Ready Rockets - 5A17

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Step 2 Ideas

1st Idea: Topic
rockets
My idea:
Testing rockets

Question:
I will test between different types of rockets with different adjustments.

Resource(s):
Motors rockets
2nd Idea: Topic
Cleaning
My idea:
Which soap is the best

Question:
Between multiple dish soaps I will test which one cleans the best

Resource(s):
Dish Soaps sponge
3rd Idea: Topic
procting
My idea:
Protecting eggs

Question:
Between multiple types of materials i will see which one protects an egg the best

Resource(s):
Egg, miracle foam, feathers, cotton

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Step 3 Background Research
Source 1

Source 1

Title: Rocket Principles

Summary:

What's the big idea about the article? The article is about how rockets work and what adjustments would make the rocket better and higher flying

In complete sentences, describe a few details (who, what, where, when, why, and how)

The article is about how rockets why they work and what to do to improve them.

Source 1 Bibliography

This source is a: _____ Website _____ Other

The URL is http://www.grc.nasa.gov/www/k-12/rocket/TRCRocket/rocket_principles.html

Last Date of Access: 12/10/25

Title of Article: rocket principle
Author's Name: Tom Benson
Date of Article: May 13 2021

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Step 4 Hypothesis

Hypothesis:

I predict that the rocket with the round nose cone will do the best and that the rocket with the flat nose cone will do the worst, because the round one has better aerodynamics and less drag, and the flat one will reduce aerodynamics and increase drag.

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Step 5 Materials and Procedures

Materials: (Make your own rocket)set, 3d printer (to make nose cones),Filament (for 3D printer), (C6-5) motors, Altimeter (to track height), Glue (to stick things together), sandpaper (to smooth edges)

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Step 5 Materials and Procedures

Experiment Procedure:

1. Build rocket from pre packaged rocket kit
2. 3D print 3 Nosecones
3. Put wadding into rocket
4. Use long object to push down wadding
5. Put in parachute
6. Put in altimeter
7. Put in the moder in the bottom
8. Put in igniter into moder
9. Put in something so the igniter wont fall out
10. Put the rocket on the metal stick
11. Test if the ignitor is working
12. Wait for announcer to launch your rocket
13. Record data
14. Repeat

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Variables

Variables:

Independent Variable: (What are you changing?)
The Nose cones

Dependent Variable: (What are you measuring?)
How high does the rocket launch

Control: (What has to be the same?)

The model of the rocket and the motor the parachute and the weight

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Step 6: Data and Conclusion

Data:

Flight	Nosecone *1 Sharp	Noscone *2 Round	Nosecone *3 Flat
1	861ft	910ft	681ft
2	872ft	879ft	747ft

Conclusion:

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Step 7: Report Rough Draft

Introduction

My project is on rocket nose cones and between different models which one will do the best. I'm using three types of nosecones, one that is flat, one that is pointy, and one that is round. I'm using the same rocket and motor to get accurate results.

Purpose and Hypothesis

My purpose to do this is to identify the best nose cone for a rocket so that someday we might be able to go Mars. My hypothesis is that the round nose cone will do the best because it pushes the air around it.

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Step 7: Report Rough Draft

Materials and Methods

- Moder (C6-5)
- Pre Built rocket
- 3D Printer
- Filament (plastic that makes objects in 3D printer)
- Igniter
- Altimeter (Records the height/altitude)
- Launch pad
- Alligator Clip
- String
- Wadding (paper like material)
- Glue
- Sandpaper

1. Build rocket from pre packaged rocket kit
2. 3D print 3 Nosecones
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Step 7: Report Rough Draft

Flight	Nosecone *1 Sharp	Noscone *2 Round	Nosecone *3 Flat
1	861ft	910ft	681ft
2	872ft	879ft	747ft

I was correct in my hypothesis that the round nose cone would do the best. After that I planned on doing three flights, but the rocket got water on it so we could only do two flights. The round nose cone went the highest in altitude and the flat was the lowest in altitude.

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Step 7: Report Rough Draft

Bibliography

benson, T. (2021, May 13). *Rocket Principles*. Nasa.gov. http://www.grc.nasa.gov/www/k-12/rocket/TRCRocket/rocket_principles.html

Science Buddies. (n.d.). *Egg Drop Project Teaches Engineering Design | Lesson Plan*. Science Buddies. Retrieved January 27, 2026, from https://www.sciencebuddies.org/teacher-resources/lesson-plans/egg-drop-engineering-design

The Kitchn. (2026, January 1). *Our Best Cleaning Tips & Tricks*. Kitchn; The Kitchn. https://www.thekitchn.com/collection/cleaning