

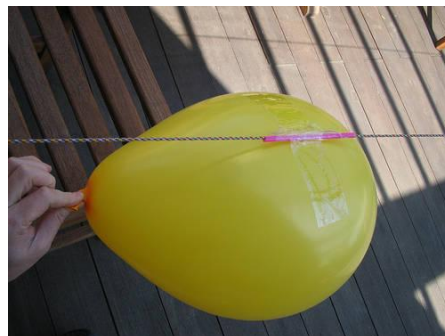
Praxis “Making Science Fun”

3, 2, 1, Ignition Lift-off!

Today we will explore the basic principles behind rocketry.

Materials:

- Balloon
- Drinking straw
- Long piece of string.
- Scotch or masking tape.



Procedure: (Remember to be sure to have your parent’s permission and they have the time to watch and help as you do your experiment.)

- Thread one end the string through the straw.
- Attach one end of the string to something on the other side of a room. Careful, you don’t want anyone to trip.
- Blow up the balloon and hold the air inside without tying it.
- Have someone hold the string taut and use tape to attach the balloon to the straw.
- Move the balloon to one end of the string so that the open end is facing the end of the string.
- With the string held level as possible, let go of the open end of the balloon and observe what happens.
- Measure and record the distance it moves.
- Repeat this experiment.

What's happening?

This activity demonstrates how rockets work. Your balloon, full of air, was the rocket. Rockets carry containers filled with substances that, when ignited, produce gases. These gases escape through openings in the rear of the rocket just like the air escaping from the balloon when you let it go. The gases going backward drive the rocket (the balloon) forward. This force demonstrates the principle of reaction. Do you think balloon shape will affect how far it travels?

Extension:

For this experiment and many others like it see:

<http://cse.ssl.berkeley.edu/AtHomeAstronomy/index.html>

This experiment is based on our “Astronomy and Sky Science” Learning Kit. Our teaching kits are loaned out FREE to provide classroom teachers and parents of home schooled children an opportunity to explore Science in interesting ways. Please consider volunteering to speak to a class about any one of our Science learning kits described on our website. We would be most appreciative to hear from you.



On January 30th, Praxis will be hosting Operation Minerva, a conference for grade 9 girls, that promotes Science, Technology, Engineering and Mathematical (STEM) based careers where students get a chance to job shadow and attend workshops. Please see our website for more details. If you are a woman currently employed in a STEM related field and are interested in volunteering 2 hours of your time so that girls attending the conference may job shadow you, please contact us.

Lorne Cooper, Regional Executive Director

PRAXIS, “Making Science Fun”. Contact Praxis at praxis@praxismh.ca, www.praxismh.ca, Tweet or follow us @PraxisMedHat, or friend us on Facebook. Address: c/o 200 7th Street S.W., Medicine Hat, AB, T1A 4K1 Phone: 403-527-5365, Fax: 403-527-6570.