

PREPARING FOR YOUR LAB



Putting in a little extra time to prepare before your lab can help you ease lab day jitters. Below are guidelines for what to do before you complete your lab experiments.



WriteOnline.ca offers additional advice for preparing for your lab. See: Lab Report > Section B > "Understanding the assignments." Your TA can also answer any questions specific to your lab.



Understand your assignment

What is required? As you prepare to start your lab work, you should know what the expectations are:

- + Do you need a full lab report or not?
- + Do you need a hypothesis?
- + Does your assignment require additional research?
- + What sections should be included in a lab report for your course?

Reading your lab manual as well as any assignment details will help you answer these questions. In particular, your lab manual contains all the critical information you need to conduct the experiment. Your instructor may also ask you to prepare a lab notebook or to fill out a pre-lab worksheet before the experiment.



Understand lab concepts

Pre-lab research will help you clarify your objectives, purpose, and hypothesis for the lab.

- + Read your lab manual, thinking about **why** you are completing the lab.
- + Identify the key scientific concepts that you will apply.
- + Read your course notes related to these concepts.
- + Consider the methods and tools you will use in the lab.

For more information about lab concepts, visit WriteOnline.ca > Section B > "Before you start."



For research help, visit UWaterloo Library's subject specific resources or the liaison librarian for your subject area.

Subject Guides: <http://subjectguides.uwaterloo.ca/?b=s>

Liaison Librarians: <https://uwaterloo.ca/library/services/librarians-subject>



Define your objectives and predictions, or identify your hypothesis

Using what you learned about the lab's concepts, write down your purpose and objectives for the lab as well as your expected outcomes.

For more help, read through key questions to ask at [WriteOnline.ca](https://www.writeonline.ca) > Section B > "Before you start."



Lab day: Conducting your experiment

In the lab, your goal is to record enough detail to allow someone else to repeat the experiment based on your notes. Be sure to take careful note of the following:

- + All of your procedures and results;
- + Any changes you made to the lab manual's procedures;
- + Any unexpected outcome;
- + Any limitations you encounter.