## **Semester I Final Project**

- Each group of 2-3 people will present a demonstration of an assigned science topic
- Each presentation should be 6 minutes and include the following:
  - 1. A brief Introduction to the topic
    - What does the class need to know in order to understand your demo?
  - 2. A Claim about what the relationship is
    - Your Claim will take one of the two following forms:
      - "The effect of (independent variable) on (dependent variable) in (subject) at (conditions) is (result)."
      - "The relationship of (independent variable) to (dependent variable) in (subject) at (conditions) is (results)."
    - You'll need to figure out which of your variables is the independent and which is dependent
    - The subject is whatever you're using for your demo
    - The conditions are your constants. What quantities are important to hold constant while you change your independent variable?
  - 3. Evidence to back up your Claim
    - The Evidence will be your actual demonstration. Show the class how your claim is true.
    - Make sure to explain what you're doing and why you're doing it.
    - Draw the classes attention to what's important about your demo.
    - Your demonstration must only include supplies you can find at home, in the classroom, or at a craft store. Keep it simple!
  - 4. Reasoning for your evidence
    - *Explain* to the class *why* your independent and dependent variables have the relationship they do. This will probably take a little research on your part.

## Topics

- 1. Gravity
- 2. Light/Optics
- 3. Buoyancy
- 4. Balance
- 5. Sound
- 6. Electricity
- 7. Magnetism
- 8. Waves
- 9. Pressure