



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences --particularly students of color and girls -- by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

Build your own parachute and learn how design affects flight.



Supplies Required:

- 4 sheets of tissue paper
- 2 yards of string
- Scissors
- Tape
- Metal washer, or other small item as a weight

Video

Playtime with parachutes: <https://tinyurl.com/47hp72ck>

Overview

Parachutes are used to help slow things down. They use a force called drag, which is when there is air resistance, or air is pushing against a surface. As the air pushes against the parachute, the person or things attached to the parachute slows down. The size and shape of the parachute can affect the speed at which it falls.



Instructions

1. The challenge is to create a parachute that falls to the ground as slowly as possible to get your payload to the ground safely with the materials provided. The parachute will be released from a distance of approximately 3 metres.
2. Attach 8 pieces of string of the same length of your choice to each corner of the tissue paper.
3. Tie or tape the pieces of string to the object you are using as a weight.
4. Use a chair or find a high spot to drop your parachute and test how well it worked, noting changes that you think would make it fall more slowly.
5. Test is out and make changes!

Additional Resources

1. How does a parachute work? <https://tinyurl.com/e86s6dxs>

Share It Out

Share on social media: Record a video or take a picture of your activity and post the results online using the hashtags:

#Parachute
#ProjectExploration
#StemAtHome

Tag a friend and challenge them to do it, too!

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634

www.projectexploration.org