



# Marshmallow Launchers

A Force and Motion

Experiment

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Thank you for your purchase! I created this experiment based on a simple picture of a homemade marshmallow gun that I figured could be modified, and used to reinforce the concept of force and motion.

**Materials Required:**

- Plastic cups (Note: I did not use Solo cups because they were too big. I used a Wal-Mart brand)
- Balloons
- Marshmallows- Big and small
- Scissors

**Directions:**

1. Cut the bottom third of the plastic cup off.
2. Tie a balloon shut.
3. Cut off a small section off at the top of the balloon.
4. Stretch the balloon around the rim of the cup.
5. Insert marshmallows and discover the fun!

I cut majority of the cups before my students came to class because I knew it might be a little difficult for them. However, they did everything else after that.



Name \_\_\_\_\_ Date \_\_\_\_\_

### Marshmallow Launchers

1. Describe force. \_\_\_\_\_

2. Describe motion. \_\_\_\_\_

3. After creating your marshmallow launcher, make a prediction as to what will happen to the small marshmallow when you launch it. \_\_\_\_\_

\_\_\_\_\_

4. Now launch your small marshmallow. What happened when you launched it? \_\_\_\_\_

\_\_\_\_\_

5. Now using a much stronger pull, launch your small marshmallow again. What happened? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Now using a much softer pull, launch your small marshmallow again. What happened? \_\_\_\_\_

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\_\_\_\_\_

7. Now make a prediction as to what will happen to the larger marshmallow when you launch it.

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\_\_\_\_\_

8. Now launch your larger marshmallow. What happened when you launched it? \_\_\_\_\_

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9. Now using a much stronger pull, launch your large marshmallow again. What happened? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

10. Now using a much softer pull, launch your large marshmallow again. What happened? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

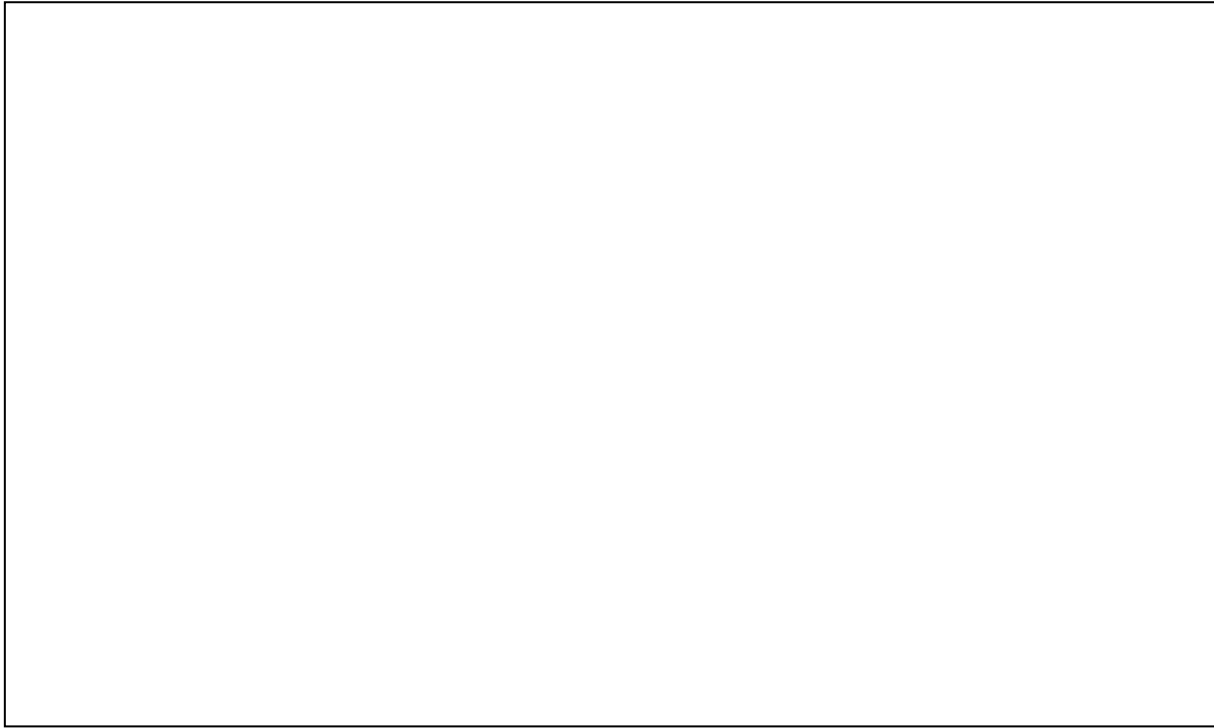
11. Explain how this experiment relates to force and motion. Does it demonstrate a force? Did you observe a motion? \_\_\_\_\_

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\_\_\_\_\_

12. Illustrate a picture of your marshmallow launcher launching the marshmallow that went the farthest distance.



13. If you could make any changes to your marshmallow launcher, what would you do? \_\_\_\_\_

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## Thank You and Credits!

Once again, thank you for purchasing this hands on experiment! Please be sure to rate my work, so that you can receive Teachers Pay Teachers credit towards future purchases.

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