

Chemistry Honors
Spring Semester Lab Final

I. Introduction

The central theme of this year's lab final is this: what lab performed this year most sparked your interest? In this project, we wish for you to select one lab and extend it further, adding both originality and complexity.

II. Details

- You will be assigned one partner with whom you will work on this final. As a group you will select a topic and plan how you wish to extend the lab beyond what was performed before. After completing the lab each member will submit a final lab report on the group's findings.
- The project will be graded in two parts. First, a rubric will be used to evaluate the idea and how well the idea has been extended. This rubric will apply to both students in the lab group. The second part of the rubric will use the standard lab report rubric, as used in previous labs. The lab final is worth one half of the final exam grade in the course (with the written portion comprising the second half, taking place during finals week).
- Students missing any day of this assignment will be required to complete the lab on their own after school at a time designated by the instructor.
- Students will leave their lab notebooks in class every day as all work is required to be completed during class.
- All information will be entered into the lab notebook for evaluation by the teacher. The information should be neatly and completely recorded.

III. Rubric Parts

- How well did the students work together during the lab?
- How creatively has the lab been extended?
- Did the group follow the scientific method? Is this a controlled experiment?

IV. Schedule of Days

- Day One - Choosing
 - Choose one of the labs.
 - Brainstorm the purpose of your experiment.
 - The purpose must be original and different for each group.
 - Obtain approval from your teacher.
 - Reference the specific sources that you plan to use to develop your procedure.
 - Brainstorm your hypothesis and experimental design.
 - Note - the lab must be able to be completed in one class period (scale properly)
 - [\[LINK\]](#) Enter your information on the shared page
- Day Two - Experiment Parts in LNB
 - Title of the experiment
 - State the purpose of your experiment
 - State the hypothesis

- List the materials required for your experiment:
 - List the steps of the procedure
 - Identify the data measurements necessary and design data tables
 - Plan calculations needed to complete the lab
- Day Three - Collecting Data
 - Data recorded completely
 - Calculations processed completely
 - Analysis of Results
 - Conclusion identified
- Day Four - Reporting
 - Finalize report
 - Analyze factors
 - Propose “next steps”

V. Previous Labs

Here is a complete list of the labs performed over the course of this class

Observing a Reaction	Separation of a Mixture
Orbital Mapping	Energy of Hydrogen Levels
Building Molecules	Qualitative Analysis
Counting by Weighing	Formula of a Hydrate
Specific Heat Capacity of a Substance	Peanut Energy
Molar Volume of a Gas	Analysis of an Alloy
Isotopes and Pennies	Precipitate Formation
Measurement and Sig Figs	Formula of an Oxide
Titration of an Acid	