STEM Kit!
Compliments of Fairport Robotics!

This month's kit:
# Balloon Rocket!

**In this kit, you will make a balloon rocket using the enclosed supplies!**

Materials:
- Balloon
- Plastic straw
- String
- Tape (2 pieces, each 5 inches long- not included)

Directions:

1. Find two objects of the same height to secure your string to, and tie or tape one end of it to one of the objects. Cut the string if it's too long.

2. Thread your string through your straw and place two pieces of tape (each about 5 inches long) near the middle of your straw.

3. Tie the loose end of your string to the other object. Make sure your string is tight! If it's not, move the objects further away from each other.
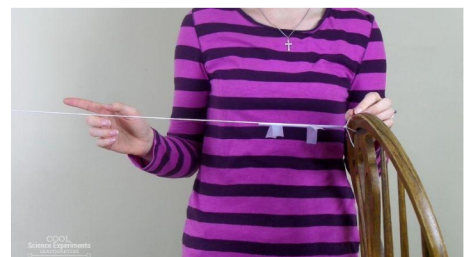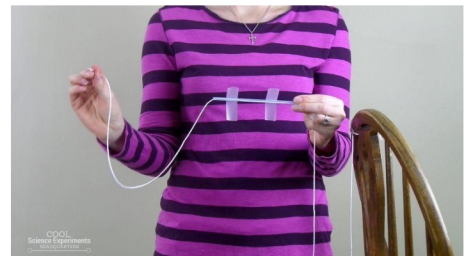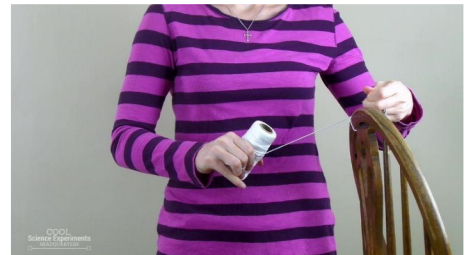
4. Blow up your balloon and stick the widest part of it to your tape. Make sure to always be holding the end of the balloon so air can't get out.
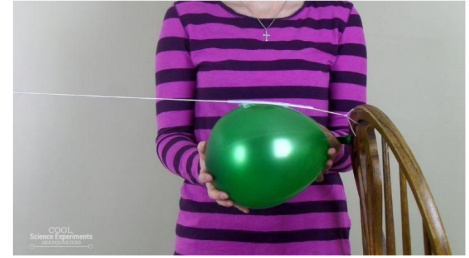
5. Okay, it's time for the good part! Hold the end of your balloon right at the end of your string and get ready to let go of the balloon! What do you think will happen? Repeat the process as many times as you'd like by blowing up the balloon, holding the end of it shut, and sliding it back to the other end of the string.
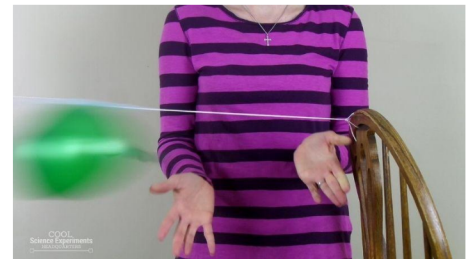
Other fun stuff!-

-Try this kit using a longer piece of string from around your house. Tie it around two trees outside, or let your imagination run wild and ask a parent for help!

-Does the balloon travel faster or slower on a string angled downwards? Upwards?

How does this rocket work?

The balloon travels across the string because of Newton's Third Law of Motion, which states that for every action (the air escaping from the balloon), there is an equal and opposite reaction (your balloon moving across the string).

If you enjoyed this STEM activity and love to be creative, consider joining a Fairport FIRST Lego League team or Fairport Robotics Team 578, Red Raider Robotics! For more information, email us at info@fairportrobotics.org.

Stay tuned for a new STEM activity next month!!!