

Writing a Research Report

A research report typically consists of up to 8 sections. These may vary depending on your field of study or your course requirements:

- | | |
|--------------------------|---------------|
| 1. Abstract | 5. Results |
| 2. Aims and objectives | 6. Discussion |
| 3. Introduction | 7. Conclusion |
| 4. Materials and methods | 8. References |

Abstract

Think of this as a key summary sentence from each section of the report.

Aims and Objectives

- **Aims** describe what the research intends to prove.

Example:

This research aims to investigate the effect of increasing temperatures on several frozen liquids.

- **Objectives** detail the actions you will take to achieve the aim(s).

Example:

To apply heat at increasing increments to each frozen liquid.

To observe and record the effect of temperature on each sample.

Introduction

Explain any theories, background details or methodology here. Provide a validation for the research and the methods used.

Materials and Methods

In the past-passive voice, describe how you performed the research and the tools you used. They should be detailed enough so that anyone in your field could repeat them without confusion.

Example:

2mL of each type of liquid was placed into individual squares in an ice tray and labelled with the relevant identifier. The ice tray was then stored at -80°C overnight.

Results

Report any collected data here. It is preferable to use tables and figures to present the information. Do not interpret the results yet.

Discussion

1. **Analyse:** interpret the results and discuss their relevance, include some references to expected outcomes from literature.
2. **Unexpected Outcomes:** discuss any unexpected results, but always include a feasible explanation as to why something didn't go as planned.
3. **Limitations:** recommend any changes which you would make were you to perform the research again or highlight any limitations you encountered.

Conclusion

Sum up your **key** findings and consider ending with a comment on a look to the future of your research area, or an aspect which would benefit from further investigation.

References

Ensure that all references are present and in the correct style.