹⁴ 6d ⁴ 7s ²	(264) Bh Bohrium [Rn] 5f ¹⁴ 6d ⁵ 7s ²	(277) Hs Hassium [Rn] 5f ¹⁴ 6d ⁶ 7s ²	(268) Mt Meitnerium [Rn] 5f ¹⁴ 6d ⁷ 7s ²	(271) Ds Darmstadtium [Rn] 5f ¹⁴ 6d ⁸ 7s ²	(272) Rg Roentgenium [Rn] 5f ¹⁴ 6d ⁹ 7s ²	(285) Cn Copernicium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ²	(284) Uut Ununtrium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ¹	(289) Uuq Ununquadium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ²	(288) Uup Ununpentium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ³	(292) Uuh Ununhexium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁴	117 Uus Ununseptium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁵	(294) Uuo Ununoctium [Rn] 5f ¹⁴ 6d ¹⁰ 7s ² 7p ⁶	

atomic mass or most stable mass number — 55.845

1st ionization energy in kJ/mol — 762.5

chemical symbol — **Fe**

name — Iron

electron configuration — [Ar] 3d⁶ 4s²

atomic number — 26

electronegativity — 1.83

oxidation states most common are bold — +6, +5, +4, +3, +2, +1, -1, -2

alkali metals (orange)

alkaline metals (light orange)

other metals (yellow)

transition metals (light green)

lanthanoids (medium green)

actinoids (dark green)

metalloids (light blue)

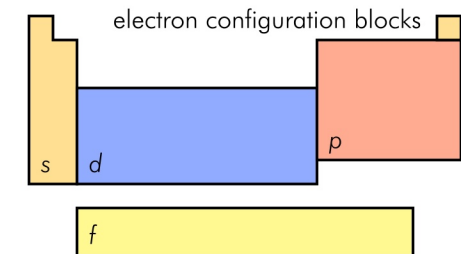
nonmetals (purple)

halogens (pink)

noble gases (light blue)

unknown elements (grey)

radioactive elements have masses in parenthesis (yellow with radiation symbol)



- notes
- as of yet, elements 113-118 have no official name designated by the IUPAC.
 - 1 kJ/mol ≈ 96.485 eV.
 - all elements are implied to have an oxidation state of zero.

138.9054 538.1 1.10 La Lanthanum [Xe] 5d ¹ 6s ²	140.116 534.4 1.12 Ce Cerium [Xe] 4f ¹ 5d ¹ 6s ²	140.9076 527.0 1.13 Pr Praseodymium [Xe] 4f ³ 6s ²	144.242 533.1 1.14 Nd Neodymium [Xe] 4f ⁴ 6s ²	(145) 540.0 Pm Promethium [Xe] 4f ⁵ 6s ²	150.36 544.5 1.17 Sm Samarium [Xe] 4f ⁶ 6s ²	151.964 547.1 Eu Europium [Xe] 4f ⁷ 6s ²	157.25 593.4 1.20 Gd Gadolinium [Xe] 4f ⁷ 5d ¹ 6s ²	158.9253 565.8 Tb Terbium [Xe] 4f ⁹ 6s ²	162.500 573.0 1.22 Dy Dysprosium [Xe] 4f ¹⁰ 6s ²	164.9303 581.0 1.23 Ho Holmium [Xe] 4f ¹¹ 6s ²	167.259 589.3 1.24 Er Erbium [Xe] 4f ¹² 6s ²	168.9342 596.7 1.25 Tm Thulium [Xe] 4f ¹³ 6s ²	173.054 603.4 Yb Ytterbium [Xe] 4f ¹⁴ 6s ²
(227) 499.0 1.10 Ac Actinium [Rn] 6d ¹ 7s ²	232.0380 587.0 1.30 Th Thorium [Rn] 6d ² 7s ²	231.0358 568.0 1.50 Pa Protactinium [Rn] 5f ² 6d ¹ 7s ²	238.0289 597.6 1.38 U Uranium [Rn] 5f ³ 6d ¹ 7s ²	(237) 604.5 1.36 Np Neptunium [Rn] 5f ⁴ 6d ¹ 7s ²	(244) 584.7 1.28 Pu Plutonium [Rn] 5f ⁶ 7s ²	(243) 578.0 1.30 Am Americium [Rn] 5f ⁷ 7s ²	(247) 581.0 1.30 Cm Curium [Rn] 5f ⁷ 6d ¹ 7s ²	(247) 601.0 1.30 Bk Berkelium [Rn] 5f ⁹ 7s ²	(251) 608.0 1.30 Cf Californium [Rn] 5f ¹⁰ 7s ²	(252) 619.0 1.30 Es Einsteinium [Rn] 5f ¹¹ 6s ²	(257) 627.0 1.30 Fm Fermium [Rn] 5f ¹² 7s ²	(258) 635.0 1.30 Md Mendelevium [Rn] 5f ¹³ 7s ²	(259) 642.0 1.30 No Nobelium [Rn] 5f ¹⁴ 7s ²