

Name _____

Section _____

Lab Instructor _____

Date _____

EXPERIMENT 2 The Use of Volumetric Glassware

PRE-LABORATORY QUESTIONS

1. Pipets used for the transfer of samples of aqueous solutions are always *rinsed* with a small portion of the solution to be used before the sample is taken. Calculate the percentage error arising in an experiment when 1-mL, 5-mL, and 10-mL pipets are used for transfer and each pipet contains 5 drops of water adhering to the inside of the barrel. A single drop of water has an approximate volume of 0.05 mL.

2. It is important to make certain that there is no air bubble in the tip of the buret below the stopcock *before* the initial reading of the liquid level in the buret is taken. If a 0.5-mL air bubble is present in the tip of a buret, what percent error in 10-mL, 20-mL, and 40-mL samples will result if the air bubble is dislodged during the dispensing of the samples?

3. Why is a rubber safety bulb always used when working with a pipet?
