Landmark Teaching Principle™ #5

Provide Models

MODELING WRITING IN SCIENCE LABS

This example¹ of sequence and format for a science lab report gives students a model of the components they should include to earn full credit when completing their own report. Additionally, each section gives a description – and sometimes even the phrasing – for what is expected.

Name Date

Title: (Capitalize)

Introduction:

The introduction of the lab explains important background information about the topic of the lab. It might make connections to content covered in class and previously learned material. This is where pre-lab questions are answered and written to form a paragraph.

Purpose:

The purpose of the lab explains why the lab is being done. It starts with "The purpose of this activity/experiment is to..."

Hypothesis:

The hypothesis is a logical/reasonable prediction (educated guess) using third person language. It is made before the lab is carried out. It should start with "The hypothesis is..." rather than, "I think..." It should be supported with a reason for the prediction, so that it reads "The hypothesis is ... because ..."

Materials:

- Complete list of materials
- o Should be bulleted
- Organized
- Use numbers for multiple pieces of equipment (2)

Procedure:

- 1. The procedure (or methods) section contains numbered steps.
- 2. Each step is concise.
- 3. It follows the logical order of the lab.
- 4. A labeled diagram of equipment/set-up should be included (if assigned).

¹ Landmark High School Science Department – J. Kuhns

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Results:

Table 1: How to make a table.

	Make Sure to Include Units	<u>Titles Should Be Bold &</u> <u>Underlined</u>
<u>Label</u> <u>Rows</u>	The results section contains organized tables or graphs of data (computer/rule) labeled with units and titles.	 It also might contain bullet form observations in a table or complete sentences. This section could have a sketch of the results if requested by the teacher.

Discussion:

The discussion should be written using past tense verbs and should start with an introductory sentence(s): "An experiment was performed..." This is the section of the report where the data or observations are analyzed and explained. The student should state the results and try to explain what happened and why it may have happened.

In addition, this section also discusses errors that may have been made during the lab that could have influenced the results. Finally, the writer gives suggestions for improving the procedure in the future.

Conclusion:

The conclusion section only needs to be 5 sentences long. It should restate the purpose and the hypothesis using <u>past tense</u> verbs. It should also include a summary of the results ("The results showed that..."). Finally, it should wrap up with: "The hypothesis was (or was not) supported by the data/observations."

How to Format Your Lab Report:

- ✓ Use size 12 font.
- ✓ Use Times New Roman.
- ✓ Indent for each paragraph.

HOW DOES THIS PROVIDE MODELS?

This formatted example of required sections and specifics, such as font size/type, allows students to model their own work based on what they see.