

# To Do To Go: Kids

Try a new To Do To Go activity each month!

## SUPPLIES

- Balloon
- Straw
- String (at least 6 feet long)
- Tape



**Your community would love to see your creations!**

Send a photo of your finished work to [todotogo@sno-isle.org](mailto:todotogo@sno-isle.org) and we'll share it on Sno-Isle Libraries social media platforms.



1. Tie or tape one end of the string to a chair, doorknob, or other support.
2. Thread the string through the straw.
3. Pull the string tight and tie it to another support in the room.
4. Blow up the balloon and pinch the end to keep the air inside. Do not tie the balloon.
5. Tape the balloon to the straw so that the opening of the balloon is horizontal with the string. The balloon will hang underneath the straw.
6. Pull the balloon all the way back to the end of the string (the starting line). The balloon opening will be against the support.
7. Let go of the balloon and watch it fly!

**Find an extra challenge and check out the book list on the back!**

## Need an extra challenge?

Add "cargo" to your balloon by making a small container out of paper or cereal boxes and attach it to the straw. Place small items inside such as paper clips, bottle caps or candy, and see how far they can go!

## How Does It Work?

Newton's Third Law of Motion states that for every action there is an equal and opposite reaction. In this case the air leaving the balloon is the action, and the balloon moving forward is the reaction.

Try adding more or less air to the balloon to see if you get a different reaction!

# Reading Suggestions

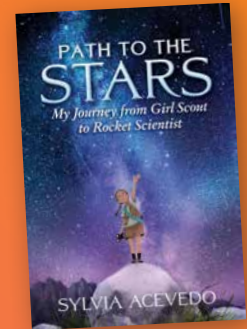
Pick these up at your local library!



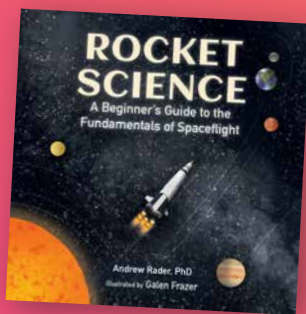
***The Flying Machine Book:  
Build and Launch 35  
Rockets, Gliders, Helicopters,  
Boomerangs and More***  
by Bobby Mercer



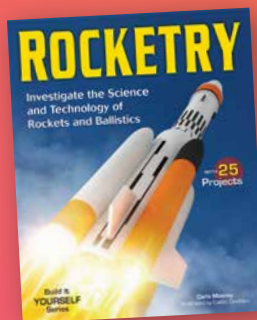
***Lucy and the  
Rocket Dog***  
by Will Buckingham



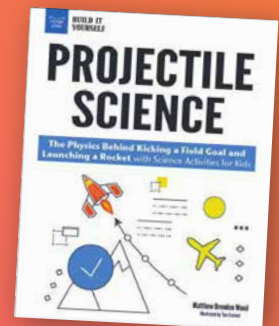
***Path to the Stars:  
My Journey  
from Girl Scout  
to Rocket Scientist***  
by Sylvia Acevedo



***Rocket Science:  
A Beginner's Guide  
to the Fundamentals  
of Spaceflight***  
by Andres Rader



***Rocketry:  
Investigate the Science  
and Technology of  
Rockets and Ballistics***  
by Carla Mooney



***Projectile Science:  
The Physics Behind Kicking  
a Field Goal and  
Launching a Rocket***  
by Matthew Brenden Wood