

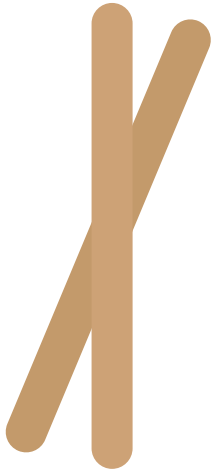
CATAPULT



INNOVATION WYRKSHOP

INNOVATEHER

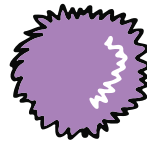
MATERIALS PROVIDED



popsicle sticks



small plastic cup



ammunition



straw piece

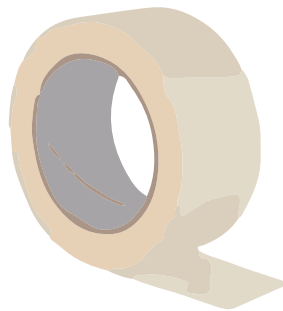


rubber band



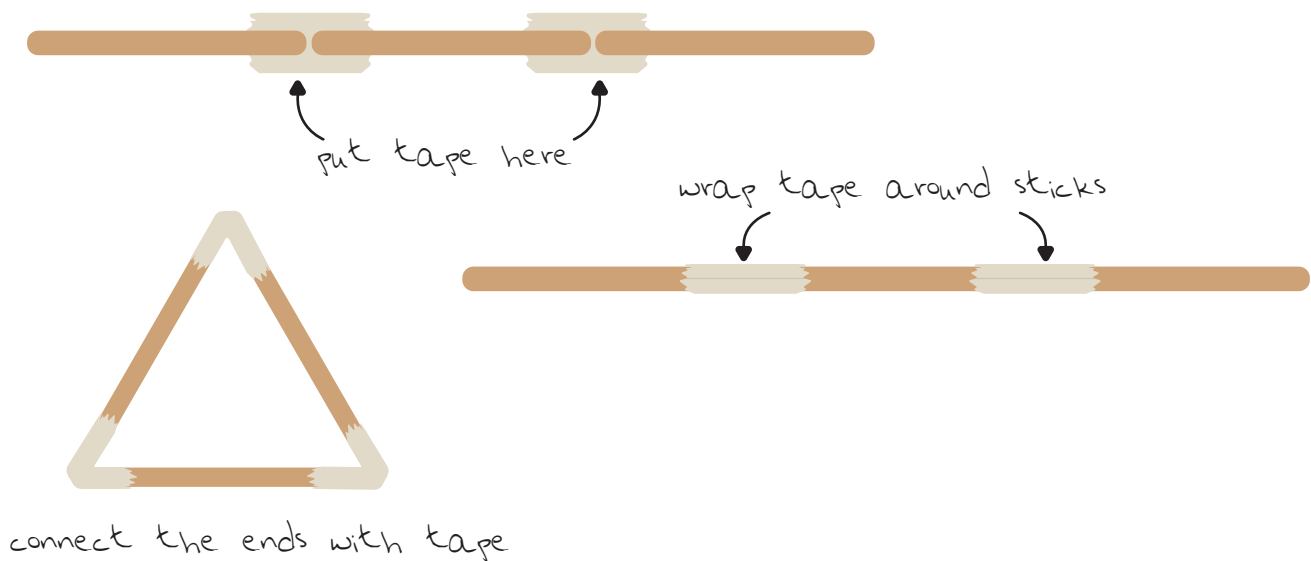
wooden sticks

MATERIALS NEEDED

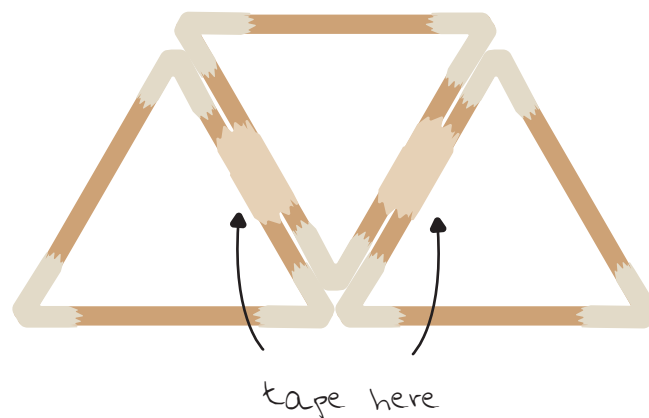


masking tape
(regular tape works too)

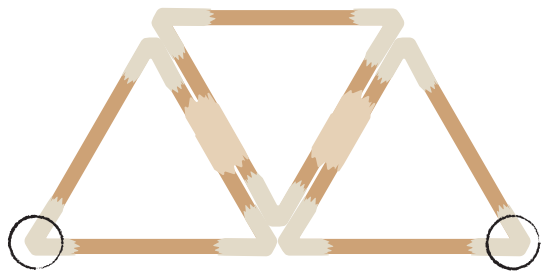
STEP 1: We'll start by making the catapult base which consists of three triangles. To make the triangle, you'll line up the popsicle sticks in a line and tape around the spots where they meet. Finish the triangle by taking a third piece of tape and securing the two ends of the line together.



