

Suggestions for Writing Your Notebook Procedure

When writing the procedure in your notebook you should put it in your own words, as much as possible, in an outline form (using reasonably understandable abbreviations when possible). You should be able to follow your own procedure without looking at the lab manual (we can tell you to put the manual away and work just from your notebook). Also, someone with a basic understanding of chemistry should be able to do the experiment by following your procedure. Here's two partial examples:

A partial example of a procedure (based on exp 6):

Part A:

- 1a. Obtain 2 Cu cylinders & Styrofoam cup (w. lid) from TA.
- 1b. Check out flip thermometer from storeroom window (student ID req.)
- 1c. Open thermometer and check if working properly (~ 20 °C).

- 2a. Weigh clean, dry Styrofoam cup nearest 0.0001 g.
- 2b. Add 60 mL of distilled water to cup.
- 2c. Reweigh cup and water to nearest 0.0001 g.
- 2d. Place cup in 400-mL beaker (for stability).
- 2e. Weigh the two Cu cyl to nearest 0.0001 g.

- 3a. Hot water bath: 600-mL beaker, ring stand, Bunsen burner.
- 3b. Carefully place both Cu cyl. in 25-mL test tube
- 3c. Place test tube in hot water bath.
- 3d. Let bath come to boil while proceeding to next step.

A partial example of a procedure (based on exp 14):

Part A:

- 1a. Clean, dry 30-mL syringe (obtained from TA).
- 1b. Remove glass plunger, rinse with 5 mL acetone.
- 1c. Lubricate plunger with graphite using pencil, rubbing entire surface.
- 1d. Temporarily place plunger in 400-mL beaker.
- 1e. Rinse barrel using 5 mL acetone. Repeat.
- 1f. Dry barrel by drawing air through it w. aspirator.

- 2a. Attach serum stopper to syringe (Fig. 14.5, p 92).
- 2b. Fold back serum stopper before pushing onto Luer-Lok fitting.
- 2c. Push small end onto Luer-Lok fitting on syringe.
- 2d. Do not pull on too tightly – don't cover slits in fitting.

Note this looks like a "cookbook", using short concise individual steps. This is much easier to read and follow in lab when you're busy, rather than the paragraph form in the lab manual. Plus, doing this helps you to learn the procedure a better than just copying it word-for-word from the manual. While in lab you can check off each step as you do them to make sure you don't skip a step or do a step twice. Often, you may have trouble fully understanding what you're supposed to do based only on the written procedure. Watching the lab video for an experiment before or while writing the procedure will often help in understanding the procedure.

After preparing your notebook, do the pre-lab (which may include on-line data-entry, depending on the experiment). You should be able to answer the pre-lab questions if you've understood the Discussion, Procedure and Data Analysis sections. The on-line pre-labs with data entry (exps. 1, 5, 6, 14, 16) will have questions pertaining to the experiment and data-entry which will pretty much follow the report sheets you will use for your data collected in lab for the report (as will the on-line data entry for your results from lab). The on-line pre-lab data entry programs use randomly generated data similar to what you will collect in lab. These will be easier to do if you've read the manual and written the procedure first.