

Macomb Academy of Arts and Sciences
Independent Student Research Program

Final Paper – Rubric

Scientific Paper Checklist ó all line items are worth 3 points except Science, which is worth 4. There are 100 total points.

3 2 1 0 No contractions 3 2 1 0 3rd person, passive voice, past tense

3 2 1 0 No spelling or grammar errors

3 2 1 0 Formatting exactly like Sliva (Impact and Times Roman fonts) or Ramey

3 2 1 0 Paper is concise and does not contain a lot of extraneous information

Abstract

3 2 1 0 Abstract has two to three sentences (minimum ó more are ok) about **each** section. Basically is an executive summary minus the error analysis paragraph.

3 2 1 0 Abstract is a single paragraph (Two at most)

3 2 1 0 No hypothesis in this section

Title of Paper

3 2 1 0 Title gives information about the experiment, the subjects, and the methods, and makes sense

3 2 1 0 Title is scientific and is not a creative-story type title.

Introduction

3 2 1 0 Research Location

3 2 1 0 Background information given that tells briefly why the experiment was done, i.e. the rationale for doing this study

3 2 1 0 References made to similar previously done research

3 2 1 0 Purpose of study given

3 2 1 0 Hypothesis given and justification for how this experiment supports it.
It will be one of the last things in this section.

Methods and Materials

3 2 1 0 Experiment has been written in order of occurrence and is reproducible

3 2 1 0 Equipment is properly labeled with brand, model, city, and state. For example, "Texas Instruments (TI) Computer Based Laboratory Two (CBL-2), (Dallas, TX)." (*Italicized items do not need to be included if You wish to write out full words*)

3 2 1 0 Methods match the purpose and the hypothesis

3 2 1 0 Materials are not given as a separate list. Rather, the reader will know what materials were used as they are mentioned throughout the paper.

Results

3 2 1 0 Data is in the prose of the Results section.

3 2 1 0 Data has been summarized to testable statistics, like means, medians, and standard deviations. NO RAW DATA!

3 2 1 0 Data has been put into tables, graphs, or other visual formats

3 2 1 0 Tables, graphs, and other visuals are embedded within the Results section. They are correctly titled with "Figure" on bottom and "Table" on top and are correctly referred to within the text.

Discussion

3 2 1 0 Discussion of hypothesis trend

3 2 1 0 Discussion of other trends

3 2 1 0 Statistical Analysis

3 2 1 0 An **explanation** is given for **why** the experimenter got the results he/she did

3 2 1 0 Possible sources of error, how they affected things, and fixes to those sources of error are mentioned

Conclusion

3 2 1 0 Brief summary of major findings

3 2 1 0 Ideas for future research that could be spawned from this research are given

Bibliography/Works Cited/Literature Cited

3 2 1 0 MLA format for each entry and the way entries are ordered within the bibliography

3 2 1 0 Entries are properly cited within the body of the main paper

Science (4 pts)

4 3 2 1 0 Sound idea, good methodology, good analysis, good contribution to high school level science