Regents Chemistry
Ms. Randall
Lab activity Expectations and Instructions

We will be conducting authentic scientific inquiry this year as well as developing scientific arguments. You will work in lab groups to construct and refine scientific models/explanatory hypotheses that you will test in the lab. Using claim/evidence/reasoning you will develop a scientific argument using your model to collect evidence that will support your claim. Use the grading rubric and example below as a guide when you construct your arguments.

Lab Requirements:

1. You will be required to maintain a lab notebook in class to develop your models/explanatory hypotheses, collect data and develop your scientific arguments.
2. You will set up your notebook as outlined.
3. You will present your model/explanatory hypothesis to the class for feedback before carrying out your investigation.
4. You will collect evidence during your investigation and as a group develop a claim based on that evidence and justify it with sufficient scientific principles.
5. Once you complete your CER, you will present it to the teacher and class and each group will ask questions and or provide feedback.
6. Lastly, upon refining your model and argument based upon feedback, you will submit a final report on google classroom for a grade.
7. The assessment of each lab will be individual and will focus on your ability to:

   -Design an experiment
   -Develop an argument
   -Construct a model
   -Determine if there is sufficient evidence to support a claim
   -Provide justification using evidence to support a claim

As per the NYS lab requirement you must complete 1200 minutes of lab investigation. We will not be counting the number of labs since these investigations will take several class periods to complete.

The conclusion helps you to focusing on what you learned by doing the lab. All conclusions will be completed in **GOOGLE classroom**. You must click "turn in" for it to be logged.

Step 1: Write a paragraph summarizing your claim, evidence and reasoning.

Claim- Objective, what are you studying? What is your experiment about??
Evidence- Data from your experiment
  Can be either qualitative or quantitative
Reasoning- your conclusion.   A justification that links the claim to the evidence.

Step 2: Answer the assigned questions.

Missed lab activities: Lab makeups will be on Wednesdays during extra help with only one lab being offered per week. Class attendance is critical for success. Extended illness will be addressed on a case by case basis.

Lab grades: Lab notebooks will be collected and graded at the end of every unit. The conclusion will be reviewed, graded and returned electronically on a weekly basis so you may review my comments and your answers.

CER Grading Rubric

Component	Level		
	0	**1**	**2**
Claim - A conclusion that answers the original question.	Does not make a claim, or makes an inaccurate claim.	Makes an accurate but incomplete claim.	Makes an accurate and complete claim.
Evidence – Scientific data that supports the claim. The data needs to be appropriate and sufficient to support the claim.	Does not provide evidence, or only provides inappropriate evidence (evidence that does not support the claim).	Provides appropriate but insufficient evidence to support claim. May include some inappropriate evidence.	Provides appropriate and sufficient evidence to support claim.
Reasoning – A justification that links the claim and evidence. It shows why the data count as evidence by using appropriate and sufficient scientific principles.	Does not provide reasoning, or only provides reasoning that does not link evidence to claim	Provides reasoning that links the claim and evidence. Repeats the evidence and/or includes some – but not sufficient – scientific principles.	Provides reasoning that links evidence to claim. Includes appropriate and sufficient scientific principles.