## Lab Report Format: No cover sheets please.

- a.Problem Statement: This gives a <u>statement</u> of what is to be studied during the experiment. May be posed as a question.
- b. Research: Students should indicate what information was studied prior to beginning the lab exercise. This may be a <u>paragraph</u> incorporating some concepts or it may be a <u>paragraph</u> indicating actual research studied.
- c. Hypothesis: A <u>statement</u> that tells what you think will happen in the experiment. It must include a clear indication of the independent and the dependent variables. I must be in the "If......then......" format. Example: "If I give a plant fertilizer, then it will grow taller." Experiments may have several hypotheses. Each should be stated separately.
- d. Materials: This is a <u>list</u> of the materials and apparatus you used. This should be written in <u>columns</u> not as a continuous paragraph.
- e. Methods: This is a step by step procedure (i.e. <u>numbered list</u> with each new number beginning on a new line in the margin) of the way the experiment was conducted. It should be specific enough for another student to follow it and repeat the same experiment.
- f. Data: These are represented in various forms. They could include: charts, graphs, drawings, or any combination of these. They should be neat, detailed, well labeled, easily understood without explanation, and include units.
- g. Conclusion: This section is in paragraph form and must include:
  1. An indication as to whether or not you accept or reject your hypothesis. The first sentence should begin, "I accept (or reject) my hypothesis."
  2. This should be followed by a <u>brief</u> explanation as to why you

believe this to be true. Data should NOT be restated! 3. You will need to offer several possible sources of error from your experiment here AND include the effect each may have had on your results.

4. Finally, this section should suggest an area of further study that has come up during this experiment. (Next Logical Question--NLQ)

Requirements for reports:

- Section a-e (statement of the problem through methods) are to be completed <u>before</u> the student begins lab. A student will not be able to begin lab until these are completed. The best way to ensure you will be able to participate in and complete lab with your partner/group is to come to class with the prelab completed.
- 2. When lab reports are assigned as an individual assignment, it is expected that the reports will not be copied among students-even between lab partners. The materials list will be the same for each student in the class and the data section will be the same for each student in a group. Any other writing (including questions to be answered) are to be done in the student's own words. If two or more students are found to have identical (or nearly identical), credit for the 'shared' section will be divided among the students involved.
- 3. Lab reports are due the day of or after the lab experiment is completed.
- 4. Any student who is absent for a lab is expected to make it up at the next possible opportunity. Because of the nature of some lab materials, waiting longer may lead to an impossibility of making the lab up at all and receiving reduced credit to the exercise. If this occurs, the prelab sections only will be accepted, not the data/conclusions.
- 5. If a student is dismissed from lab because of a behavioral issue, the data and conclusion sections will not be accepted. This will result in a reduced credit.
- 6. Each section should be written with a proper heading and separate from the other sections. For example, the problem statement should NOT run into the research.
- All charts and graphs should be properly and clearly labeled and titled. The scale should be accurate and consistent. Lines of best fit should be used (do <u>not</u> use dot-to-dot lines). Units used should be accurate and clear. They should be done using a ruler (or on a computer) and be very neat. (see resource sheet on reminders for charts and graphs)