CHM 1025C CT #5, Ch 6 & 7 **27-Oct-2008** **Prof George W.J. Kenney, Jr**

NO CREDIT IF YOU: Fail to put in the Units & Properly Round, Fail to show ALL math work,

PRINT YOUR NAME on the line: _____

Your start time on this test _____

Your finish time on this test: _____

Time it took you to do this test: _____

1. (30 pts, 3 pts ea) Fill in the blanks

What are some of the visual evidences for a chemical reaction

1.1 _____

1.2 _____

1.3 _____

1.4 In this reaction: $2\ H_2 + O_2 \rightarrow 2\ H_2O$, the '2' in front of the Hydrogen [$\underline{2}\ H_2$]is called the

_____

1.5 The following symbol is sometimes used in a chemical reaction ↓, what would expect to visually see in the chemical reaction in order to use this symbol? Describe it!

1.6 What does the term "Driving Force" mean? _____

1.7 What is needed for electrical conductivity in an aqueous solution? _____

1.8 The net ionic reaction for the reaction of an acid and a base is:

1.9 An acid produces or generates:

1.10 A base produces or generates :

2. (28 pts, 14 pts ea) Show the *Molecular Equation*, *Complete Ionic Equation* and the *Net Ionic* Equation for the following reactions:

2.1 The reaction of Silver Nitrate with Calcium Chloride

2.2 The reaction of Nitric Acid with Ammonium Hydroxide

3. (42 pts, 14 pts ea) Reactions:

A. Write the formulae for the reactants and products
B. Balance the equation
C. Will the reaction go to completion?

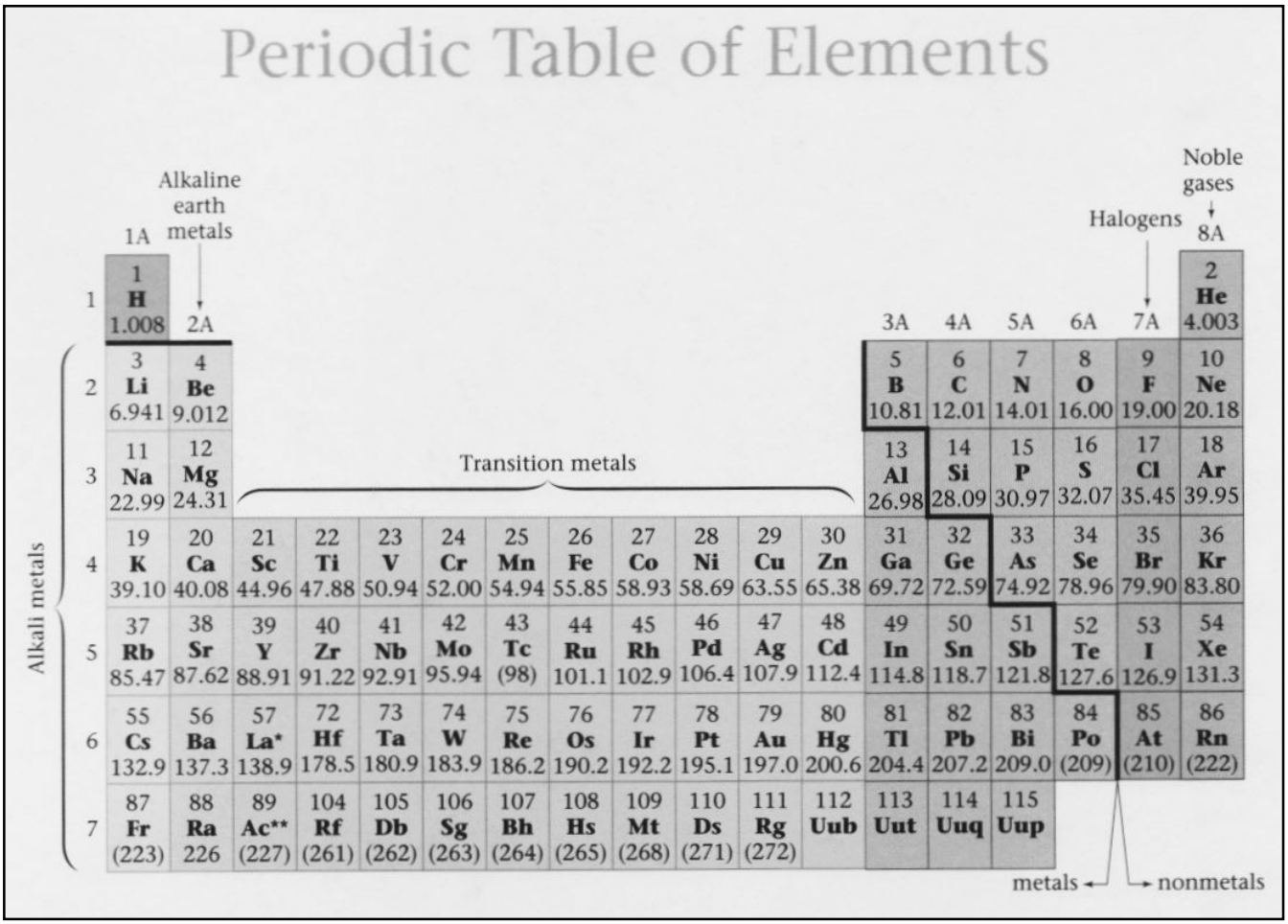
3.1 Sulfuric Acid and Sodium Bicarbonate. **Will the reaction go to completion? Yes / No**

