Date	Period

WHAT'S THAT SOUND?

<u>Purpose</u> – Use the scientific method to identify the cause of the sound inside the balloon.

Carefully pay attention to the amazing screaming balloon demonstration and record observations and inferences in the table below. (if you do not remember the difference, look at pg. 7 in your amazing ESS novel...aka science binder)

OBSERVATIONS	INFERENCES

Analysis Question

1. Did this demonstration show qualitative or quantitative observations? Explain why. (single words do not count, this must be at least one sentence long)

Directions - It's time to use the scientific method to figure out how the sound was created. As a group design an experiment to solve the mystery sound.

Materials – 1 - 12 inch balloon, 2 pennies, 2 washers, 2 hex nuts, 2 pencil erasers, and 2 marbles.

<u>Safety Considerations –</u> The group only gets 1 balloon, use it as it is intended to be used and not as a toy, if it tears or becomes unusable, the group will have to problem solve to continue in the activity. Students must stay with groups and not wander the classroom. Students who cannot follow directions/procedures will not be allowed to complete this assignment and will be given an alternate assignment.

<u>Hypothesis</u> – What do you think is causing the sound? If...then statement, single words do not count.

Variables - Identify the variables in the experiment

Independent:

Dependent:

Control:

<u>Procedures</u> – List the steps for the experiment

Name _____

<u>Graph</u> – Create the appropriate graph to display the results of the experiment. Make sure to provide a title and place the independent and dependent variables in the correct axis.

Analysis Questions

- 1. What is the conclusion for this experiment?
- 2. Which Cross Cutting Concept (CCC on Green Sheet pg. 3) do you think this lab best represents?
- 3. Which Science & Engineering Practices (SEP on Green Sheet pg. 3) did you do in this lab?
 - a. b.