

Popsicle Stick Catapult

Instructions By: Kalif Publishing, www.stormthecastle.com

Materials

- 32 popsicle sticks
- Masking tape
- Pencil
- Rubber Band
- Scissors
- 6" x 6" paper



PURPOSE: To build a bridge spanning twelve inches that will hold 50 lbs. The bridge is to be made of only popsicle sticks and glue.

Catapult Body

1. Lay out your tape with the sticky side up. Place two sticks end to end right on it. Don't wrap them up yet.



2. Place a third stick on top of the first two sticks, right in the middle. Now wrap the tape around all three. Do at least two full revolutions of the tape.



3. Make three of these. This is the base for your first triangle.

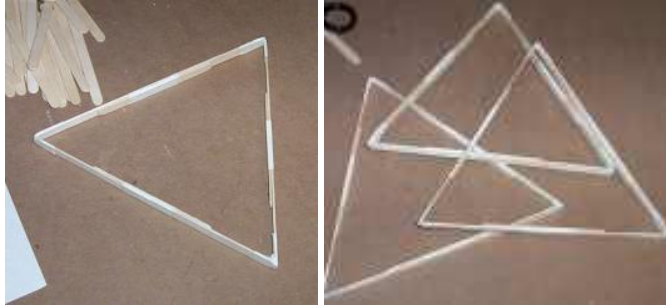


4. Place your three Popsicle stick assemblies end to end and tape them together. Use at least three wraps of tape at the joints to make it nice and strong.



Popsicle Stick Catapult

5. Now fold the length of sticks into a triangle and tape the end together. You now have your first triangle. Do this process two more times so you have three triangles.



6. Now hold two of the triangles together side by side and tape them only on one side. The red arrow shows the side that I have taped together. Our Geodesic triangle is going to tape shape now.



7. Now lay one triangle down on the table and splitting the legs on the two you taped together slide them right over the one on the table.
8. Here is the completed triangle, now all that remains is to tape all the shapes together.



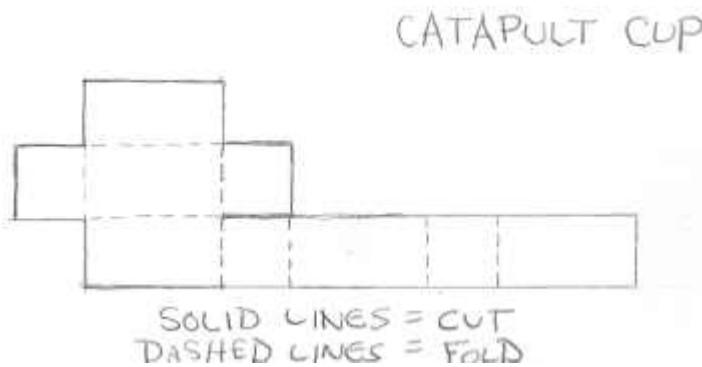
Popsicle Stick Catapult

Catapult Arm

1. Put three Popsicle sticks end to end, with two centered on top and tape in place



2. Cut out your paper cup template and fold along the dotted lines. Then tape it to the arm of your catapult. Don't tape it to the end of the arm, affix it about an inch from the end so you have room to press down the arm with your finger.



3. Now wrap one end of the rubber band around the catapult arm just under the cup and tape it firmly in place.



4. Using a couple of pieces of tape, connect the other end of the catapult arm where the three triangles meet. This is a bit tricky to do, but try to secure the catapult arm firmly yet freely. Think of the tape as being a kind of a hinge.



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5. Wrap the other end of the rubber band around the top of the catapult and tape it firmly into place. If you do not have a large rubber band you can chain a group of small ones together then use them. Experiment with the rubber bands and get a power set up that you like.



Congratulations! Your Popsicle Stick Catapult is complete!