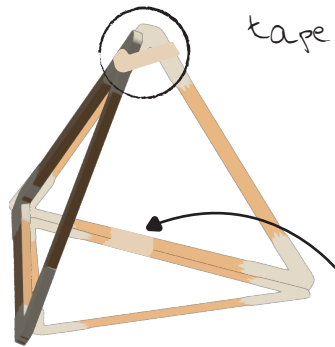
STEP 2: Repeat step one until you have three triangles. Line them up next to each other in a row to make a trapezoid (the end triangles pointing upward, and the middle triangle pointing down). Tape the triangles together where they meet, but only tape the top sides, don't wrap the tape all the way around.



STEP 3: Take the two triangles on the end and fold them up so that the two ends meet at the top to form a pyramid shape. Tape the top pieces together, and then reinforce the parts where the triangle sides connect with at least two pieces of tape wrapped around both sides.

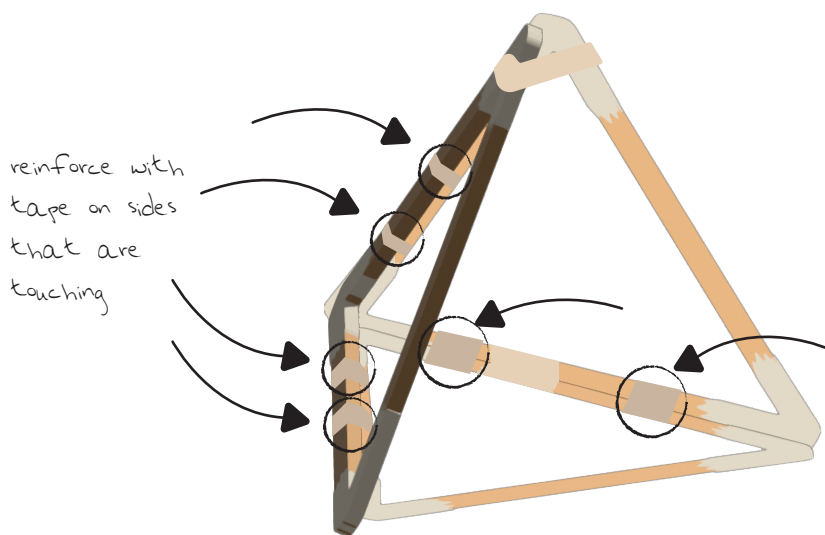


bring the two points together



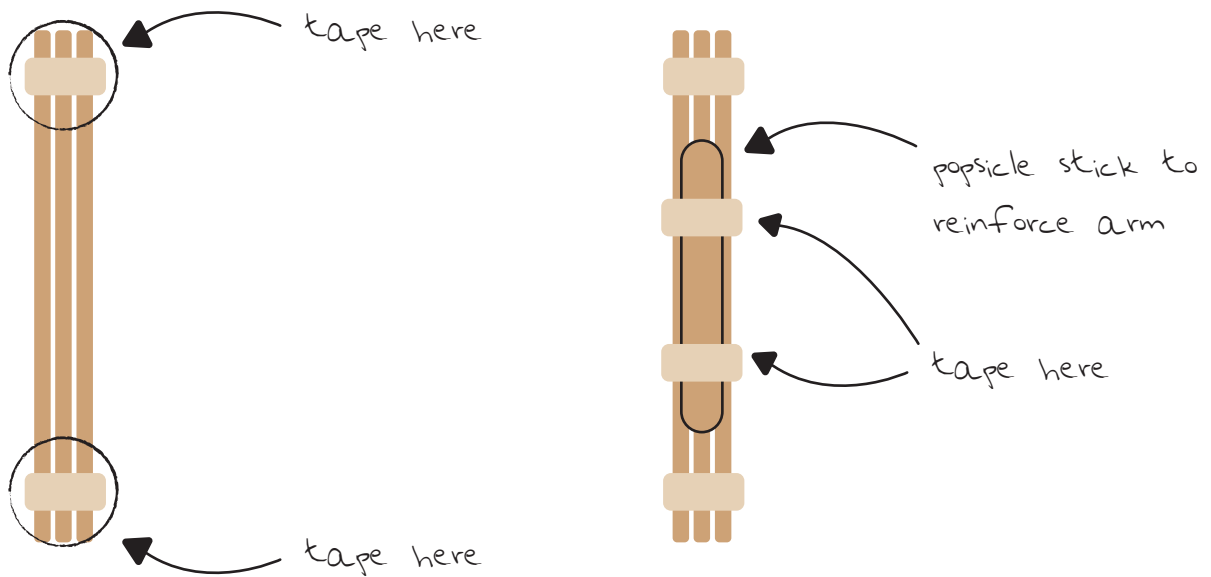
tape them together

by placing the tape on one side you made a joint

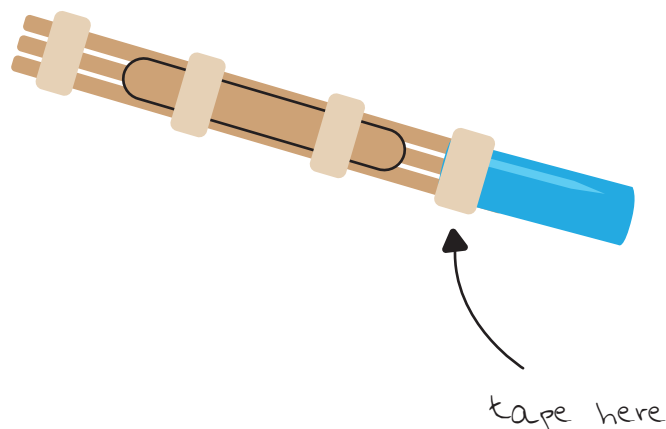


reinforce with tape on sides that are touching

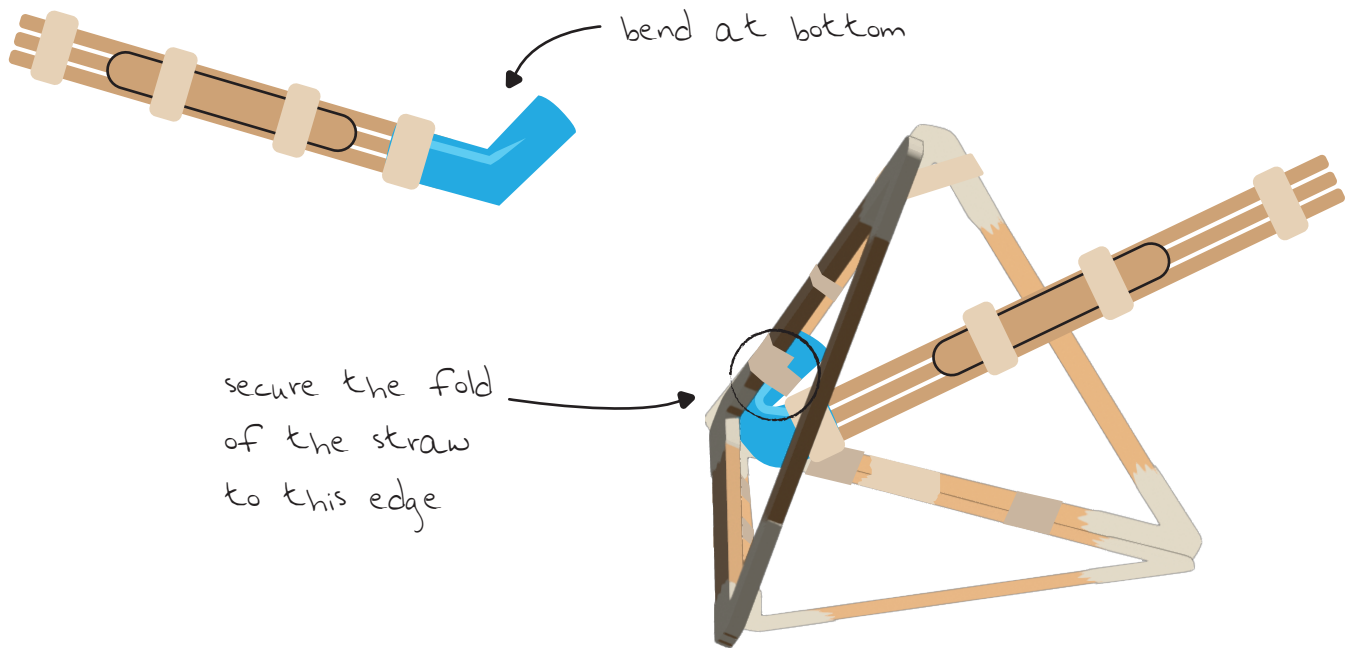
STEP 4: Now let's make the catapult arm. Take the wooden sticks and tape them on either end, side-by-side. Then, place another popsicle stick in the middle and tape around the popsicle stick and the wooden rods to generate more support for the arm.



