



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:

Learn about weight and balance, then create a sculpture that is perfectly balanced.



Supplies Required:

- 1 Cork
- 2 or more bamboo skewers
- 1 tooth pick (can also use a paperclip or push pin)
- 2 or more marshmallows (can also use modeling clay or play dough)

Video

Watch this video from PBS Kids to see the Balance Magic Activity in action: <https://pbskids.org/designsquad/build/balance-magic/>

Overview

Gravity pulls everything down to the ground, but perfectly balanced objects can seem to defy gravity. Think of a seesaw, if two people who weigh the exact same were to sit on either side then the seesaw would be balanced and neither end would be touching the ground. If one person is heavier, then that side of the seesaw will touch the ground.

Instructions



1. Use the cork to create the body of your sculpture.
2. Insert a skewer at an angle so that its end is below the cork.
3. Repeat with the second skewer but on the opposite side of the cork.
4. Slide a marshmallow onto the end of each skewer.
5. Test it by placing the cork on on your fingertip.
6. TIP: If your sculpture isn't balancing... Adjust the arms so that more than half the weight is below the resting point and is evenly distributed.
7. For an extra challenge, make the body even smaller by attaching a toothpick to the bottom of the cork.

Additional Resources

1. Check out the PSB Kids website for more ways to extend this activity: <https://pbskids.org/designsquad/build/balance-magic/>
2. See what other kids have made and add your own design: <https://pbskids.org/designsquad/project/72469/>

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:

#BalancingMagic
#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