**Homework #3 Chemistry 1114 section 2 (Fong) due Wednesday 7 Feb 2018 28 pts (in class)**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_answers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3.0 Prefix Check-up**

**Convert the following to their best, prefixed expressions**

**6.0\*10-8 g = \_\_\_\_\_\_\_60 ng\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2.4\*107 m= \_\_\_\_\_\_\_\_\_24 Mm\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3.1. Convert the units on the left to the indicated units on the right (2 pts each/6 pts total)**

**500 μg = \_\_\_\_0.5\_\_\_\_\_ mg**

**0.006 ms= \_\_6\*103\_\_\_\_\_\_ ns**

**500 kg= \_\_\_\_0.5\_\_\_\_\_Mg**

**3.2. How many sig figs in the numbers below :**

**8.00\_\_\_3\_\_\_\_ 0.00010\_\_\_\_\_2\_\_\_\_ 5.000\*1056\_\_\_\_\_\_4\_\_\_\_\_\_**

**3.2 Compute the following calculations to the correct significant figure count:**

**(2 pts each)**

**301 + 0.100 -0.0100 + 1 = \_\_\_\_\_302\_\_\_\_\_\_\_\_\_\_\_\_\_**

**6.000\* 3.0\*4.00 = \_\_\_\_\_\_4\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2\*101**

**(102 +9 -1.00)\*5.0 = \_\_\_\_\_\_22\_\_\_\_\_\_\_\_\_\_\_\_\_**

**25.00000**

**3.3 How does Dalton define compound ? (check your text, chapter 2) (1 pt)**

**A compound is a whole numbered combination of atoms of different elements.**

**3.4. Naming Circus: (2 pts/answer)**

(see : oxyanion list from lab or from Website under Laboratory)

1. Write the formula for sodium sulfate \_\_**\_Na2SO4**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Write the name for CoCl2 \_\_\_**Cobalt(II) chloride**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Write the formula for iron(III) carbonate \_\_\_\_\_**Fe2 (CO3)3**\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Write the name for NO \_\_\_\_\_\_\_**nitrogen monoxide**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Write the formula for calcium nitride \_\_\_\_\_**Ca3N2**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_