**Sophomore Research Topic Presentation**

Each person should complete 1 topic presentations. You should have a total of 2 per pair/3 per group.

**1) Research Question**

What Topic/concept in chemistry will you explore?

What problem are you trying to solve/question will you answer?

What knowledge will you need to master/gain an understanding of to evaluate this topic?

**2) The Experiment**

Web address:

Attach a hard copy as well.

Summary of the experiment

How will you manipulate the experiment to make it your own/different from the given lab?

**3) Data to be Collected**

Independent Variable(s) with units you will measure in

 Dependent Variable(s) with units you will measure in

 Constants

 Controls

**4) Materials, Tools, Instruments to be Used**

Where will you obtain the materials from? Be specific. Think about safety and disposal. For chemicals use <http://www.flinnsci.com/chemicals/>

What will they cost you? (Can you scale down the size/volume of the lab to save money?)

How will you dispose of the chemicals when you are done?

How much material(s) will you need to reasonably conduct enough trials?

**6) Logistics**

Where will you conduct the experiment?

How long will each trial take?

How much time will it take to conduct all of your trials?

What statistical test do you think you may use to analyze your data? (Consider time and cost)

7)**Sources**

Sites that have been helpful that you may want to revisit for your review of literature (similar to an annotated bib)