

Helpful Hints for Experiment 1 Lab Report (also see the Lab Manual)

Introduction:

Introductions to lab reports should always tell the reader the purpose (why the experiment was done), how it was done (briefly), and what the overall results were.

Make this brief but cover all the experiment. Suggested starting sentences: "The purpose of this experiment was twofold..." then go on to describe what you did. Another suggestion: "The purpose of this experiment was to use the concept of density to evaluate the precision and accuracy of three volumetric measuring devices, etc." This is a good place to include the equation for density.

Then move on to the "how": "Three volume measuring devices were evaluated: 100 mL graduated cylinder, etc." Explain how precision and accuracy were determined using the density of water.

Finally, finish up with a summary of the results: "The _____ was found to be the most precise device to measure volume with the average density of water determined to be _____ \pm _____ g/mL, followed by the ..., and the" Now indicate the accuracy results using the calculated PREs.

Note the above are suggestions; *I don't expect or want to see lab reports that are a direct copy of the above.*

Procedure:

Be brief, but tell the reader how you determined the densities. Cite the lab manual for details.

Describe what was done with the data you collected. In other words, how did you determine the precision and accuracy?

Results:

Tabulate your numerical results. You can follow the procedure in the lab manual or the suggestions below. Note, you need supporting text before *each* of the tables (see good lab report).

Table 1. Masses determined for 5.0 mL of water using three measuring devices.

Measuring device	Masses for each of three trials (g)		
100 mL Graduated Cylinder			
10 mL Graduated Pipet			
5 mL Volumetric Pipet			