CHM 1025C George W.J. Kenney, Jr CT-1 Ch $2 \& 3 \quad \underline{\text { 21-Sept-2009 }}$

NO CREDIT IF YOU: Fail to put in the Units \& Properly Round, Fail to show ALL math work Max Grade: 103 points PRINT NAME ON LINE $\qquad$
(1 pt) Test End time
(1 pt) Test Start time
(1 pt) Test Elapsed time $\qquad$

## A. Answer the Following ( 4 Points each $=40$ pts )

1. What is Chemistry?
2. What are the steps in the Scientific Method?
3. What is a measurement?
4. What is Scientific Notation?

Fill in the blanks

| Physical Quantity | SI Unit Name | English Unit Name |
| :--- | :--- | :--- |
| 5. Mass | - |  |
| 6. Length | - |  |
| 7. Time | - |  |
| 8. Temperature | - |  |
|  |  |  |

9. How many ml is in one Liter?
10. How many milligrams is in one gram?

## B. Perform the following Calculations [ Show All Math ] ( 10 pts ea = 60 pts )

1. The Valencia flagpole is $\mathbf{1 2} \mathrm{ft}$ tall. How many millimeters is this?
2. I just purchased 1.2 tons of bananas, how much is this in kg ?
3. I go to the store to get a bottle of OJ. The bottle size is $\mathbf{7 5 0}$. ml. How many gallons is this?
4. The temperature outside is $25^{\circ} \mathrm{F}$. What is the temperature in ${ }^{\circ} \mathrm{C}$ and ${ }^{\circ} \mathrm{K}$ !
5. 1234.567
123.45
3000.00 12.345
6. $\mathbf{3 3 3 . 3 3}$ feet $\times 3.0 \mathrm{lb}=$

DID YOU CHECK FOR SIGNIFICANT DIGITS DID YOU CHECK FOR PROPER UNITS
$\qquad$ Yes $\qquad$ No
$\qquad$ Yes $\qquad$ 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

