How To Write a Formal Lab Report

Background
- Contains supporting information (from research or class notes) that will lead to an educated guess as to what should occur in the data.
- Contains definitions of vocabulary or applicable laws

Purpose
Clearly states why you are doing the lab investigation

Hypothesis
May be a statement of what you expect to occur OR may be a prediction of results OR may be a starting point for experimentation.

Procedure
- Bulleted or numbered list of what was done
- Written in third person (Heat for 10 minutes vs. I heated the sample)
- Should not contain data
- Should be specific enough to be replicated but not too intricate
  - obtain materials
  - heat chemical in hot water bath
  - record data every 30 seconds

Data
- Should be a chart of results
- May be after the procedure or may be next to the procedure, as long as it is somehow separated

Conclusion
- Must refer to the Hypothesis
- Must answer the purpose of the lab
- May contain graphs or diagrams
- May contain narrative of results

Errors
- Must contain at least three items that may have affected data
- Should be procedural (Age of chemicals may cause a slow reaction)
- Should not be personal (My lab partner spilled......)