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
2. Aims and objectives
3. Introduction
4. Materials and methods
5. Results
6. Discussion
7. Conclusion
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 try 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.