Lab Write Up
Diet Coke and Mentos Lab Example

Problem Question – What is the BIG idea we're trying to answer?
Remember David's cake failure..."Why didn't the cake rise?", not "Was the oven broken?"

Hypothesis – ***Always*** use an "If {Ind Var}, then {Dep Var}." statement to show your prediction for the answer to the problem question.
If we add more mentos to the Diet Coke, then the fountain will go higher.
(Never, ever change your hypothesis after you begin the experiment – it might be wrong, but that doesn't matter. The whole point of an experiment is to see if your hypothesis is right or wrong!)

Experimental Design – Variables
Independent Variable
Dependent Variable
Constants (list at least 5)

Procedures and Materials – Should be a *complete* list (as if a stranger would follow them without you and do the experiment correctly)

Materials: How many of each item did you use for the entire experiment?
Procedures: let someone read it to see if it makes sense to them
(be specific and complete)

Data Table – used to organize the data collected during the experiment. Can be hand-drawn, but must be with a straight edge. Feel free to "computerize" it! Must have a descriptive title and labels/units for everything.

Start thinking about your conclusion right here... what conclusions are you starting to see?

Graph/Data Analysis - Why do we make a graph? To help prove your point or main idea! You want your graph to support your conclusion...choose your graph wisely! Use the "Graphing Rules to Live By." Remember the IV goes on the X axis and the DV on the Y axis!

Conclusion – The whole point of the experiment (See "Tips for Building the Perfect Conclusion!")

Application – How does it apply outside the experiment? OR How would you use the knowledge gained in this experiment in a different setting?

Possible Errors / Hidden Variables – Discuss possible errors in your work (outside factors that interfered with the experiment) and hidden variables that may have affected your results.
Example: The ingredients are different in boxed Mentos and rolls of Mentos. Could that affect your results?

Experiment Redesign – If you were given the opportunity to do this lab again, what would you do differently? Discuss whether you would try to redo the same experiment with better constants, or would you try to learn something different by changing up the experiment.