

CHEAT SHEET: Lab Report Format

Lab Reports should follow the following format.

Title Page: The cover/title page should include the title, the author's name(s), date, teacher & class period, along with the school name. All information should be centered on the page.

Margins, Fonts, & Spacing: All pages should one-inch margins on the top, bottom, left and right. The appropriate fonts are Arial, Times New Roman, or Courier, and all text should be 12pt type. The paper should be double-spaced, but there should be no extra spaces between lines (no "quadruple" spacing.)

Sections: Sections in the paper should have a short heading that says what it is that section. The heading should be **bolded**, *italicized* and centered as shown below. Titles for sub-sections within a section should be *italicized* and left-justified. Sections do NOT start on a new page unless the only the title would appear on the previous page.

Introduction

The Introduction of your lab report should be a paragraph describing the reason for the experiment and will always include the statement(s) of the specific questions and/or problems being investigated.

Observations & Hypothesis

The Observations section of your lab report will always the background information on the concepts being explored, your hypothesis(es) and/or predictions of the outcome of the experiment to be done and the response you came to that specific prediction

Materials & Methods

The Materials should include a list of ALL materials you will be using in your research. The methods portion of this section should be a numbered or bulleted list of step-by-step procedures you used to carry out your investigation. . Remember that this is to be complete enough so that another scientist would be able to replicate your research protocol using your list. This section should also clearly point out experimental control groups, experimental (text) groups, independent (manipulated), dependent (responding), constant (controlled) variables and how data will be collected/calculated.

Data & Results

The Data & Results section should include any tables, graphs, sketches, and/or diagrams that you collected/produced as part of the investigation. You should also include how data was manipulated (ie. percents, differences, applied constants, conversions, etc...if applicable) and the units used to measure data.

Analysis

The Analysis section should describe any trends your data presents. Describe any important observations using basic, scientific descriptive terms and refer to the Data & Results section as needed. Some labs will have questions asked as part of the activity. Responses to those questions would be placed in this section with a sub-heading (left-justified, *italicized*) for each. You should also address any errors, deviations or anomalies that appear in your work.

Conclusion

The Conclusion section describes the work you did, conclusions you drew from the work and should compare your original hypothesis with your actual results. It should clearly state what you learned from the lab and how that specifically points to the conclusion you made. You should also address areas of potential, future research and any questions that arose as a result of your research.

Works Cited

Your works cites page should start on a separate page and should contain a reference to all research, including those from which pictures, diagrams, and other visuals were used. The format of the bibliographic citations (the whole citation that appears on the works cited page) should follow the APA guidelines. You can use a site like <http://www.citationmachine.net> to generate properly formatted citations. Be sure to keep up with your sources as you research to make this process easier.

MYP GRADING RUBRIC:

Criterion D – Scientific Inquiry	
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student attempts to state a focused problem or research question. The method suggested is incomplete . The student attempts to evaluate the method and respond to the focused problem or research question.
3–4	The student states a focused problem or research question and makes a hypothesis but does not explain it using scientific reasoning. The student selects appropriate materials and equipment and writes a mostly complete method, mentioning some of the variables involved and how to manipulate them. The student partially evaluates the method. The student comments on the validity of the hypothesis based on the outcome of the investigation. The student suggests some improvements to the method or makes suggestions for further inquiry when relevant.
5–6	The student states a clear focused problem or research question, formulates a testable hypothesis and explains the hypothesis using scientific reasoning. The student selects appropriate materials and equipment and writes a clear, logical method, mentioning all of the relevant variables involved and how to control and manipulate them, and describing how the data will be collected and processed. The student evaluates the method, commenting on its reliability and validity . The student comments on the validity of the hypothesis based on the outcome of the investigation. The student suggests realistic improvements to the method and makes suggestions for further inquiry when relevant.
Criterion E - Processing Data	
0	The student does not reach a standard described by any of the descriptors below.
1–2	The student collects some data and attempts to record it in a suitable format. The student organizes and presents data using simple numerical or visual forms. The student attempts to identify a trend, pattern or relationship in the data. The student attempts to draw a conclusion, but this is not consistent with the interpretation of the data.
3–4	The student collects sufficient relevant data and records it in a suitable format. The student organizes, transforms and presents data in numerical and/or visual forms, with a few errors or omissions . The student states a trend, pattern or relationship shown in the data. The student draws a conclusion consistent with the interpretation of the data.
5–6	The student collects sufficient relevant data and records it in a suitable format. The student organizes, transforms and presents data in numerical and/or visual forms logically and correctly . The student describes a trend, pattern or relationship in the data and comments on the reliability of the data. The student draws a clear conclusion based on the correct interpretation of the data and explains it using scientific reasoning.

RUBRIC: Lab Report
Cellular Hydration & Sports Drinks

Names: _____

Topic	Description	Points	Out of
Introduction <i>(Criterion D)</i>	- The problem/question is clearly defined (2pts.)		2
Observations & Hypothesis <i>(Criterion D)</i>	- Supporting observations, information, are clear, relevant, and connected to lab (3pts.) - Hypothesis is clearly stated and includes prediction and supporting observations (3pts.)		6
Materials & Methods <i>(Criterion D)</i>	- Materials and amount needed/used are clearly stated (2pts.) - Experimental procedure is clearly laid out (4pts.) - Independent, Dependent and Constant/Controlled variables are identified (3pts.) - Data collection/measurement technique is defined (1pts.)		10
Data & Results <i>(Criterion E)</i>	- Data collected is clearly displayed in a labeled (5pts.) - Graphical analysis is used to display data in a meaningful way (5pts.)		10
Analysis <i>(Criterion E)</i>	- Data collected is explained in the text (3pts.) - Clear connections are made between the data and its implications (3pts.) - Specific questions from lab are addressed (see handout) (4pts.) - Errors, deviations or anomalies are addressed (2pts.)		12
Conclusion <i>(Criterion D & E)</i>	- Data, observations, and research are connected in a clear and logical way (3pts.) - Hypothesis and Data are compared (4pts.) - Provides suggestions for future research (3pts.)		10
Format	- Document format include proper title page and presentation (2pts.) - Margins (1"), font (12pt, A/T/C) and spacing (DBL) meet requirements (3pts.) - Headings and paragraphs are properly formatted (2pts.) - Document is professionally worded and relatively free of errors. (3pts.) - Works cited are in APA format (if applicable) <input type="checkbox"/> PLAGARISM: Works cited required, but not included = 0/60		10
MYP Criterion Scores	Criterion D	Criterion E	60
	0 1 2 3 4 5 6	0 1 2 3 4 5 6	