

The Breakdown of a Scientific Article

Title: describes the paper

- Be concise
- Keep the audience in mind

Abstract: Summarizes the major points of the paper

Includes: Purpose of Study, Site, Study Species, Methods, Results, Discussion

- Usually written last
- Make a sentence or two from each section

Key Words: used to categorize your paper, used by search engines

Introduction: sets the stage for scientific argument; presents the context

- Includes:
- Background information – previous work, current theories
 - Hypothesis/ Predictions – stated clearly and concisely
 - Importance of study – why we should read this paper

***in this section, introduce key concepts and define terminology

Materials and Methods: allows others to replicate/understand the study

Includes:

- Site – When and Where
- Study organism – Genus, Species, Age, Sex, Size, Life-Cycles, Habitat, Why appropriate, How obtained, etc.
- Equipment – Tools, sampling devices, Type and Quantity of Chemicals
- Procedures – Clearly and concisely explain how Data were Collected
- Statistical Procedures – Clearly and concisely explain how data were analyzed

Results: provides data in tables, figures **AND** text format

Includes:

- Summary of the data that addresses your hypotheses
- Use Labeled figures/tables to display complicated, lengthy data. Be sure to summarize the most important features of figure/table in text
- Do NOT include a figure/table that is not referenced in the text
- **Do NOT interpret data**

Discussion: Provides an interpretation of the results

Includes:

- A restatement of hypotheses
- A restatement of results
- An explanation for the results (don't dismiss "negative results")
- Comparisons to other studies
- Predictions
- Directions for further research

Acknowledgements: thanks to those who helped or funded the research

- be sure to thank everyone that helped you with ideas, collect data in the lab or field, analyze data, create graphics or prepared the paper

Literature Cited: referenced literature used in the paper

- an alphabetical list of authors referred to in paper

FOLLOW THE CORRECT FORMAT FOR THE PAPER.

Hints

- Tables (title on top)
- Figures (title on bottom)
- Citing literature within the text
 - o Louda 1984 (**one author**)
 - o Louda and Potvin 1995 (**two authors**)
 - o Coley et al. 1985 (**3 or more authors**)