

# How to Write a Science Lab Report

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Block: \_\_\_\_\_

- Always start a Lab Report with a new sheet of paper
- Make sure your First & Last Name, Date and Block are included
- All writing should be in blue or black ink, *all diagrams, graphs and calculations must be in pencil*

Use the following headings in order, for each lab write up.  
(Each heading should always be underlined with a ruler)

**Title:** Write down the Activity number and the name of the lab.

Example: Activity 12-6: Measuring pH of different types of water

**Purpose:** Summarize in 1-2 sentences what you hope to explore or find out in this lab.

**Materials:** List the equipment and chemicals/specimens you will be using to conduct the experiment. Always note any differences from the equipment you actually use and what is written in your text.

**Procedure:** Include a brief outline of the steps to follow. If you are using the textbook you can simply record "Refer to text, page \_\_\_"

**Results:** This is the section where you will record your data that you collect and your observations from carrying out the experiment.  
This may be in the form of:

- a diagram
- a short list of observations
- a table of results
- a graph etc..

**Discussion:** You will often be asked to answer some questions about your experiment. Your answers should be written in full sentences under this heading.

**Conclusion:** Write a brief summary of your results and 2-5 sentences summarizing the key ideas learned from the experiment. The conclusion should link back to the original purpose. You should include possible sources of error and/or ideas to improve or expand your experiment next time.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Title: Experiment 3A The Thickness of a Thin Aluminum Sheet****Objectives:**

This lab serves three purposes: application of significant figures, application of exponential notation, and preparation for finding the thickness of a molecule

**Procedure:** Please refer to Heath Chemistry, Canadian Edition, and Pages 37-

**Data And Observations:**

Table 1: Dimensions and mass of aluminum foil samples

Sheet No.	Type	Length (cm)	Width (cm)	Mass (g)
1	Normal	12.20	10.35	0.850
2				
3	Heavy duty			
4				

The density of aluminum is  $2.70 \text{ g/cm}^3$

**Sample Calculation:**

$$\begin{aligned}
 1. \text{ Area} &= 12.20 \text{ cm} \times 10.35 \text{ cm} \\
 &= 126.27 \text{ cm}^2 \\
 &= 126.3 \text{ cm}^2
 \end{aligned}$$

$$\begin{aligned}
 \text{Volume} &= \text{mass/density} \\
 &= 0.850\text{g}/2.70 \text{ g/cm}^3 \\
 &= 3.15 \times 10^{-1} \text{ cm}^3
 \end{aligned}$$

$$\begin{aligned}
 \text{Thickness} &= \text{volume/area} \\
 \text{Thickness} &= 3.15 \times 10^{-1} \text{ cm}^3 / 126.3 \text{ cm}^2 \\
 \text{Thickness} &= 2.49 \times 10^{-3} \text{ cm}
 \end{aligned}$$