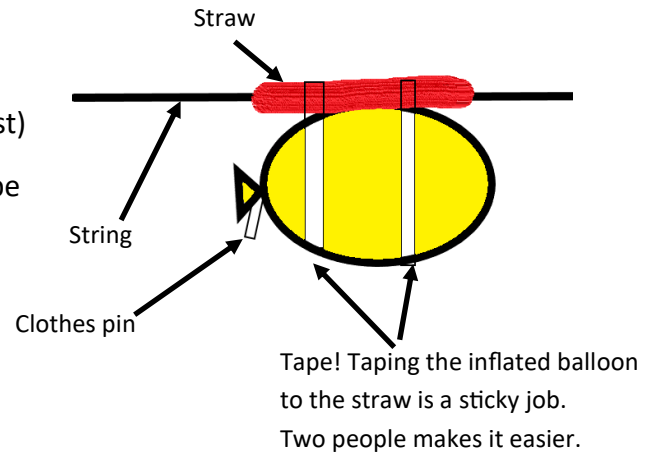


To the Moon, with a Balloon!

STEM* Activity: Using the air released from balloons (forward motion called thrust), children will explore the scientific method by sending balloons flying along a track made from string.

What you need:

- String (several pieces at least 10 feet long)
- Straws (wide milkshake or boba straws work best)
- Tape (packing tape is good but narrow sticky tape would work too)
- Balloons (latex-free)
- Clothespins (the ones with the little spring work best)



What you do:

1. Thread one straw onto each length of string. The straw should be able to easily slide back and forth on the string
2. Find two points in the room, and fasten a string so the line is stretched tight. Consider setting up several string tracks, depending on your space; creating more than one track (to different points) allows children to try different distances and reach a variety of goals without direct competition. Can you reach the moon? How about Mars?
3. Consider recruiting a volunteer to hold a “planet” at the goal as something to aim toward.
4. Blow up a balloon, twist its end, and hold it temporarily closed with a clothespin.
5. Carefully hold the balloon against a track’s straw and tape the balloon onto the straw. Allow each child to determine how their balloon should be attached (exploring the principles of physics in action).
6. Have the children stand by their balloons, ready to remove the clothespin. Count down to blast off, and watch the balloons rocket away along the string!
7. Try again with changes in how the balloon is taped to the string, balloon direction, and volume of air. Let the rocketeers discover best practices through trial and error!

(From the Collaborative Summer Library Program 2019 manual-Thanks, CSLP!)

*“STEM” stands for **science, technology, engineering, and math**. STEM can refer to the subjects individually or one or more working together, but can also mean a way of doing things that includes solving problems, asking questions, and exploring the world around us.