

Name
Date
Period

Rocketship Lab

Goal: To create a rocketship using the following materials:

1. baking soda
2. vinegar
3. beads
4. pipe cleaners
5. tongue depressants
6. duct tape
7. masking tape
8. cardboard - 4 x 4 inch square

Day 1

You are going to work with your group to create a rocketship design.

1. Everyone needs to agree on the design of the rocketship
2. Everyone needs to agree on the amount of baking soda and vinegar ratio
3. Everyone needs to draw the design and write down the ratio of baking soda and vinegar. Use color.
4. You also need to explain the reasons behind your design and ratio in 3 sentences.

Day 2

You are going to build and test your rocketship

Materials and Rules:

1. You can only use 6 inches of duct tape and 12 inches of masking tape
2. You will be given 100 mL vinegar and 50 grams baking soda. You may not use any more than what you are given. It also does not mean that you have to use all of it. Figure out a ratio that will work, do research on-line.
3. You MUST use 6 beads, 2 pipe cleaners, 4 x 4" cardboard pieces, and 3 tongue depressors
4. You can use paper towels or toilet paper, this is optional.

Grading

Your grade will mostly be determined by how far the rocketship goes. This is a total of 40 points.

If your rocketship travels 3ft in distance then you will receive 28 out of 40 points. If your rocketship travels further than 3 feet then you will earn more points, but if it is less than 3ft then you will earn less points. The group with the rocketship that goes the furthest will get 10 points extra credit. The picture of your rocket design, ratio of baking soda and vinegar, and reasoning will be worth 10 points

To make up points:

If your ship does not go 3 feet, you can write up a 2 paragraph paper on what you would change to make it go farther? What variables could have caused poor flight? Be intelligent and discuss what you could change to help the flight.