



# Minds in Motion

**Activity Rundown:** Looking for an engaging STEM activity to do this Father's Day? What better way to spend the afternoon than to build some catapults with Dad and the ones you love! After building, take them out for some target practice!

## You will need:

- ☐ Jumbo craft sticks
- ☐ Rubberbands
- ☐ String
- ☐ Duct tape
- ☐ Hot glue/hot glue gun
- ☐ Plastic bottle cap or cup
- ☐ 1 small palm-size rock or something heavy to act as a weight
- ☐ Items that fit in the cup to launch
- ☐ Paper and tape to make a target(s)

## Let's do it!

Step 1. Set two craft sticks down end to end, now glue a third on top of these to connect them and make one long stick.

Step 2. Repeat this process seven more times. You now have the eight beams that make up the body of your catapult.

Step 3. Now take two of these beams, cross them over each other near the end and glue them together.

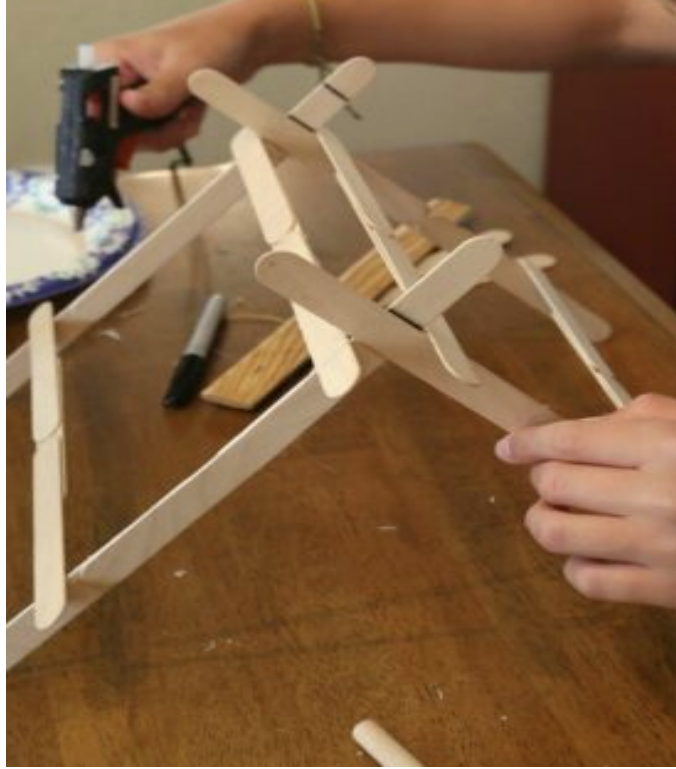


Step 4. Repeat step 3 one more time.

Step 5. Now using the remaining four beams as cross braces assemble the body of the catapult as shown below.

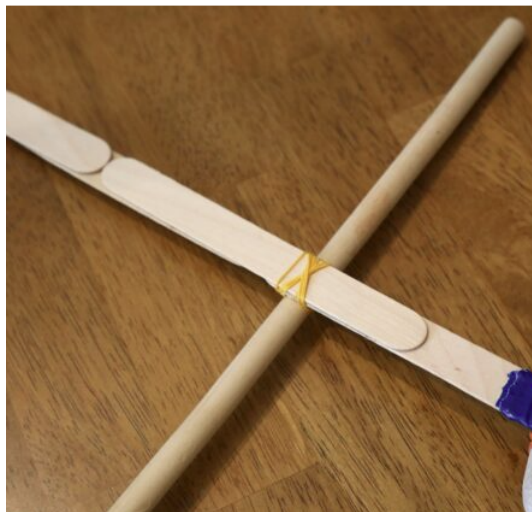


# Minds in Motion



Step 6. Set aside the base of the catapult and grab four craft sticks, create a beam using these four sticks.

Step 7. Now using a rubber band, secure this beam to the middle of the wooden dowel, about  $\frac{3}{4}$  of the way down the beam. This forms the catapult arm.



Step 8. Glue the cup or bottle cap to the longer end of the catapult arm.

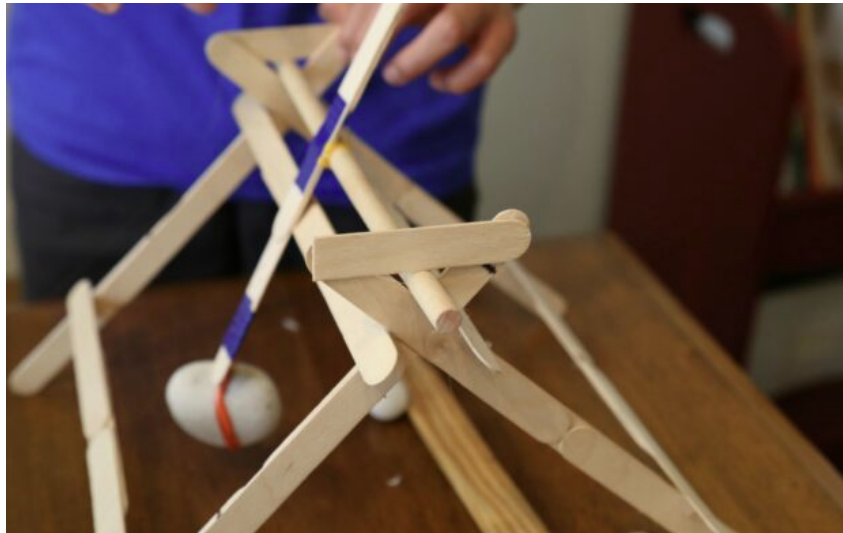


# Minds in Motion

Step 9. Using duct tape, attach the rock to the shorter end of the catapult arm.



Step 10. Place the catapult arm in the slots of the catapult base, and using small pieces of craft sticks lock it in place.



Step 11. Test out your catapult with various projectiles to see which can go the farthest or are the most accurate!

**Did you Know:** A catapult is a device used to launch a projectile, without the aid of explosives. Catapults have been used for thousands of years, and come in all shapes and sizes. They can be as simple as a slingshot, or as complicated as a large trebuchet used to launch huge boulders to knock down a castle wall. More information about catapults in the resources section below.



### Resources:

- <https://frugalfun4boys.com/build-test-craft-stick-trebuchet/>
- <https://gosciencekids.com/catapult-stem-project/>

### Reach out!

We would love to hear from you about all the amazing STEM projects you are doing at home! Show us your finished products on any of the following social media platforms by tagging us or by using the following hashtags. We hope these projects have brought some excitement to your day during these difficult times.

Let us know how we did! Please [click here](#) to fill out a short survey on how well we did and what you would like to see more of in the future. Thank you!

Twitter: **@MyMindsInMotion**

Facebook: **@mindsinmotion2014 & @ucactiveliving**

Instagram: **@ucalgaryactive**

Please use the following hashtags!

**#ucalgarycamps #ucalgarytogether**

**We hope you enjoyed our STEM Father's Day activity! Everyone at Minds in Motion would like to wish you and those closest to you a happy Father's Day!**