

Build your own Candy Corn Catapult

Using any of the following materials, design and build your own candy catapult.

Suggested Materials:

- Jumbo craft sticks (in Halloween colours — *optional*)
- Rubberbands
- Glue or glue gun
- Bottle Cap
- Mini Cauldrons and Pumpkins
- Candy

Directions :

1. To start engineering your catapult, stack eight craft sticks together, one on top of the other and wrap elastics around the ends to hold them together. This helps create some additional stability and strength. This stack is going to be your fulcrum.
2. Take a single craft stick and place it perpendicular to the stack on the bottom, start by setting the fulcrum about a quarter of the way up the single stick. For extra stability you can slide the popsicle stick between the last stick in the fulcrum, so it is sandwiched in.
3. Add a second single stick on top of the fulcrum, also perpendicular to the stack so that it lines up with the bottom stick. Attach the two sticks with a rubber band on the end so you create a V shape.
4. You can secure the V to the fulcrum using another rubber band in a figure 8 pattern. This is completely optional. We prefer not to do this so we can easily adjust our designs to get the most power, however, if you have younger kids the stability and structure will make it easier for them to use.
5. On the opposite end from the rubber band attaching the two sticks, glue on the bottle cap. Ensure you leave a little bit of room at the end for your fingers to push down to launch.

***Building catapults is a design and engineering challenge. So challenge your kids to vary their designs so you can evaluate how it affects the effectiveness and power of the final design.

Some variations to consider:

- Have the kids vary how far they set their perpendicular sticks up the stack.
- Consider changing the height of the stack to see how that affects the results.
- Glue another craft stick onto your top launching stick to make it longer before adding the bottle cap.

Encourage your kids to come up with other design alterations and get creative!