| 1 | $\begin{gathered} 1 \\ \mathbf{H} \\ 1.008 \end{gathered}$ | $2 \mathrm{~A}$ |  |  |  |  |  |  |  |  |  |  | 3A | 4A | 5A | 6A | $7 \dot{7}$ | $\begin{gathered} 2 \\ \text { He } \\ 4.003 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline 3 \\ 2 \mathbf{L i} \\ 6.941 \end{gathered}$ | $\begin{gathered} 4 \\ \mathbf{B e} \\ 9.012 \end{gathered}$ |  |  |  |  |  |  |  |  |  |  | $\begin{array}{\|c\|} \hline 5 \\ \mathbf{B} \\ 10.81 \\ \hline \end{array}$ | $\begin{gathered} 6 \\ \mathbf{C} \\ 12.01 \end{gathered}$ | $\begin{gathered} \mathbf{7} \\ \mathbf{N} \\ 14.01 \end{gathered}$ | $\begin{gathered} 8 \\ 0 \\ 16.00 \end{gathered}$ | $\begin{gathered} 9 \\ \mathbf{F} \\ 19.00 \end{gathered}$ | $\begin{gathered} 10 \\ \mathrm{Ne} \\ 20.18 \end{gathered}$ |
|  | $\begin{gathered} 11 \\ \mathbf{N a} \\ 22.99 \end{gathered}$ | $\begin{gathered} 12 \\ \mathbf{M g} \\ 24.31 \end{gathered}$ |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} 13 \\ \mathbf{A 1} \\ 26.98 \end{gathered}$ | 14 <br> $\mathbf{S i}$ <br> 28.09 | $\begin{gathered} 15 \\ \mathbf{P} \\ 30.97 \end{gathered}$ | $\begin{gathered} 16 \\ \mathbf{S} \\ 32.07 \end{gathered}$ | $\begin{gathered} 17 \\ \mathbf{C l} \\ 35.45 \end{gathered}$ | $\begin{gathered} 18 \\ \mathbf{A r} \\ 39.95 \end{gathered}$ |
|  | $4 \begin{gathered} 19 \\ \mathbf{K} \\ 39.10 \end{gathered}$ | $\begin{gathered} 20 \\ \text { Ca } \\ 40.08 \end{gathered}$ | $\begin{gathered} 21 \\ \text { Sc } \\ 44.96 \end{gathered}$ | $\begin{gathered} 22 \\ \mathbf{T i} \\ 47.88 \end{gathered}$ | $\begin{gathered} 23 \\ \mathbf{v} \\ 50.94 \end{gathered}$ | $\begin{gathered} 24 \\ \mathbf{C r} \\ 52.00 \end{gathered}$ | $\begin{gathered} 25 \\ \text { Mn } \\ 54.94 \end{gathered}$ | $\begin{gathered} 26 \\ \mathbf{F e} \\ 55.85 \end{gathered}$ | $\begin{gathered} 27 \\ \text { Co } \\ 58.93 \end{gathered}$ | $\begin{gathered} 28 \\ \mathbf{N i} \\ 58.69 \end{gathered}$ | $\begin{gathered} 29 \\ \mathbf{C u} \\ 63.55 \end{gathered}$ | $\begin{gathered} 30 \\ \mathbf{Z n} \\ 65.38 \end{gathered}$ | $\begin{gathered} 31 \\ \mathbf{G a} \\ 69.72 \end{gathered}$ | $\begin{gathered} 32 \\ \mathbf{G e} \\ 72.59 \end{gathered}$ | $\begin{gathered} 33 \\ \text { As } \\ 74.92 \\ \hline \end{gathered}$ | 34 $\mathbf{S e}$ 78.96 | $\begin{gathered} 35 \\ \mathbf{B r} \\ 79.90 \end{gathered}$ | $\begin{gathered} 36 \\ \mathbf{K r} \\ 83.80 \end{gathered}$ |
| 5 | $\begin{gathered} 37 \\ 5 \\ \mathbf{R} \mathbf{R} \\ 85.47 \end{gathered}$ | $\begin{gathered} 38 \\ \mathbf{S r} \\ 87.62 \end{gathered}$ | $\begin{gathered} 39 \\ \mathbf{Y} \\ 88.91 \end{gathered}$ | $\begin{gathered} 40 \\ \mathbf{Z r} \\ 91.22 \end{gathered}$ | $\begin{gathered} 41 \\ \mathbf{N b} \\ 92.91 \end{gathered}$ | $\begin{gathered} 42 \\ \text { Mo } \\ 95.94 \end{gathered}$ | $\begin{aligned} & 43 \\ & \mathbf{T c} \\ & (98) \end{aligned}$ | $\begin{gathered} 44 \\ \mathbf{R u} \\ 101.1 \end{gathered}$ | $\begin{gathered} 45 \\ \mathbf{R h} \\ 102.9 \end{gathered}$ | $\begin{gathered} 46 \\ \text { Pd } \\ 106.4 \end{gathered}$ | $\begin{gathered} 47 \\ \mathbf{A g} \\ 107.9 \end{gathered}$ | $\begin{gathered} 48 \\ \mathbf{C d} \\ 112.4 \end{gathered}$ | $\begin{gathered} 49 \\ \text { In } \\ 114.8 \end{gathered}$ | 50 $\mathbf{S n}$ 118.7 | 51 <br> $\mathbf{S b}$ <br> 121.8 | 52 Te 127.6 | 53 <br> I <br> 126.9 | $\begin{gathered} 54 \\ \mathbf{X e} \\ 131.3 \end{gathered}$ |
| 6 | $\begin{gathered} 55 \\ \text { Cs } \\ 132.9 \end{gathered}$ | $\begin{array}{r} 56 \\ \mathbf{B a} \\ 137.3 \end{array}$ | $\begin{gathered} 57 \\ \mathbf{L a}^{*} \\ 138.9 \end{gathered}$ | $\begin{gathered} 72 \\ \text { Hf } \\ 178.5 \end{gathered}$ | $\begin{gathered} 73 \\ \mathbf{T a} \\ 180.9 \end{gathered}$ | $\begin{gathered} 74 \\ \mathbf{W} \\ 183.9 \end{gathered}$ | $\begin{gathered} 75 \\ \mathbf{R e} \\ 186.2 \end{gathered}$ | $\begin{gathered} 76 \\ \text { Os } \\ 190.2 \end{gathered}$ | $\begin{gathered} 77 \\ \mathbf{I r} \\ 192.2 \end{gathered}$ | $\begin{gathered} 78 \\ \mathbf{P t} \\ 195.1 \end{gathered}$ | $\begin{gathered} 79 \\ \mathbf{A u} \\ 197.0 \end{gathered}$ | $\begin{gathered} 80 \\ \mathbf{H g} \\ 200.6 \end{gathered}$ | $\begin{gathered} 81 \\ \text { T1 } \\ 204.4 \end{gathered}$ | $\begin{gathered} 82 \\ \mathbf{P b} \\ 207.2 \end{gathered}$ | $\begin{gathered} 83 \\ \mathbf{B i} \\ 209.0 \end{gathered}$ | 84 Po $(209)$ | $\begin{gathered} 85 \\ \text { At } \\ (210) \end{gathered}$ | $\begin{gathered} 86 \\ \mathbf{R n} \\ (222) \end{gathered}$ |
| 7 | $7 \begin{gathered} 87 \\ \mathbf{F r} \\ (223) \end{gathered}$ | $\begin{array}{r} 88 \\ \mathbf{R a} \\ 226 \\ \hline \end{array}$ | $\begin{gathered} 89 \\ \mathbf{A c}^{* *} \\ (227) \end{gathered}$ | $\begin{gathered} 104 \\ \mathbf{R f} \\ (261) \end{gathered}$ | $\begin{gathered} 105 \\ \mathbf{D b} \\ (262) \\ \hline \end{gathered}$ | $\begin{gathered} 106 \\ \mathbf{S g} \\ (263) \end{gathered}$ | $\begin{gathered} 107 \\ \mathbf{B h} \\ (264) \end{gathered}$ | $\begin{gathered} 108 \\ \text { Hs } \\ (265) \end{gathered}$ | $\begin{gathered} 109 \\ \text { Mt } \\ (268) \end{gathered}$ | $\begin{gathered} 110 \\ \text { Ds } \\ (271) \end{gathered}$ | $\begin{gathered} 111 \\ \mathbf{R g} \\ (272) \end{gathered}$ | $\begin{gathered} 112 \\ \mathbf{U u b} \end{gathered}$ | $\begin{gathered} 113 \\ \text { Uut } \end{gathered}$ | $114$ <br> Uuq | $\begin{gathered} 115 \\ \text { Uup } \end{gathered}$ |  |  |  |

