

A brief guide to producing an inquiry based lab report

Just like there is no one definition of what constitutes an inquiry *lab*, there is no, one, single way to produce a lab report for the same. However, a competent lab report will include elements of the following. To make your life easier I *strongly* suggest that you use the headings below in your report. By doing so it should help you to clarify your thoughts, and help you to keep things brief and compact.

Title – A few words that describe the whole experiment .

Aim – In an inquiry based lab, this is the *question* that you are attempting to answer.

Apparatus & chemicals – A list of laboratory equipment and chemicals that you used.

Method – A step-by-step explanation of the procedure. It should be written with sufficient clarity to allow a third party to replicate your experiment exactly, *without* you being present. Any obvious steps such as gather the equipment, put on goggles, light the Bunsen burner etc., can be omitted.

Results – A record of any observations and measurements that were made during the experiment. Often, the most efficient way to present such data is in the form of a table.

Conclusion/Discussion – Calculations that you performed on the data that you collected in the results section, plus any conclusions that you drew, and an answer to the question outlined in the **Aim**. In this section you can add any comments relating to errors or data that you were not expecting. However, if you do, be specific and avoid the phrase 'human error'.

A few general points;

- All reports must be word-processed and sent to me electronically.
- When dealing with numbers, give attention to significant figures and to units.
- Please give attention to spelling, grammar and general presentation. Do NOT overelaborate with unnecessary fonts, colors, pictures or other embellishments. This is a lab report, not a piece of creative writing or artwork.
- Please keep lab reports as brief as possible without omitting any *necessary* details.