

How To...

Day 28: Make a lolly stick catapult

Another fab forces investigation, this time using lolly sticks, elastic bands and pom-poms (and reusing the milk bottle lid from yesterday's hockey investigation!)



Instructions

1. Stack six lolly sticks on top of each other.
2. Secure each end of the stack with an elastic band. It's really important that the elastic bands are tight enough to hold the bundle together.
3. Place two sticks on top of the other. Secure one end of the sticks with an elastic band.
4. Open the free end of the two lolly sticks, so the whole thing looks like a beak.
5. Push the bundle of six sticks inside the beak shape as far as it can go. It should look a bit like a wonky cross, where one of the lines is held open.
6. Wind an elastic band around the point where the two bundles meet – the middle of the wonky cross shape.
7. Hold the catapult flat on the table and twang the top of the double stick 'beak'. This is the arm of the catapult, so it should twang freely.
8. Adjust the elastic bands until the catapult has the maximum amount of spring.
9. Use sticky tack to attach a bottle lid to the end of the catapult arm. This will act as a handy bucket to hold the pom-poms.
10. Put a pom-pom in the bottle lid bucket, push the arm down, and then release it to watch the pom-pom fly.
11. Who can make a pom-pom fly the furthest?

What happens if you move the fulcrum? (the pivot point around which the lever turns or is supported)

<https://www.scouts.org.uk/activities/lolly-stick-catapults/>

<https://www.science-sparks.com/how-to-make-a-catapult/>