

Physics 102 - Fall 2009 - Problem Set 5

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The periodic chart
below might be helpful

Los Alamos National Laboratory Chemistry Division

Periodic Table of the Elements

1A	2A	3A	4A	5A	6A	7A	8A
1 H 1.008 gas	4 Be 9.012 solid	5 B 10.81 solid	6 C 12.01 solid	7 N 14.01 gas	8 O 16.00 gas	9 F 18.99 gas	10 Ne 20.18 gas
11 Na 22.99 solid	12 Mg 24.31 solid	13 Al 26.98 solid	14 Si 28.09 solid	15 P 30.97 solid	16 S 32.07 solid	17 Cl 35.45 gas	18 Ar 39.95 gas
19 K 39.10 solid	20 Ca 40.08 solid	31 Ga 69.72 solid	32 Ge 72.64 solid	33 As 74.92 solid	34 Se 78.96 solid	35 Br 79.90 liquid	36 Kr 83.80 gas
37 Rb 85.47 solid	38 Sr 87.62 solid	49 In 114.82 solid	50 Sn 118.71 solid	51 Sb 121.76 solid	52 Te 127.60 solid	53 I 126.90 solid	54 Xe 131.30 gas
55 Cs 132.91 solid	56 Ba 137.33 solid	81 Tl 204.38 solid	82 Pb 207.2 solid	83 Bi 208.98 solid	84 Po 209 solid	85 At 210 solid	86 Rn 222 gas
87 Fr 223 solid	88 Ra 226 solid	114 Uuq (294)	114 Uuq (294)	114 Uuq (294)	116 Uuh (296)	118 Uuo (298)	118 Uuo (298)

58 Ce 140.12 solid	59 Pr 140.91 solid	60 Nd 144.24 solid	61 Pm 145 solid	62 Sm 150.36 solid	63 Eu 151.96 solid	64 Gd 157.25 solid	65 Tb 158.93 solid	66 Dy 162.50 solid	67 Ho 164.93 solid	68 Er 167.26 solid	69 Tm 168.93 solid	70 Yb 173.05 solid	71 Lu 174.97 solid
90 Th 232.04 solid	91 Pa 231.04 solid	92 U 238.03 solid	93 Np 237 solid	94 Pu 244 solid	95 Am 243 solid	96 Cm 247 solid	97 Bk 247 solid	98 Cf 251 solid	99 Es 252 solid	100 Fm 257 solid	101 Md 258 solid	102 No 259 solid	103 Lr 260 solid

Lanthanide Series*

Actinide Series*

element names in **blue** are liquids at room temperature
 element names in **red** are gases at room temperature
 element names in **black** are solids at room temperature