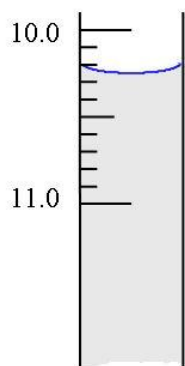


Chemistry 204  
Dr. Brian Anderson  
Experiment 1 Quiz A  
September 26-27, 2005

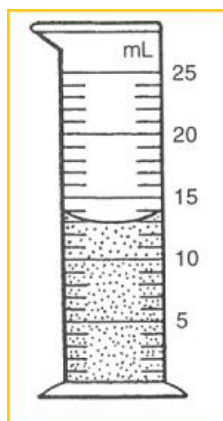
Name \_\_\_\_\_ Section \_\_\_\_\_ TA \_\_\_\_\_

1. The Greek mathematician Archimedes was asked to determine whether or not a crown was pure gold without cutting it open to find out. Suppose Archimedes measured a gold nugget with a mass of 298.57 grams and a volume of 15.47 mL, and then measured the crown to have a mass of 3011.25 grams and a volume of 156.02 mL. Is the crown pure gold? Show your work.

2. What are the volume readings on this burette and graduated cylinder?



\_\_\_\_\_ mL



\_\_\_\_\_ mL

3. Calculate and report the result using the correct number of significant digits:

a)  $25 + 0.0995 =$

b)  $7.81 \times 90.00 + \frac{89.76}{4.22} =$