

Rubric for Formal Laboratory Report (100 points)

Name _____

Date _____

Course _____

The overall grade may be severely reduced if the writing is poor quality: grammatical errors, spelling errors, etc.

_____ (12 points) All sections of the laboratory are present: this page (on top), title page, abstract, introduction, materials, procedures, data, data analysis, discussion, hazardous chemical information, conclusions, references.

_____ (10 points) Abstract is well written: concisely tells the results of the experiment, includes either percentage errors (quantitative data) or statement of the success of the experiment (qualitative data).

_____ (6 points) The Introduction makes the purpose of the experiment clear. It is brief and does **not** explain the procedures.

_____ (12 points) Data is tabulated and well-organized into charts. Charts are labeled properly with correct units given. Data is presented to the correct number of significant figures. Qualitative data is descriptive and organized into charts.

_____ (12 points) Data is analyzed with appropriate calculations performed correctly and with the correct number of significant figures. If a graph is required it is made using an appropriate graphing program such as excel and if the graph is linear then a linear least squares fit is performed. Calculations on the precision and accuracy of the data are included.

_____ (4 points) Illustrations of some type are present and may include photographs, drawings, imported images as long as they are properly referenced (credit is given to the owner of the image).

_____ (6 points) The procedure is NOT presented in detail but a reference is made to the source of the procedure and any modifications made to the procedure are described.

_____ (20 points) The experiment is discussed and inferences are drawn about the success of the experiment, a discussion of the results is presented, any sources of error are explained, suggestions for future experiments are included. Every attempt should be made to find literature values for comparison. For qualitative results data is interpreted with relationship to the hypothesis of the experiment.

_____ (6 points) Points are earned for the quality of the experimental data and results.

_____ (4 points) Concluding remarks concisely present the overall results of the experiment.

_____ (4 points) References and a discussion of hazardous materials are included.

_____ (4 points) The laboratory has a professional presentation.

_____ **Total score**

Additional Comments: