**Mini-quiz #10 Chemistry 1114 section 2 (Fong) 17 Sept 2014 4 pts A**

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

Show work for all problems…or no credit !

1. Given that octane (C8H18) has a molecular mass of 114 g/mol and 1 mole count=6\*1023:

How many grams of octane are in 3.158\*1022 molecules of octane ?

 \_\_\_\_\_\_\_ g octane

2. The molecular mass of SO2 is 64 g/mol. Given that 1 mole count =6\*1023, how many molecules of SO2 are in 21.333 g SO2 ?

 \_\_\_\_\_\_\_\_ molecules SO2

**Mini-quiz #9 Chemistry 1114 section 2 (Fong) 17 Sept 2014 4 pts B**

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

Show work for all problems or no credit

1. Given that propane (C3H8) has a molecular mass of 44 g/mol and 1 mole count=6\*1023:

How many molecules of propane are in 22 grams of propane ?

 \_\_\_\_\_\_\_\_\_\_\_molecules propane

2. The molecular mass of NO2 is 46 g/mol. Given that 1 mole count =6\*1023, how many grams of NO2 are in 3.91\*1022 molecules of NO2 ?

 \_\_\_\_\_\_\_\_ g NO2