

## ***InLab: the lab procedure***

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Lab Section: \_\_\_\_\_

Lab Title: \_\_\_\_\_

*Note:* This is the handout version, which only contains the Descriptive InLab steps. For more help or additional information, you'll need to go to the on-line version of Descriptive InLab at <http://labwrite.ncsu.edu> where you can view additional materials on-line or obtain a full printable version from the Descriptive Labs homepage.

### **1. Setting up the lab:**

Before you start the lab, review the objectives and the procedures you will follow. Take detailed notes as you gather your materials, set up your lab, and calibrate instruments. These notes will help you document your experimental protocol, which you can use later when writing the Methods section of your lab report.

### **2. Preparing to collect data:**

If you are collecting quantitative data, identify the variables and units of measurement and create a table or set up a spreadsheet. If you are collecting qualitative data, determine the kinds of data you will be collecting and then prepare appropriate materials for recording observations (drawings, tables for observations, photographs, etc.). Read the lab manual to see what kinds of data you are being asked to record and be sure that you are ready to record the data in the appropriate form when you begin the lab procedure.

### ***3. Collecting and recording lab data:***

Carefully follow the experimental protocol. As you conduct your experiment and record your data, take notes on what you are doing and on any changes in the procedure. As you record your data, you should be asking yourself various questions: What are the relationships among the variables? Do the data behave in the way that you had anticipated? If not, why not? If the data make no sense, you may need to consider sources of uncertainty once again. Sources of uncertainty may affect the accuracy and precision of your experimental data.

### ***4. Visualizing the data:***

If your data are quantitative, it may be useful to turn the table or spreadsheet you created into a graph. If you are going to keep your data in a table, revise the table so that it can be presented correctly in the report. Representing your data in the proper visual format will allow you to identify trends and relationships among variables more easily.

**5. *Making sense of your data:***

Review all your drawings, tables, graphs, and other data you collected during your lab and summarize in a sentence or two the overall finding for the lab. Then write a few sentences about how these findings help to answer the questions you raised in the PreLab, question 4. If you haven't completed the PreLab, you may want to go there now. If your lab instructor says it is OK, corroborate your findings with your peers.