

# Writing Reports

The following items must be included in a laboratory report.

## Object

This should be a one or two line statement. It could be identical to the one in the laboratory instructions unless you have added some components of your own to the standard experiment.

## Procedure

This should be a short description of the experimental methods in your own words.

## Data

Clear presentation of data is very important in an experiment. A tabular form is often used. The following is a typical data table.

Trial #	Measured quantity $x$	Measured quantity $y$	Measured quantity $z$	Computed quantity $a$	Computed quantity $b$	Error in $b$
1	...	...	...	...	...	...
2	...	...	...	...	...	...
3	...	...	...	...	...	...
4	...	...	...	...	...	...
Average					...	
Std. err.						...

For a specific experiment the number of measured quantities, the number of computed quantities and the number of trials will be different. The quantities for which you compute errors and averages will also be different.

## **Calculations**

Here you should state the formulas used to compute quantities in the data table and demonstrate the computations for at least one row of the table.

## **Conclusion**

This is a summary of the conclusions drawn from the data obtained.

## **Sources of error**

Here you should list what you think are the shortcomings of the experimental method that contribute to experimental errors. What you consider as sources of error will demonstrate your understanding of the experiment.