**Writing a Conclusion**

Overall: You are trying to make sense of and summarize your data in order to prove something. The main goal is to explain your data – whether it be what you would expect or not. Also, don’t use 1st person pronouns (I, we, my.. etc.), unlike these examples!

1. First generally restate what you completed in the lab. DO NOT go through a step by step process of what we did.
   * + Good: In lab, we reacted sodium bicarbonate with acetic acid in order to prove the law of conservation of mass to be true.
     + Bad: The first thing we did in lab today was *Mass* the empty bottle and cap. Then we added about 25 mL of acetic acid solution to a screw top bottle. After that we *massed* the bottle, cap and the acetic acid. Next, what we did was. . . (I think you get the point…)
2. The next thing you want to do is talk about the concept behind the lab, refer to the title and/or purpose for the big idea behind the lab. Talk about these concepts and describe how they apply to your lab.
   * + Good: The Law of Conservation of Mass states that matter cannot be created nor can it be destroyed. Applying this law to my lab today, my total grams of reactants should be the same as the mass of my products.
     + Bad: The law of conservation of conservation of mass was used in the lab today.
3. You want to refer back to your data/observations that you recorded during your lab to support your findings.
   * + Good: We determined the mass of our reactants to be 12.56g, and after the reaction the mass of our products was 12.56g. With our data being unchanging from reactants to products, this supports the Law of Conservation of mass; no matter was created and no matter was destroyed.
     + Bad: Our grams didn’t change.
4. The last thing you want to write about in every conclusion is reasons for error. “Human error” is unacceptable. So are things such as “I measured the liquid incorrectly” or “The scale was wrong” as these things should not be incorrect and probably were not incorrect. Thing of things either chemically or procedurally that could have affected your results. Also, your reasoning for your errors **should reflect your results**. (i.e. A loss of chemicals should not result in a mass of products that was *higher*  than expected. It should be lower.)
   * + Good: While our chemicals were reacting, some of the chemicals erupted out of the test tube. This loss of chemicals is why our mass of our products was below what we expected.
     + Bad: 3 examples:
       - * Human error is why our results were off.
         * I read the volume incorrectly.
         * While our chemicals were reacting, some of the chemicals erupted out of the test tube. This loss of chemicals is why our mass of our products was above what we expected.