Soda-Straw Rocket Template

Activity Time: 20 Minutes

Materials Needed:
- Soda-Straw Template
- Sharpened Pencil
- Scissors
- Tape
- Soda-Straw

1. Carefully cut out the rectangle. This will be the body tube of the rocket. Wrap the rectangle around a pencil length-wise and tape the rectangle so that it forms a tube.

2. Carefully cut out the two fin units. Align the rectangle that extends between the two fins with the end of your body tube and tape it to the body tube. Nothing should stick out past the body tube! Do the same thing for the other fin unit, but tape it on the other side of the pencil, so you have a “fin sandwich.”

3. Bend the one fin on each fin unit 90 degrees so that each fin is at a right angle to its neighbor. When you look along the back of the rocket, the fins should form a “+” mark.

4. Using the sharpened end of your pencil, twist the top of the body tube into a nose cone. Measure your nose cone from its base to its tip and record the length on your Data Log and on the rocket itself.

   (For the Data Log, create a chart on a piece of paper with columns labeled “Rocket Length” and “Distance Traveled.” For every attempt, fill in the log).

5. Remove the pencil and replace it with a soda straw. Blow into the straw to launch your rocket! Record the distance it travels on your Data Log.

Activity description courtesy: John Callas, NASA/JPL
# Soda-Straw Rocket Data Log

Distance Traveled (in cm)

<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>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td></td>
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</tbody>
</table>
Soda-Straw Rocket Data Analysis

Distance Traveled (cm)

Nose Cone Length (cm)