



Guide: Dissecting a Scientific Paper¹

1. Title:

- Based on the title, what is the main point being made by the paper? In one to three sentences, explain what you think the title means?

2. Abstract:

- If there is an abstract, then translate the abstract into your own words line by line.

3. How do these authors introduce this paper?

- What questions is this study trying to answer?
 - Try to phrase the main idea being tested in the study as a hypothesis
- Are there keywords or ideas that you don't understand? If so, look them up.
- Why are the authors addressing the questions that they are?
- Is there a scientific debate or controversy that this study will help address? If so, what is it?

4. Phrase the main idea being tested in a single sentence that presents the authors main argument. (This is a thesis statement.)

5. Materials and methods:

- BREIFLY summarize the approach that the study takes to answering the main question.

6. Supportive Evidence Presented

- What are the *main findings* of this study?
 - Describe each piece of evidence and how it supports the thesis statement you stated in number 4 of this guide.
 - Are there any results presented here that you do not understand? If so, what are they? We can discuss these in class.

7. Discussion and Conclusion

- What are the most important findings of this study?
- Were any of the study's findings surprising or hard to explain? If so, what were they, and why were they surprising?
- What were the strengths and weaknesses of the study's design?

¹ <http://evolution.berkeley.edu/evolibrary/teach/journal/index.php>