

Activity: Rubber Band Boat

On SCOPE's Things that... swim episode, you saw Julia make a rubber band powered boat. Here's how she did it:



What you need:

Milk carton
Scissors
Sticky tape
Stapler
Ice cream sticks
Strong rubber band
Somewhere to test your creation (sink, bathtub or pool)

What to do:

1. First, cut the milk carton in half - one half is going to be the hull of your boat.
2. Firmly attach an ice cream stick to either side of the square end of the milk carton, so half the stick is on the hull and half is sticking out the back.
3. To make the paddle, cut out some rectangles from the left over parts of the milk carton and staple them together to make one strong rectangular paddle.
4. Loop the rubber band around the sticks, place the paddle in the rubber band and twist it around and around until the band is wound nice and tight- but don't let go yet!
5. Put your boat in the water and let go of the paddle!
6. Try making different sized propellers and see how it affects the movement of the boat in the water.

What's happening?

Well, the boat moves because of the stored energy in the rubber band. The more stretched the rubber is, the more stored energy it has. When you let it go, that stored energy is converted into kinetic energy, which spins the propeller, pushing the water in one direction and moving the boat in the other direction!