Participation Assignment
CHEM 1090-General Chemistry I

Name: **#7**

Section: 31, MWF **Due Date: Monday 10/23/2017**

1. You have a sample of 0.630 g of calcium.
   a. Calculate the moles of calcium in the sample.

   b. Now, assume that all of the calcium came from a tablet that contains only calcium citrate, $Ca_3(C_6H_5O_7)_2$. Calculate the moles of calcium citrate in the tablet based on the moles of calcium you calculated in the previous question. Hint- how many calciums are in calcium citrate?

   c. Calculate the mass of calcium citrate in the tablet.

2. The copper ore malachite has the chemical formula $Cu_2(CO_3)(OH)_2$.
   a. Calculate the molar mass of malachite.

   b. Calculate the mass of copper in 1.000 mole of malachite.

   c. Calculate the mass percent of copper in malachite.