

1 1A		● PERIODIC TABLE OF THE ELEMENTS ●																18 8A	
1	1 H 1.0079											13 3A	14 4A	15 5A	16 6A	17 7A	2 He 4.0026		
2	3 Li 6.941	4 Be 9.0122											5 B 10.811	6 C 12.011	7 N 14.007	8 O 15.999	9 F 18.998	10 Ne 20.180	
3	11 Na 22.990	12 Mg 24.305	3 3B	4 4B	5 5B	6 6B	7 7B	8 8B	9 8B	10 8B	11 1B	12 2B	13 Al 26.982	14 Si 28.086	15 P 30.974	16 S 32.066	17 Cl 35.453	18 Ar 39.948	
4	19 K 39.098	20 Ca 40.078	21 Sc 44.956	22 Ti 47.867	23 V 50.942	24 Cr 51.996	25 Mn 54.938	26 Fe 55.845	27 Co 58.933	28 Ni 58.693	29 Cu 63.546	30 Zn 65.39	31 Ga 69.723	32 Ge 72.64	33 As 74.922	34 Se 78.96	35 Br 79.904	36 Kr 83.80	
5	37 Rb 85.468	38 Sr 87.62	39 Y 88.906	40 Zr 91.224	41 Nb 92.906	42 Mo 95.94	43 Tc (98)	44 Ru 101.07	45 Rh 102.91	46 Pd 106.42	47 Ag 107.87	48 Cd 112.41	49 In 114.82	50 Sn 118.71	51 Sb 121.76	52 Te 127.60	53 I 126.90	54 Xe 131.29	
6	55 Cs 132.91	56 Ba 137.33	57 - 71 La-Lu	72 Hf 178.49	73 Ta 180.95	74 W 183.84	75 Re 186.21	76 Os 190.23	77 Ir 192.22	78 Pt 195.08	79 Au 196.97	80 Hg 200.59	81 Tl 204.38	82 Pb 207.2	83 Bi 208.98	84 Po (209)	85 At (210)	86 Rn (222)	
7	87 Fr (223)	88 Ra (226)	89 - 103 Ac-Lr	104 Rf (261)	105 Db (262)	106 Sg (266)	107 Bh (264)	108 Hs (277)	109 Mt (268)	110 Ds (281)	111 Uuu (272)	112 Uub (285)			114 Uuq (289)				

Lanthanide	57 La 138.91	58 Ce 140.12	59 Pr 140.91	60 Nd 144.24	61 Pm (145)	62 Sm 150.36	63 Eu 151.96	64 Gd 157.25	65 Tb 158.93	66 Dy 162.50	67 Ho 164.93	68 Er 167.26	69 Tm 168.93	70 Yb 173.04	71 Lu 174.97
Actinide	89 Ac (227)	90 Th 232.04	91 Pa 231.04	92 U 238.03	93 Np (237)	94 Pu (244)	95 Am (243)	96 Cm (247)	97 Bk (247)	98 Cf (251)	99 Es (252)	100 Fm (257)	101 Md (258)	102 No (259)	103 Lr (262)

Some Constants & Conversion Factors:

 (1) Avogadro number: $N = 6.022 \times 10^{23}$ /mole

 (3) Gas Constant: $R = 0.0821 \text{ atm L/mol K}$ or $R = 8.3145 \text{ J/mol K}$

 (5) Electronic Charge: $e = 1.602 \times 10^{-19}$ Coulomb

 (7) 1 joule = 1 kg. $\text{m}^2/\text{s}^2 = 0.239$ calorie = (1 coulomb) x (1 volt); (8) 1 calorie = 4.184 joules

 (10) 1 pascal = 1 Newton / $\text{m}^2 = 1 \text{ kg/m.s}^2$; (11) 1 atm = 760mm Hg = 760 torr

 (14) 1 m = 100 cm; (15) 1 nm = 10^{-9} m; (16) 1 pm = 10^{-12} m; (17) 1 L = 1000 cm^3

 (2) Planck's constant: $h = 6.626 \times 10^{-34}$ J.sec

 (4) Speed of Light: $c = 2.997 \times 10^8$ m/sec

 (6) π $\pi = 3.14159$

 (9) Faraday's Constant: $F = 9.648 \times 10^4$ coulomb /mol electron;

 (12) $\text{K} = \text{°C} + 273.15$; (13) $\text{°C}/5 = (\text{°F} - 32) / 9$

 (18) 1 kg = 10^3 g; (19) 1 g = 10^3 mg; (20) 1lb = 453.6g.