

MATERIALS LIST:

- 6 jumbo craft sticks
- 4-5 rubber bands
- Something small and soft to launch (cotton balls or pom poms work well)



3, 2, 1... LAUNCH!

The earliest catapults date back to the 4th century BCE. They have been used to send projectiles soaring without needing gunpowder or other chemicals. Using stored energy through tension, the sudden release can send things flying!

TRY THIS:

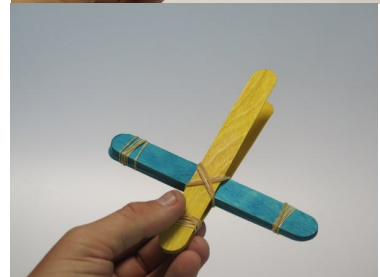
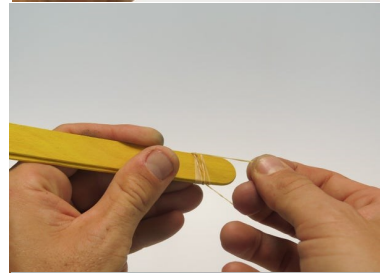
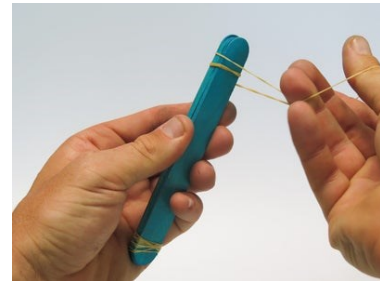
- ⇒ Remix the design! What would happen if you use more craft sticks? What if you took some away?
- ⇒ Can you engineer a way for the catapult to hold your projectile more effectively? Think of things you have around the house that you can add!
- ⇒ What other changes would you make to your catapult to make it work better? Brainstorm and test it out!

DIY Catapult

PROCEDURE:

Have science fun as a family! Complete activities with parental supervision.

1. Stack four craft sticks together and secure them together with rubber band them at both ends creating sort of a craft stick sandwich. This creates what the *fulcrum*.
2. Take two other craft sticks and wrap a rubber band around one end.
3. Wedge the stack of four sticks (fulcrum) between the two sticks. This creates the tension you need for a successful launch.
4. Using another rubber band or two, secure the fulcrum to the two sticks by making an X out of the rubber bands.
5. Test it out! With the catapult on the table, hold your soft projectile to the stick that is sticking up. Press the stick down to increase tension and then let go! Does it fling your item?



6. Be sure to take a picture or video or even share your catapult in action in the Facebook comments on the Buffalo Museum of Science or Tiff Nature Preserve pages!

Source: Instructables