Soda Straw Rocket Template – Cut these three pieces out carefully.
### Soda-straw rocket data log

<table>
<thead>
<tr>
<th>Length of Nose Cone</th>
<th>Trial #1</th>
<th>Trial #2</th>
<th>Trial #3</th>
<th>Trial #4</th>
<th>Trial #5</th>
<th>Notes</th>
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</table>

**Distance Traveled (in cm)**
LESSON 5: SODA-STRAW ROCKETS

(C) Student Worksheet. Soda-straw data analysis graph

Distance Traveled (cm)

Nose Cone Length (cm)
LESSON 5: SODA-STRAW ROCKETS

(D) Student Worksheet. Soda-straw Rocket Analysis (1 of 2)

Your Research Question:
How will changes to the rockets’ nose cone length affect the distance the rocket will travel?

1. Your Prediction (Your Hypothesis):

2. Your Conclusion:
   A. What Nose Cone Lengths did your team use? _____, _____, _____, _____.
   B. What happened to the Distance Traveled when you had a longer Nose Cone?

   C. What happened to the Distance Traveled when you had a shorter Nose Cone?

   D. Why do you think these results happened?
E. Did you have any problems during the investigation that might have changed the Distance Traveled?


F. Was your prediction supported? _______

G. If yes, what evidence do you have your prediction was supported? If no, why do you think it wasn’t supported?


H. Other than nose cone length, give 3 examples of variables that might be changing the Distance Traveled.

1. __________________________

2. __________________________

3. __________________________

I. Pick one of the examples and give a hypothesis (a suggested explanation that predicts a particular outcome, based on a model or theory) as to why this variable might change the Distance Traveled of the rocket.


