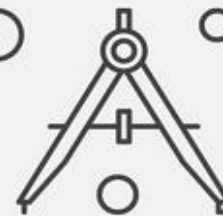
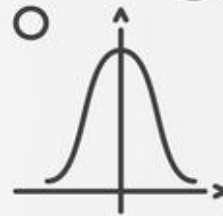
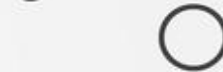
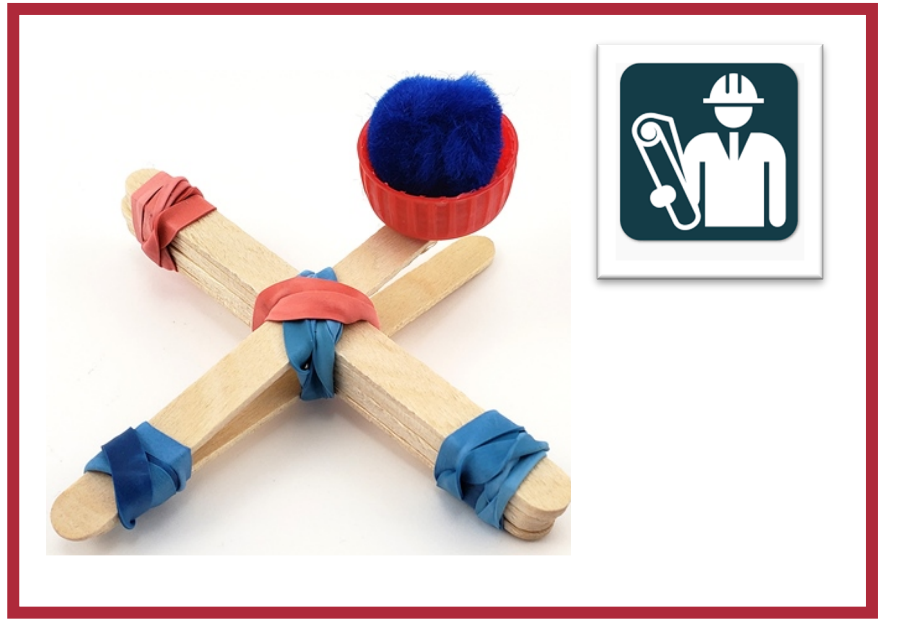


YOUR CHALLENGE Build a lollipop stick catapult



STEP 1

Gather Your Materials



8 Lollipop sticks



5 Rubber bands



Glue



Plastic bottle top



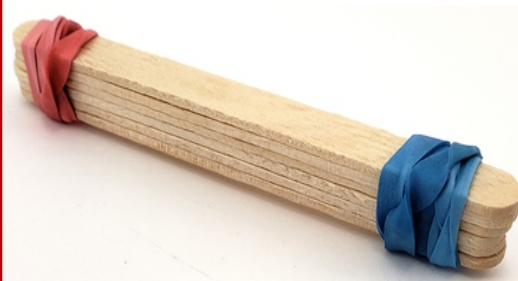
**Cotton ball (or
paper ball)**

STEP 2

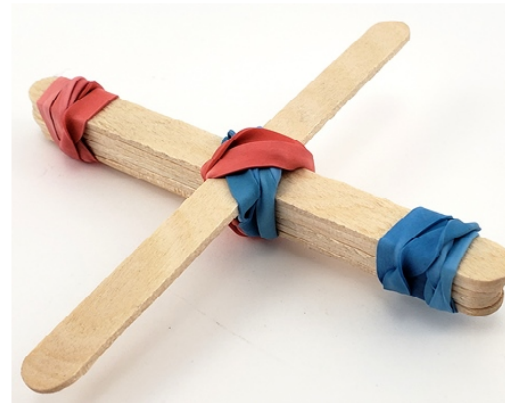
Begin your build – Phase I

Why not
decorate your
lollipop sticks
before you
begin 😊

1. Take six lollipop sticks, stack them one on top of the other. Secure these sticks together by wrapping rubber bands around both ends of the stack. You will anchor the launching stick to this stack, as described in the next step.



2. To add the launching stick take one stick and attach it perpendicular to the stack you just made, in the middle, so you get a cross shape. You can do this with one or two rubber bands that are crossed in an X over the sticks. If you cross it this way, the stick will stay straight.

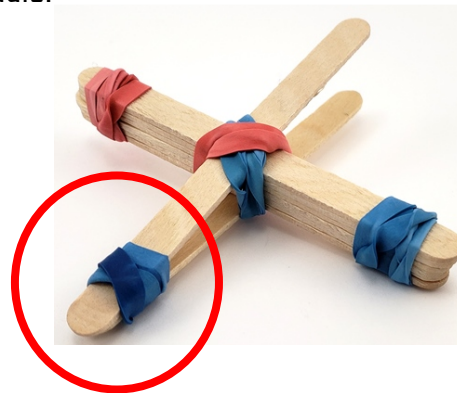


STEP 3

Continue your build – Phase 2

Test as you go along to make sure your design is working!

3. Add the base by attaching a stick to one end of the launching stick with a rubber band. If it were not for the stack of sticks in between, the launching stick would fall flat on top of the base. Now the launching stick and the base form a V shape lying on its side with the stack of sticks in the middle.



4. Put your catapult on its base, locate the end of the launching stick that sticks up and glue the bottle cap there so it forms a small cup to hold the cotton ball. Wait until the glue is dry!

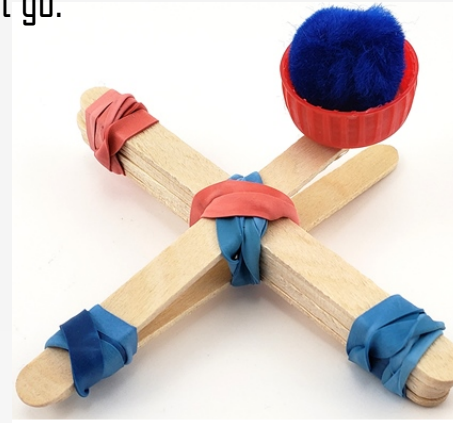


STEP 4

Have fun launching !

Put your catapult in an open area on a flat surface such as a table or an open space on a hard floor. Clear about a meter of open space for the cotton ball to fly and land.

Place a cotton ball in the launching cup, push the cup down just a little bit and let go.



Have you any ideas on improving your design?

Can you set up a target to aim at?

How far can you launch your ball?



Send us a picture of your project



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