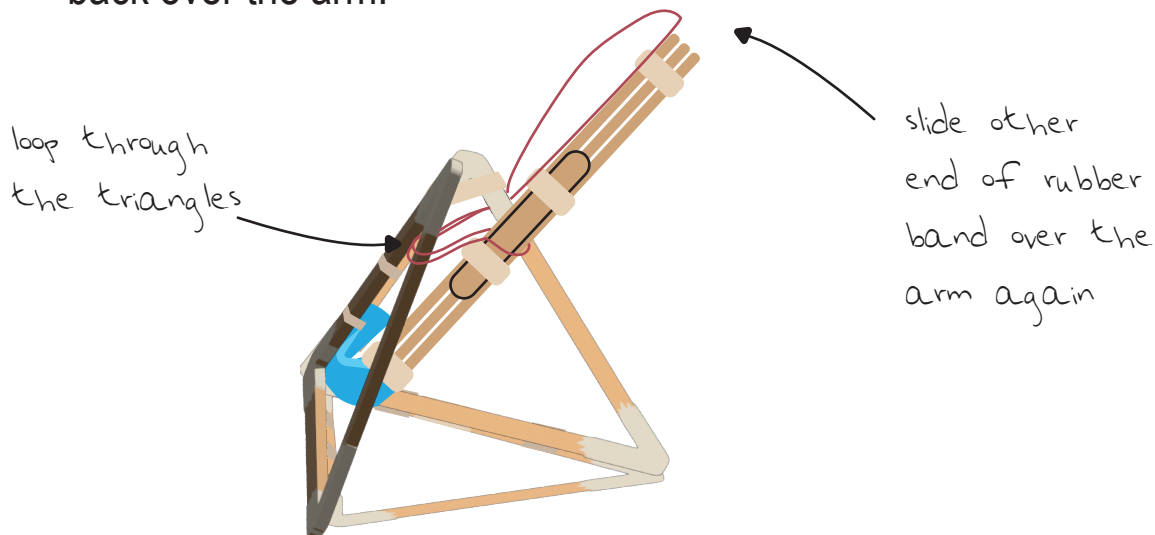
STEP 5: Take the straw piece and fit it over the wooden sticks on the bottom. If you can't fit it over all of them, try and fit over at least two of them. Secure with tape.



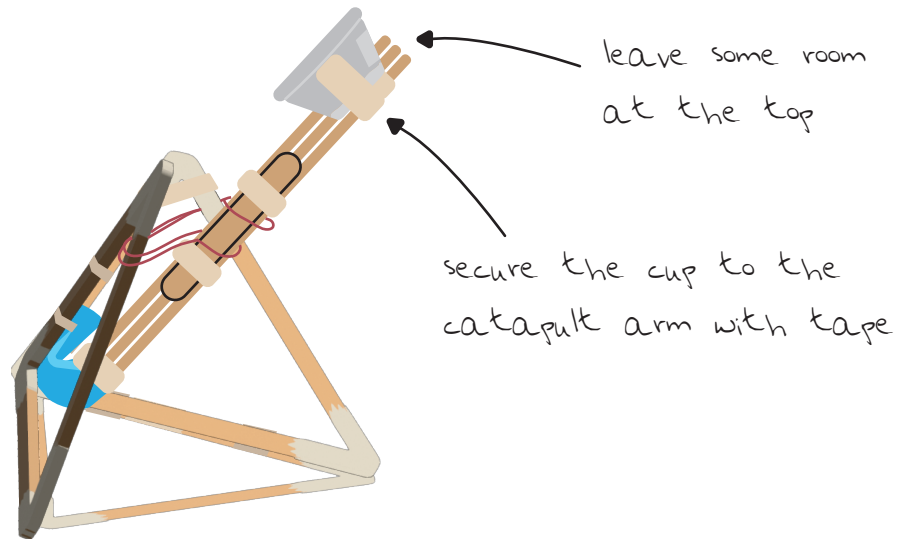
STEP 6: Bend the straw and place it in the open side of the pyramid and secure it in the bottom corner. The fold of the straw should be up against the edge where the two triangles meet. Secure the fold of the straw to that edge.



STEP 7: Take the rubber band. Slide the rubber band over the arm of the catapult. Next you're going to lace the rubber band through the two triangles and stretch it up to slide it back over the arm.



STEP 8: Take the plastic cup and place it near the top of the arm. Leave a little bit of room at the top so you can pull the arm down. Use tape to secure the cup onto the arm.



STEP 9: Add some ammunition in the cup, and while holding one hand on the catapult base (the pyramid), use your other hand to pull the catapult arm down. Then let it go! Now you're ready to lay siege to a Lego castle. Go forth and conquer!

