Name:_________________________________________ Period: ______

**Application Project: Consumer’s Challenge** (student rough draft worksheet)

In this activity students will have an opportunity to apply the process of scientific method and test a consumer product.

All students will:
- Apply the scientific method to test a product
- Complete a detailed lab report explaining the testing process and results
- Share their process & results with the class in a brief presentation (items to be shared in your presentation are marked with a ★)

**Consumer Challenge Application Project Due Date: ________________**

**Instructions:**

**Part A: Think About It!**
- (1) What product(s) or brand(s) will you test?

- (2) What do you want to find out? Write a testable question that addresses the goal of your experiment.
  
  Question:

- (3) What do you think will happen?
  
  Hypothesis(+why): I think...

**Part B: Plan It!**

(4) What materials will you need to test your product?

Materials Needed:

(5) What safety issues do you need to address?

(6) What will you do to ensure reliable results & make sure the experiment is fair?
(7) What data (measurements or other numbers) will you collect in your experiment?

☆ (8) What steps will you use in your experiment?  **Hint:** Be very specific!

**Procedure:**

(1) Part C:  **Experiment & Test Your Hypothesis!**
Follow your procedure to test your product.

(9) Draw a picture of your procedure on your lab report form in the **Illustration (Apparatus Drawing)** box.

(10) What do you see? Use your senses to make observations. Write at least 5 detailed observations.
**Observations (at least 5 detailed observations):**
Part D: Data Collection & Analysis

(11) Use the space below to create a data chart or table to record the information (data) gathered during your experiment.

(12) Use the space below to create a graph that explains the results of your experiment. (Be sure to include a key & label the axes).
Part E. Analysis & Discussion

☆ (13) What trends did you see in your information or data? Explain your trends, results and what you learned in at least 3 complete sentences.

Explain trends:

(14) If you were going to do test these products again, what would you change in your procedure to make your results more accurate? Write two sources of error on your lab report form. Be sure to write in complete sentences!

Sources of Error (2): Two sources of error include:

1. 

2. 

Part F. Your Conclusion

(15) Was your hypothesis correct? Be sure to write in a complete sentence!

Was your hypothesis/prediction correct?

(16) What is a related research question that could also be investigated using similar materials?

Additional research question: