

Boats: 1. Elastic paddle boat

(Czech Republic)

Background

Energy is stored in the rubber band which is attached to the paddle wheel. As the paddle wheel is wound, the attached rubber band also winds, storing muscle energy. When released the rubber band unwinds, in turn causing the paddle wheel to rotate and the boat to move.

You will need:

- ✓ Lollipop sticks
- ✓ Elastic band
- ✓ Hot glue gun
- ✓ Sharp knife
- ✓ Small saw

Follow these steps:

1. Using lollipop sticks and a hot glue gun construct a boat as shown above (the first picture shows the boat from above, the second shows the underside of the boat).
2. To make the paddle: Use another lollipop stick. Cut off two small identical pieces.
3. Round both ends of each of the two pieces.
4. Use a small saw to cut a notch halfway along each piece, cutting down past halfway in each stick.
5. Click these two pieces together to make a paddle.

6. Wind the elastic band through the paddle and over each end of the back of the boat.
7. Wind the paddle backwards, put the boat in water and release.

So what happened?

The boat will speed forwards in the water.

What next?

Try making other elastic band boats, changing the type of material the boat is made from, the material used to make the paddles and different sized elastic bands.

