**CHE1031 pre-lab quiz: Density of Coke vs. Diet Coke**

1. Which is more certain or more proven, a hypothesis or a theory?
2. What is the definition of density? What units are used to express density in chemistry?
3. Label each as intensive or extensive properties.  
   a. Density  
   b. Mass  
   c. Volume
4. Which statement is true?  
   a. Increasing pressure decreases density.  
   b. Increasing temperature decreases density.  
   c. Decreasing pressure increases density.  
   d. Increasing temperature increases density.
5. What is the least count of a buret calibrated to 10ths of a mL?

1. On an exam would you rather give answers that are accurate or precise?
2. Which has a larger effect on your precision?  
   a. The least count of your glassware  
   b. Today’s humidity  
   c. Your lab skills
3. Which of the three statistical methods mentioned here is used to compare experimental results to known reference values?  
   a. Percent difference

b. Percent error  
c. Standard deviation

1. How many sig figs can be read from each of these instruments? (Answer this one in lab.)  
   a. Our electronic balances  
   b. A 100-mL graduated cylinder  
   c. A 50-mL buret
2. What Excel functions or formulas can be used to determine mean and standard deviation?