* Report Title
  + Concise but descriptive
  + Relevant to the experiment
* Background Information
  + Present the research you conducted about the topic you were interested in that led to your testable question
  + The information should be thorough enough to demonstrate that the testable question is not easily answered through research alone.
  + Include enough to give the reader the foundational knowledge to understand your experiment without extraneous information (even if it is on-topic).
  + Consider why anyone would want to know the answer to the testable question you will pose – illustrating why the reader should care about your experiment makes it more compelling.
* Testable Question
  + A concise, one sentence question that your experiment is designed to answer.
* Hypothesis
  + Predicts the outcome of the experiment and is supported by scientific principle(s) based on in-class content and background information.
  + Clearly describes the independent and dependent variables of your experiment.
  + Does not need to follow an “If…then…because…” formula.
* Methods
  + First present a bulleted list of all materials used. Do not include materials assumed to be present in a lab setting unless specific to your experimental design (table, paper, pencil/pen, calculator, tap water, etc.)
  + Any amounts associated with a material must be listed specifically and in metric units.
  + Second, describe a numbered list of steps that would allow a third party to replicate your experiment. Each step should be a separate action (e.g. “Add 5 g of sucrose to 100 mL of distilled water, and heat on hot plate on a low temperature setting until dissolved” should be broken up into two steps at the comma).
  + Do not include steps on how to conduct analysis on your data.
* Data & Analysis
  + Use a table to present raw data, regardless of whether it is qualitative/quantitative.
  + Include analysis with your data. This can be calculating an average, percent change, standard deviation, standard error of the mean, confidence interval, Chi square, graph, etc. Analysis should be meaningful to your experiment.
  + This section should include no text beyond labels for tables and graphs!
* Conclusion
  + Restate your hypothesis (it doesn’t have to be word-for-word from earlier in the report). Evaluate whether or not your data/analysis supports your prediction.
  + State the answer to your testable question (this is your conclusion/claim).
  + Defend your conclusion by summarizing your data/analysis and relating it back to scientific principles.
  + If there were notes or anything you wanted to discuss about your data section, this is the section to work that in.
  + Because there is no time to redo your experiment, you will evaluate your experimental design and suggest improvements you would make. This includes at least one source of error – be sure to explain how improving your identified weakness would affect your data.
  + Be sure to reiterate the significance of your findings to society at large.