

Catapult Construction and Testing

This engineering and physics experiment is designed to get youth excited about simple machines. You will build your own catapult and test how far it can launch different objects.



RUSH

Supplies and Instructions

- 10 Jumbo popsicle sticks
- 5 Rubber bands
- 1 Plastic spoon
- A variety of small objects to test and launch



- See step by step instructions on the other side of this hand-out.

Questions for Discussion

- What type of machine is a catapult? It is a lever. When you pull down on the arm of the lever all of the energy gets stored up. When you release it, the energy pushes the object into the air.
- What other levers have you seen?
- What objects will go the furthest distance? Test each object to find out.
- Why do you think some objects go further than others?

This activity was adapted from ACT Now: a statewide coalition that works to ensure youth have access to quality and affordable afterschool opportunities

Build a Catapult Handout

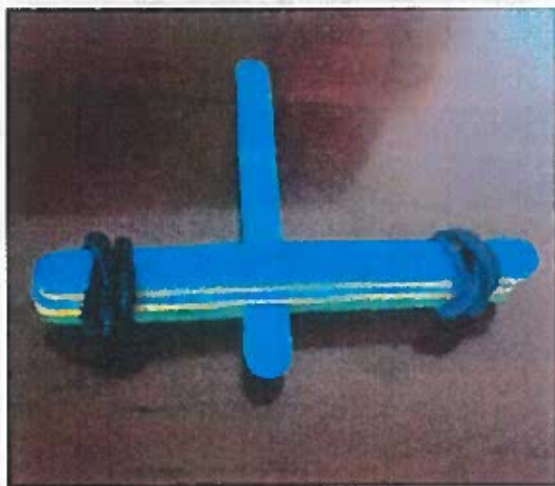
Step 1: Take 8 Popsicle sticks and stack them on top of one another. Wrap a rubber band around each end of your stack.



Step 3: Put a second stick on top of your stack and wrap a rubber band around the bottom of the 2 Popsicle sticks.



Step 2: Push one of the sticks through the stack just below the top stick.



Step 4: Place your spoon, facing up, on top of the stick that is on top. Wrap a rubber band around the bottom to attach the spoon to the stack and another rubber band (or tape) around the top.

