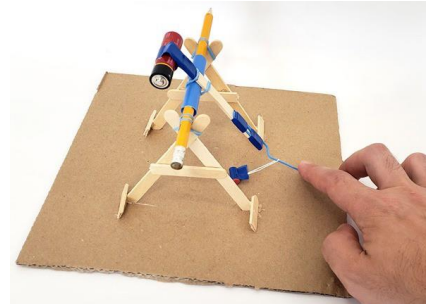




## Build a catapult / trebuchet

### Materials

- hot glue gun, tape, scissors
- ice cream sticks
- rubber bands
- wooden dowel or pencil
- a straw wider than the dowel/pencil
- a heavy weight – batteries or washers
- string
- paperclip
- small rubber to shoot

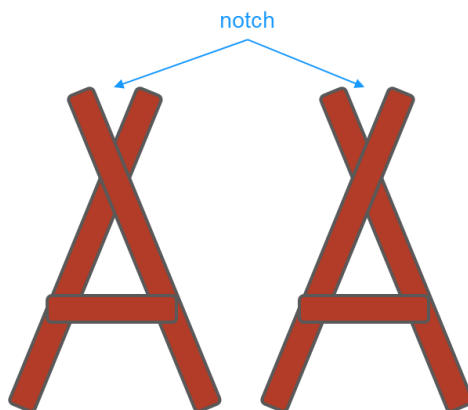


Credit: Ben Finio, PhD, Science Buddies

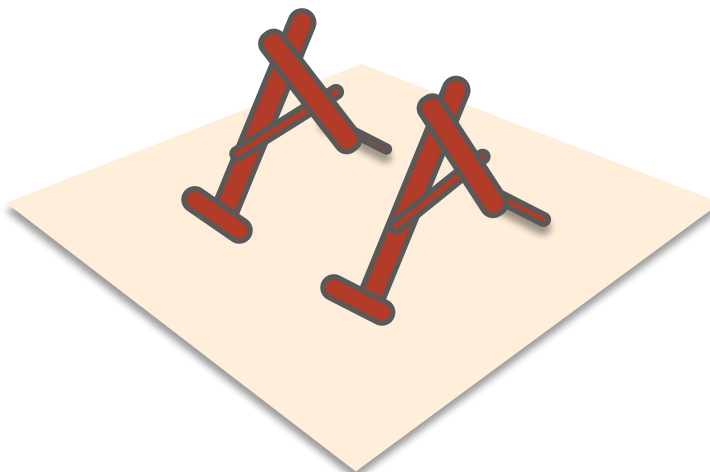
[Original Source: Science Buddies](#)

### Instructions

1. Build two (2) A-frames using the ice cream sticks and glue/tape them together. Make sure there is a little notch at the top.



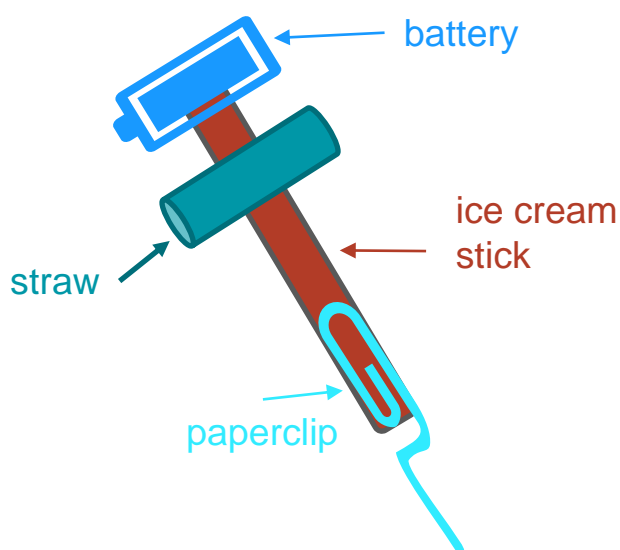
2. Secure the two frames to a cardboard (or other) base next to each other. This can be done by cutting notches in the cardboard for the bottoms of the frame to slot into, then gluing extra ice cream stick pieced at the foot of the frames to secure them.





## Build a catapult / trebuchet

3. Tape the weight (battery, washers, etc) onto the end of another ice cream stick. **WARNING** - DO NOT hot glue batteries!
4. Unwind one end of a paperclip, until it is almost straight but leave a small bend. This bend will serve as a hook to hold the "sling".
5. Tape the flat side of the paperclip to the other end of the ice cream stick with the weight.
6. Cut a piece of straw that is the same length as the battery weight.
7. Attach the straw to the ice cream stick just below the battery.



8. Thread a pencil or dowel through the straw and place the pencil (arm) in the notches of the A-frames. Secure it with tape.
9. Tape a loop of string onto a small eraser or object. This is your projectile. The projectile must be lighter than the battery weight.
10. Loop the string through the paperclip, pull the arm down and fire!

