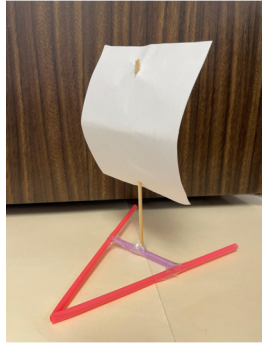


**STEM Kit!**  
**Compliments of Fairport Robotics!**

This month's kit:  
**Wind-powered sailboat!**



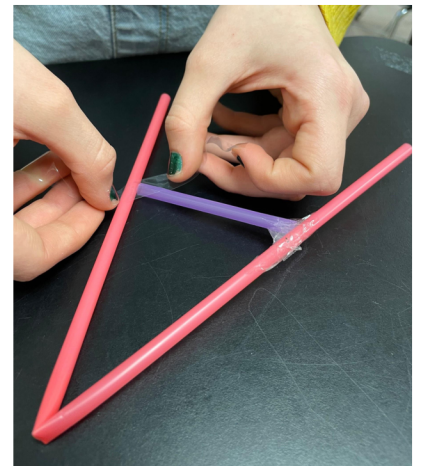
**In this kit, you will make a wind-powered sailboat using the enclosed supplies!**

**Materials:**

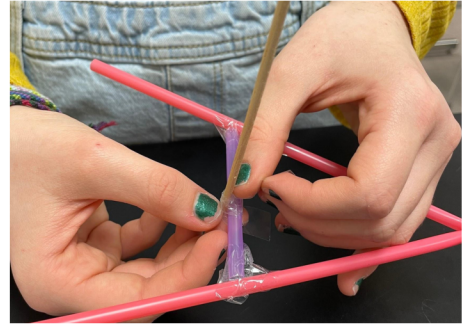
- 2 plastic straws, plus a smaller
- one 1 wooden dowel
- 4.25 x 5.5 inch piece of paper
- Tape (not included)

**Directions:**

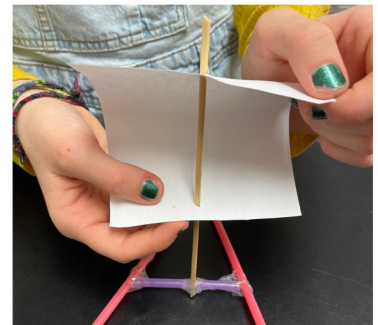
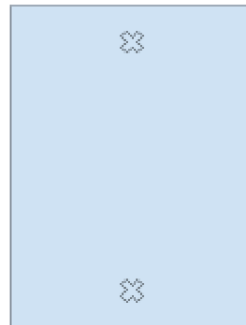
1. Using your two big straws, insert one into the other by scrunching the end of it as shown. (Ask an adult if you need help.)
  
2. Bend where the two straws meet, and cut the longer one at the end so they are both the same length.
  
3. Take the small piece of straw and place it between the two longer straws. Tape the small piece to each longer straw by wrapping your tape around where they meet. The result should look like a capital A. This is a hard step, so you might need an adult!



**4. Tape your wooden dowel to the small straw as shown. You might need to wrap the tape around it a few times. The dowel should run straight up when you set your boat down. (This is where your sail will go!)**



**5. With your dowel, poke two holes in your piece of paper as shown to the right. Then, slide the paper onto the dowel to make your sail. Tape the paper at both holes so that the sail curves. That way, it will catch wind. Voilá! Your very own sailboat! Fill your bathtub with water and place your boat inside! Blow on the**



**sail, or use a hairdryer with a parent's help to watch it zip across! Try not to get your sail wet. If you do, it can be easily replaced by cutting a new piece of paper.**

### **Other fun stuff!-**

**-Try using different size pieces of paper as your sail, or even a piece of cardstock (which is thicker than paper). Does the speed of your boat change when you blow on it?**

### **How does this boat work?**

**The sailboat travels across the water because its sail “catches” the wind, which pushes it across the water.**

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](mailto:info@fairportrobotics.org)!

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