Marshmallow Launchers
A Force and Motion Experiment
By: Ashley Tidwell
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.
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? ________________


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

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

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? _______________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________
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? 

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________