CHM 1025C   **George W.J. Kenney, Jr**   **CT-2**   **Ch 3,4**   **09-June-2009**

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

Max Grade: 101 points   (1 pt) PRINT NAME ON LINE _____

CHECK CORRECT BOX OR LOOSE 20 PTS   **Test End time** _____

Wed Afternoon Lab □   **Test Start time** _____

Wed Evening Lab   □   **Test Elapsed time** _____

A. Answer the Following (4 Points each = 100 pts)

1. Name the states that matter can exist in:

2. Water boils at 100 ^{o}C, is this a Physical or Chemical Property?

3. A plant grows, is this a Physical or Chemical Property?

4. What is the difference between an element and a compound?

5. What kind of a mixture is McDonalds CheeseBurger?

6. Can you purify the salt and pepper mixture by distillation?

7-10. Give the element name and symbol for 4 compounds that exist on Planet Earth over 1%:
     Name   Symbol   Name   Symbol

     _____   _____ _____   _____

     Name   Symbol   Name   Symbol

     _____   _____ _____   _____

11-12: Give the element name and symbol for 2 compounds that exist in the Human Body over 1%:
     Name   Symbol   Name   Symbol

     _____   _____ _____   _____

13-14: Name 2 crucial trace elements used in the human body and their use:
     Name   Symbol   Use

     _____   _____ _____

     _____   _____ _____

15. What does Diatomic mean? Give 2 examples?

16. What particle has a positive charge?

17. What is the name and charge on the particle that Rutherford he used?

18. What are the names and the relative sizes of the sub element particles?

19. Sodium can exist with a molecular weight of 23 and 24. What name is given to this

20. Sodium 23 contains 11 protons, what is the Nuclide Symbol for this particular element?

21. What is the name given to the column that contains Li, Na, K etc?

22. What is the name given to the column that contains F, Cl, Br, etc?

23. Carbon exists as diamond, graphite, coal and other forms. What name is given to this sequence?

24-25. `1234.563`   `5000.0`
        ` 123.45`   `x   2`
        `  12.345`

DID YOU CHECK FOR SIGNIFICANT DIGITS   _____ **Yes**   _____ **No**

DID YOU CHECK FOR PROPER UNITS   _____ **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

	1A	2A											3A	4A	5A	6A	7A	8A
1	1 **H** 1.008																	2 **He** 4.003
2	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
3	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
4	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
5	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
6	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)
7	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**			