**Homework #5 Chemistry 1114 (Fong) due Wednesday 21 Feb 2018 12 pts (in class)**

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

2 pts per problem

Assume: 1 mol count ~ 6\*1023

Show work for all mole-mass-count problems or no credit will be given !!

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Show work for all mole-mass-count problems or no credit will be given !!

1) How many moles of X with a molecular mass=A are present in B grams of X ?

 Moles X=

2) What is the molecular mass of CaCO3 to the nearest gram ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g/mol

3) How many grams of CaCO3 are present in 2.4\*1024 molecules of CaCO3 ?

 \_\_\_\_\_\_\_\_\_\_ g CaCO3

4) How many moles of CaCO3 are present in 25 grams of CaCO3 ?

 \_\_\_\_\_\_\_\_\_\_\_ mol CaCO3

5) How many molecules are present in 0.15 mol of CaCO3 ?

 \_\_\_\_\_\_\_\_\_ molecules CaCO3

6) How many molecules of CaCO3 are present in 500 grams of CaCO3 ?

 \_\_\_\_\_\_\_\_\_ molecules of CaCO3