

EXAMPLE CHEMISTRY LAB REPORT - Miss Gurganus's classes

Lab Title (use the official one or make up your own)

Question:

Write the question, goal, or problem here.

Hypothesis:

Write your prediction here.

Research:

Answer research questions here. Your answers should be in **complete sentences**. **Please do not write the questions! Please do not number the questions!** Full credit is given when you give many details and list the source of each answer (book title and page number, website address, name of expert you consulted). Calculations, charts, diagrams, and sketches may be included in research.

Materials:

(THESE ARE JUST AN EXAMPLE!!!)

| | |
|-----------------------------|-----------------------------|
| 1 Celsius thermometer | 1 sparker |
| 4 25 x 150 mm test tubes | 25 mL 6 M HCl |
| 1 Bunsen burner | 1 ringstand |
| 3 50 mL graduated cylinders | 2 #6 2-hole rubber stoppers |
| 1 heat resistant pad | 6.59 g $K_2Cr_2O_7$ |
| 1 small test tube brush | 3 125 mL Erlenmeyer flasks |

(Notice that materials should be listed in **two neat columns** that do not touch each other. First **how many of each item** is listed, then a **description/size**, then the **name of the item**. For chemicals, an amount is listed. There are a few things that are **NEVER** included in a materials list: liquid water of any kind, paper towels, goggles, aprons, lab books, pens, lab desks, and lab partners.)

Hazards:

The student safety contract applies is always the first sentence in hazards. Then use complete sentences (**starting with the name of each chemical**) to mention the hazards of each chemical being used during the lab. Be sure to mention any special precautions or safety equipment needed (such as gloves or the explosion barrier). The safety contract is mentioned so you do not have to repeat the thirty safety rules every lab. Copies of SDS (hazard sheets) are available at <http://www.flinnsci.com/msds-search.aspx?>

Procedure:

(THESE ARE JUST AN EXAMPLE!!!)

1. Physically and chemically clean beakers and graduated cylinders.
2. Dry the beakers.
3. Label the beakers with the names of the chemical and initials.
4. (Your goal is always to have 10 or more steps of procedure.)
5. (Each step should begin with a verb.)
6. (If you use the words “set up” or “build,” you must have a labeled diagram right below that to show how you will set up/build.)
7. (No pronouns! Avoid the words you, me, we, I, she, he, etc.)
8. (Don’t write “record data” or “gather materials.”)
9. (Be specific!)
10. Clean up (is always the last step!)

Data:

- written during lab and cannot be re-written or re-typed
- more data = better data
- include qualitative data (words, pictures) and quantitative data (measurements)
- keep it neat!
- does **NOT** have to be in complete sentences!
- don’t forget three signatures: yours, partner’s, and teacher’s clean-up

Calculations (not required for every lab):

- written after data
- neatly done
- show all work
- label all numbers with units

Conclusion:

A conclusion is written after lab. A conclusion should have three parts: evidence, rules (reasoning), and claim. Be sure that your claim answers the lab’s original question!