# The Lab Notebook

As part of your formal training as a scientist, you must learn to keep a lab notebook. The lab notebook is a permanent record of your activities and results in the laboratory. Lab notebooks come in electronic or paper form. Entering data into WebAssign is similar to keeping an electronic notebook. You may also choose to print out the lab procedure worksheet, to collect your data and make calculations. For practice purposes, treat your worksheet as if it were a lab notebook.

### Features

Sections for recording your laboratory data and making calculations are present throughout the lab procedure. Many of the questions and calculations from the in-lab assignment are expanded upon in the postlab assignment. Therefore, having a clear record of your data and your calculation methods is useful for completion of the postlab assignments. You should never rip out original pages from your lab notebook, not even for scratch paper.

### Ink Only!

Because the notebook is a permanent record, data entry must be made in **water-insoluble ink.** If an error in entry occurs, delete it by drawing **a single line** through the incorrect data. Do not scribble over the entry because you may change your mind again and need that number. A single line is sufficient to indicate that you think you made a mistake. Never use pencil!

### Dating

Always **date each page** in your lab notebook with the day the observations were performed. Although this probably seems silly for a general chemistry lab, the dated pages in lab notebooks have decided ownership of million dollar discoveries in laboratories around the world. It is very important that you get in the habit of properly documenting your results, just in case you have a million dollar discovery!

### Neatness

The lab notebook need not be a work of art! If you are keeping your notebook correctly, it will most likely contain strike-throughs and other indications of where experiments had to be repeated. This is to be expected since you are experimenting. However, the lab notebook must be *neat enough for someone else to be able to read.*

### Labeling

Each data point that is written in the lab notebook must be **labeled** and include a **unit.** A bare number will not mean anything to someone else and you might forget what the number was by the time you do your postlab assignment. Always clearly label your results.

### Data Collecting and Recording

Make a habit of writing down information pertinent to an experimental procedure. This means not just numbers but also physical observations like the color, temperature changes, etc. For each of the labs, there are data tables provided for you in the lab manual. Feel free to add any interesting observations or information beyond these data tables. It is always better to record too much rather than too little. *All results should appear in your lab notebook.*

### Calculations

Please write out the calculations for each experiment in your lab notebook where indicated. If there are a number of identical calculations, it is acceptable to write out a single sample calculation and then simply list the results of the other identical calculations.