

The Effect of Nosecone Shape on Rocket Flight Distance

By

We will be investigating 3 different nosecone shapes to determine how the shape affects the rocket flight distance. The first shape we will investigate is a Flat Nosecone.

Choose 2 different nosecone shapes your group will investigate and record below.

Nosecone Shape:

Shape 1. Flat Nosecone

Picture:



Shape 2. _____

Picture:

Shape 3. _____

Picture:

Controls: Variables that will not be changed

paper type _____ / copying paper _____

paper size _____ / 8 1/2 x 11 inches _____

_____ / _____

_____ / _____

_____ / _____

_____ / _____

Prediction: We predict the flight of the rocket will be longest on with the

_____ nosecone shape because _____

_____.

Results Data: Nosecone Shape and Rocket Flight Distance (ft.)

Nosecone Shape	SHAPE 1 FLAT	SHAPE 2 Trial 2	SHAPE 3 Trial 3
Test 1 Flight (ft.)			
Test 2 Flight (ft.)			
Test 3 Flight (ft.)			
Order test results from smallest to largest for each shape.			
Median Number (The number in the middle of the ordered numbers)			

Conclusion: (A claim supported by data)

The results of the experiment shows _____

Claim

because _____

Data (measurement/observation)

_____.

Diagram of Recommended Design based upon Rocket Flight Distance:

Engineering Recommendation:

Based on the data I collected, or that has been reported collaboratively,
as an engineer, I recommend

_____ because _____

_____.

Stomp Rocket Worksheet
By

Discuss these questions with your group and record your responses on the lines.

1. Why *doesn't* the rocket appear to be moving prior to the "stomp"?

2. Why types of energy does the Stomp Rocket possess after the "stomp"?

3. Where did the energy come from when the rocket blasted off?

4. Describe what type of energy each object has from human to the end of the rocket flight.
