

Biology Laboratory Report Format

An important skill to develop in biology is to communicate effectively. In our class, we need to communicate exactly what happened in each experiment, what patterns you discovered, and what conclusions may be drawn from your data. The ability to write such a report is not something that happens overnight but must be acquired through practice. For this course you will be asked to use a specific laboratory format to communicate your ideas.

Guidelines

1. Use only blue or black pen for all lab reports. You may print, or use a typewriter or computer.
2. Reports are to be done on 8.5" x 11" white paper
3. Use a straight edge when necessary (underlining, drawing boxes around procedures, and making tables and graphs).
4. Pages can be numbered a & b (example: 3a & 3b) if more pages are needed to complete a section.

Title Page

1. **Title** (all capital letters, centered)
2. **Name**, lab group (names), due date, and period in upper right hand corner of the page.

Page ONE of lab report:

1. Purpose of lab report

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- States a problem or question.
- A hypothesis written as an IF... THEN...

2. Introduction:

- This will include background information (definition of terms that describe the experiment).
- Describes the variables of the experiment.
- A statement of the purpose either explains why the experiment is being done.

Page TWO of lab report:

1. Apparatus:

- List and draw the items/tools needed to perform the experiment.

2. Materials:

- List the consumable materials to be used.

Page THREE of lab report:

Procedures:

- A brief summary of what you did in the experiment.
- A second summary paragraph is used to describe any observations made during the experiment.

Page FOUR of Lab Report

Data Tables

Organize data in an easy to read form. Data includes all measurements &/or observations made during the experiment. Tables have a title, rows, columns, and heads. The title is found at the top of the table. The title tells you what information is contained in the table. Columns are the sections that run up and down. At the top of each column is a head that tells you what information is in the column. Rows are sections that run from one side to another on the table. All measurements must have units. Always use a straight edge. There are to be no erasures or “white-outs” on data tables. Any errors made are to have one line drawn through them with a ruler.

Page FIVE of lab report:

Results

1. The data should be graphed whenever appropriate. Each graph must have a descriptive title; axes labeled with appropriate units; and a key if more than one set of data is plotted. Points which describe a trend must be connected with a straight line or smooth curve.
2. Write a few sentences that summarize the data table and graphs. No opinions or inferences here—just facts.

Page SIX of lab report:

Conclusions, written in paragraph format.

1. Restate the purpose for the experiment and use data to show that the purpose was fulfilled or not fulfilled.
2. Restate the problem and use data to explain why your problem was solved or not solved.
3. Restate the hypothesis and use data to explain why your hypothesis was proven or disproved.
4. Answer all analysis questions assigned.

Discussions

1. Please answer the questions assigned under the discussion section.
2. This is not the place for a description of the procedures or observations. The conclusion is for explaining the “why” of the experiment
3. Use data to help support your answer
4. Give reasons for any errors that occurred (reread your observations to find these errors). How have the errors influenced the outcome of the experiment.