DIYs » Stem Activities » Marvelous Mechanics Motion » Age 6 - 8 » Catapult

about levers, energy conversion, and other STEM concepts along the way.



Materials Needed

10 ice lolly sticks Bottle cap Double-sided tape Rubber bands Paint Paintbrushes Paint palette



Step-by-step tutorial



Paint the ice lolly sticks in your favourite colours. Wait for them to dry before assembling the catapult.



Step 2

Stack 8 ice lolly sticks together and secure them at both ends with rubber bands to create the catapult base.



Step 3

Insert one ice lolly stick vertically between the 7th and 8th sticks of the base.



Step 4

Secure it by wrapping rubber bands in an X pattern.



Step 5

Take the final ice lolly stick and position it on top of the base, aligning it with the ninth stick to create a "V" shape. Secure it with rubber bands. This will be the launching arm.



Using double-sided tape, attach the plastic bottle cap to the end of the top ice lolly stick, positioned like a cup facing upward. This will be the launcher.



Step 7

Your catapult is now ready for safe launching!



The Science Behind It:

When you've built your catapult, you've created a simple lever model. Try changing the length of the lever or the position of the fulcrum to see if objects launch closer or further!

Objects can be launched because the rubber bands store elastic potential energy when stretched. As the ice lolly stick bends backward, elastic potential energy builds up. When released, the rubber bands return to their original shape, and this quick release converts the stored elastic potential energy into kinetic energy, launching the pompom into the air.