3.2 Iron (III) Bromide and Potassium Hydroxide **Will the reaction go to completion? Yes / No**

3.3 Hydrochloric Acid and Zinc **Will the reaction go to completion? Yes / No**

How do you rate this test from 1 to 10 _____

1 = Very Easy, can do it with my eyes closed, 10= Very Very Difficult, could not do any of the problems


Periodic Table of Elements
Alkaline earth metals
Noble gases
Halogens
1A
2A
3A
4A
5A
6A
7A
8A
Transition metals
Alkali metals
1 H 1.008
2 He 4.003
3 Li 6.941
4 Be 9.012
5 B 10.81
6 C 12.01
7 N 14.01
8 O 16.00
9 F 19.00
10 Ne 20.18
11 Na 22.99
12 Mg 24.31
13 Al 26.98
14 Si 28.09
15 P 30.97
16 S 32.07
17 Cl 35.45
18 Ar 39.95
19 K 39.10
20 Ca 40.08
21 Sc 44.96
22 Ti 47.88
23 V 50.94
24 Cr 52.00
25 Mn 54.94
26 Fe 55.85
27 Co 58.93
28 Ni 58.69
29 Cu 63.55
30 Zn 65.38
31 Ga 69.72
32 Ge 72.59
33 As 74.92
34 Se 78.96
35 Br 79.90
36 Kr 83.80
37 Rb 85.47
38 Sr 87.62
39 Y 88.91
40 Zr 91.22
41 Nb 92.91
42 Mo 95.94
43 Tc (98)
44 Ru 101.1
45 Rh 102.9
46 Pd 106.4
47 Ag 107.9
48 Cd 112.4
49 In 114.8
50 Sn 118.7
51 Sb 121.8
52 Te 127.6
53 I 126.9
54 Xe 131.3
55 Cs 132.9
56 Ba 137.3
57 La* 138.9
72 Hf 178.5
73 Ta 180.9
74 W 183.9
75 Re 186.2
76 Os 190.2
77 Ir 192.2
78 Pt 195.1
79 Au 197.0
80 Hg 200.6
81 Tl 204.4
82 Pb 207.2
83 Bi 209.0
84 Po (209)
85 At (210)
86 Rn (222)
87 Fr (223)
88 Ra 226
89 Ac** (227)
104 Rf (261)
105 Db (262)
106 Sg (263)
107 Bh (264)
108 Hs (265)
109 Mt (268)
110 Ds (271)
111 Rg (272)
112 Uub
113 Uut
114 Uuq
115 Uup
metals
nonmetals