Journal Style Report -Rubric

	Poor	Satisfactory	Good	Excellent
Introduction (15 Pts.)	(0-8 Pts.) Minimal description of key elements of an introduction. Does not demonstrate understanding of experiment.	(9-11 Pts.) Key items described in a satisfactory way. More examples of deficiencies and other problems such as one key item missing. (i.e. no purpose statement)	(12-13 Pts.) Contains three key items described in an acceptable way. Deficiences may include: • Lack of depth • Incomplete description of theory • Reactions or equations missing	(14-15 Pts.) Describes the following three key items clearly and thoroughly. • **Purpose** • **Importance** • • **Theory of method used to solve problem.**
Experimental (15 pts.)	(0-8 Pts.) Procedure consists of steps, not paragraph form. Does not accurately describe procedure with enough detail to be repeated. Materials are not included.	(9-11 Pts.) Procedure is written in paragraph form but some important information is missing or it is difficult to follow.	(12-13 Pts.) Procedure is written in paragraph form and contains sufficient information to be repeated. Contains overly detailed descriptions of basic lab techniques. (Use a 1 mL pipet to add solution to a 10 mL flask, etc.)	(14-15 Pts.) Procedure is written in paragraph form with enough detail so a peer student could repeat the experiment.

	Poor	Satisfactory	Good	Excellent
Results and Discussion (40 pts.)	Graphs and Tables Poor representation of data, improper formatting, missing labels. (0-4 pts.) Written description of data is incorrect or incomplete. (0-4 pts.) Calculation is incorrect or incomplete. (0-5 pts.) Data is interpreted incorrectly. (0-4 pts.) Error Analysis: (0-2 pts.) Error discussion is missing or does not include any errors reflecting inherent difficulties in experimental technique.	Graphs and Tables: Reasonable way to summarize data, but not the most effective visual representation. (5 pts.) Written description of data is difficult to follow or lacks detail. (5 pts.) Calculation is correct but difficult to follow. Not labeled throughout. (6 pts.) Some minor mistakes in interpretation of data, but mostly correct. (5 pts.) Error Analysis: (3 Pts.) Error discussion is general and does not address specific problems with the data. (i.e. The measurement is high, but errors discussed result in an artificially low measurement.)	Graphs and Tables: Good visual aid for data; missing or incorrect labels (6-7 pts.) Written description of data has insufficient detail in some parts. (6-7 pts.) Calculation is correct, but does not have correct sig figs or units. (8 pts.) Correct interpretation of data, but does not discuss agreement with theory or put result in a broader context. (6-7 pts.) Error Analysis: (4-5 Pts.) Several key errors and their effects are identified, but improvements are not discussed.	Graphs and Tables: Excellent visual aid for summarizing data, labeled correctly. (8 pts.) Written description of data is organized and thorough. (8 pts.) Calculation is correct and easy to follow. Answer has appropriate number of sig figs and is labeled with appropriate units. (10 pts.) Correct interpretation of data, discusses agreement with theory, puts result in a broader context. (8 pts.) Error Analysis: (6 pts.) Key experimental errors, their possible effects, and ways to reduce them are discussed. (Errors inherent to experiment are included.)
Conclusion (5 Pts.)	Major components are missing. (0-2 pts.)	Only some key ideas, but not all are addressed. (3 pts.)	Conclusions are given but connection to importance in a broader context is not made. Writing is not concise. (4 pts.)	Conclusions about results and their importance in a broader context are described in a concise summary paragraph. (5 pts.)

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References (10 pts.)	(0-6 pts.) • >4 statements missing citations • Only uses nonscientific sources such as Wikipedia. • References do not contain pertinent information.	(6-7pt.) • 2-4 statements missing citations • Uses only one scientific source. • References must include all pertinent information.	(8 Pts.) • 1-2 statements missing citations • References include all pertinent information. • Use of scientific sources such as textbooks, journal articles, or government websites.	(9-10 pts.) • All statements in the paper that are not original to the author are cited. • References include all pertinent information. • Use of scientific sources such as textbooks, journal articles, or government websites.
Writing (15 pts.) (Circle issues with writing within the paper.)	(0-9 Pts.) • >4 examples where scientific language could be improved. • >8 errors in spelling, punctuation, or grammar.	(10-11 Pts.) • 3-4 examples where scientific language could be improved. • 5-8 errors in spelling, punctuation, or grammar.	(12-13 Pts.) • 1-2 examples where scientific language could be improved. • 3-4 errors in spelling, punctuation, or grammar.	(14-15 pts.) • Scientific writing (3rd person, past tense) and terminology is used throughout. • < 3 errors in spelling, punctuation, or grammar.

Comments: List three main areas for improvement.