**Pre-AP Formal Lab Report Requirements**

**Title of Lab**

**Date** (lab was performed)

**Your name, Lab partner(s) name(s)**

**Objectives**:  ***In your own words,*** describe the purpose of the lab. DO NOT SIMPLY COPY THE OBJECTIVES FROM THE BOOKLET.

*“The purpose of this lab was to…*

*The necessary materials were \_\_\_\_\_ which was used to \_\_\_\_\_, \_\_\_\_\_ which was used to \_\_\_\_\_, …”*

**Data**: This should be in the form of one or more **typed** data table(s). **Remember to include units!** Note: “Data” #11 is actually a collection of calculations. These should be placed in the calculation section.

**Calculations:** This section should be **typed** and should show all the calculations requested in the “Calculations” section of the lab report. Calculations should be organized so that it is clear to the uninformed reader what is going on. Remember that #11 from pg. 38 should also go in this section.

**Analysis:** Answer analysis questions from the lab procedure. Number each question so they are easy to locate and **DO NOT copy the question** into your lab report before answering it! (The system will flag you for “copying” someone else’s work.)

 Calculations should be shown for any questions requiring math.

**Error Analysis:** Explain your percent error. If error was above 15%, explain several sources of error and how they would have affected your results. Describe the steps your could take when repeated this lab to prevent these errors from occurring. If your error was below 15%, explain the steps you took to prevent error from occurring and why these steps were important.

**Conclusion:** This section is the most important part of your lab report, and should include ALL of the following:

* Thesis statement: intro to your paragraph that reminds the reader about the goal of the lab. (Hint: if you’re stuck, you can choose to summarize your objectives here. Do not just copy them down again.)

*The purpose of this lab was to…*

* Brief recap of lab procedure and data collection method. (DO NOT explain how to math. Just explain lab procedures.) NOT step-by-step: summarize in 2-4 sentences.

*This was accomplished by…*

* Explanation of your results. (Be specific: include data! But not all data. Summarize the highlights.) **Be sure to identify if you achieved the objectives you outlined in section 1.**

*We found that…*

* Identify how your results compare to the accepted value (**cite your calculated percent error**).

*The accepted molar mass of butane was…*

*The experimental molar mass of butane was…*

*This led to a percent error of…*

* Reflection: identify what you learned from this lab, and how it connects to current Pre-AP chemistry content. How was the content you learned in this unit essential for understanding the lab?

*In order to complete this report, it was necessary to understand that…*

* Concluding statement: wrap up your conclusion! This is **different** from your reflection. Tell me the most important points of the lab.

**References:**  If you’ve used any outside sources, create a reference list here. Follow formatting from your English class.

**Grading Hints:**

* Include the full heading (as shown at the top).
* Label all sections (objectives, analysis, etc).
* Write the **objectives** and **conclusions** sections in complete sentences.
* Use paragraphs (aka more than one) for the **conclusion** section.
* Do not capitalize chemicals names – they are NOT proper nouns (i.e. write “copper” not “Copper”).
* **Use subscripts and superscripts when needed (i.e. write “Cr2O72-“ not “Cr2O7 2-“)**
* Do not double-space: 1.5 or 1.15 spacing!

**Warning about Plagiarizing**:Just because you worked in the same lab group as someone else does NOT mean you are allowed to have identical (or similarly-worded) sections of your lab report. The ONLY sections that are allowed to be the same across a lab group are data/calculations tables. **YOU WILL RECEIVE A ZERO FOR YOUR LAB REPORT IF YOUR REPORT COMES UP AS A SUSPICIOUSLY HIGH MATCH WITH ANOTHER STUDENT (even if you completed the lab first).** Any work that is truly your own will show up as statistically different from all other students, and turnitin.com will show that!

IF YOUR REPORT IS LESS THAN ONE PAGE LONG, THERE IS A VERY GOOD CHANCE THAT YOU HAVE NOT INCLUDED EVERYTHING YOU NEED TO INCLUDE.