HHSS Senior Science Laboratory Report Outline

Cover Page:

1. Title of your laboratory investigation
2. Course code
3. Student's name
4. Teacher's name (spelled correctly!)
5. Due date

Introduction:

- An introduction should include all pertinent background information needed for the reader to understand the lab (i.e. definitions of terms, content area background, pertinent scientific laws and theories, chemical equations, mathematical formulas, derivations etc…).
- Next, a concise statement of the problem that is being investigated must be included.
- You may be required to include a hypothesis (a justified prediction as to the outcome of the experiment) within the body of your introduction.

Materials:

- This is a point-form list of the various resources you used to complete your investigation.
- Quantities should be included whenever possible.
- Safety precautions should be included.

Procedure:

- This is a summary of what was done during the investigation.
- The summary should be clear and to the point.
- Your procedure should be organized in numbered steps and written in past tense, impersonal (no personal pronouns).
- Include a titled, labelled, well-organized, meaningful diagram when appropriate.

Results:

- This section includes all the data and/or information that you collect from the investigation.
- This information can frequently be expressed in chart form.
- All observations will be made with an appropriate degree of precision.
- This section may include:

1. data charts
2. calculations (sample calculations)
3. graphs
4. qualitative observations

Conclusion:

- This section *summarizes* the experiment in paragraph form, and interprets the results.
- This section directly relates your results to the purpose.
- The hypothesis should be evaluated in this section.

Error Analysis:

- This section includes any sources of error for the investigation.
- This section describes how and why the procedure should be changed to make the investigation more accurate.
- Anything the experimenter can reasonably control CANNOT be used as a source of error.

Inquiry:

- This section includes the answers to any questions, if assigned.

<u>General Guidelines for Writing Laboratory Reports</u>

- Always write in the third person, impersonal. That is, avoid the use of "I", "We", "You", "He", "She", or "They". For example, instead of writing: "We heated the water using a Bunsen burner." write: "The water was heated using a Bunsen burner".
- Always write in complete sentences.
- You may use point form, phrases or single words when writing in charts, tables or on diagrams.
- General formatting considerations:

1. All heading and subtitles - **bold** text and <u>underlined</u>.
2. Paragraphs will be indented.
3. Sections will follow the order indicated above.
4. Tables must fit entirely on one page, not across two pages.
5. Diagrams/illustrations/graphs/tables must include **<u>descriptive</u>** titles.
6. Do not include extraneous information that is not pertinent to the lab content.
7. Proofread to eliminate spelling and grammatical errors.
8. Incoherent and/or confusing sentence structure should be eliminated.
9. Correct units are present where appropriate.
10. Formal reports will be word processed in a 12 point, Times New Roman font.