Standard Format of Primary Scientific Literature

The Six Parts:
1. Title
2. Abstract
3. Introduction
4. Methodology/Experimental
5. Results/Discussion
6. Conclusion

1. Title: The title should be a clear phrase or sentence that provides enough information about the experiment to entice the reader, yet not too much detail. It may address the essential findings or purpose of the experiment.

2. Abstract: The abstract is a brief statement of the purpose and important results of the experiment. It should be no more than five sentences and can be written last, after the rest of the paper is clearly formulated.

3. Introduction: The introduction gives the experiment a context. It provides a background in the subject matter, including relevant previous studies. All sources used must be cited. The hypothesis is clearly stated here.

4. Methods/Experimental: The methods section states specific materials, equipment, and instrumentation used. It describes how lab/field work was carried out, and emphasizes measures taken to reduce possible error, or remove background noise from data. Other scientists in the field should be able to reproduce the experiment using information in this section.

5. Results/Discussion: This is a well-written account of the data obtained on lab/field notes. It will include graphs, diagrams and tables to illustrate the most significant data. Graphics should be well-labeled and accompanied by footnotes. Each figure, however, cannot stand alone and its content should be well-described in the text of the results. There should be a subheading for each significant result, or assay, under which the results will be stated and discussed in terms of the experiment. For some less complex experiments, all of the results can be stated under one heading and the discussion will be part of the conclusion.

6. Conclusion: The conclusion addresses the overarching implications of the most significant results. It may list possible sources of error to explain why some data deviate or why the experiment was not successful. It should not infer more than the results actually mean. The conclusion responds to the introduction, explaining why the results are important to future work in the field. It may state how the experiment could be re-evaluated so that more conclusive results may be obtained.

References: A bibliography of any works cited in the introduction, conclusion, or throughout the paper. There are several general formats, but the format is usually specific to a field or journal.