

We can build our own boats at home. They can't travel quite as far but they're still plenty of fun!

Make your own boats

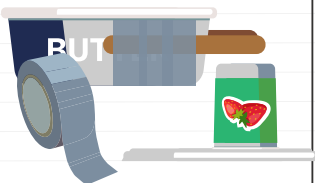
Life
SCIENCE FOR ALL

How to make a paddletub

Wind it up and watch it swim!

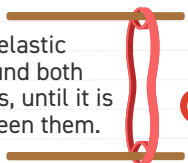
STEP 1

Using heavy duty tape, stick two lolly sticks to your tub on opposite sides, with half of each sticking out past the end of the tub. Then tape the yoghurt pot down onto the lid of the tub.



STEP 2

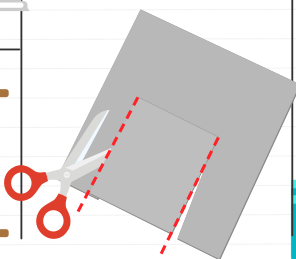
Wind the elastic band around both lolly sticks, until it is taut between them.



STEP 3

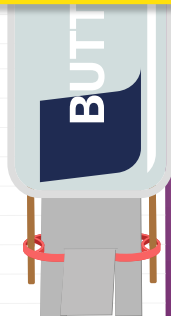
Cut a large square out of the second lid. Divide and mark this square into three sections, then cut to the mid point of the lines, as shown in the picture below. This will make your paddle.

- Be careful with the scissors and the sharp end of the plastic once it is cut.



STEP 4

Weave one side of the elastic band in and out through the two cuts, and use a small piece of tape on the back of the flap to hold it in place.



STEP 5

Spin the flap to wind it up and release it when floating the boat in the bath. Watch it go!



Try:

- Using different elastic bands. Which work best?
- Changing the shape of your paddle. What shape moves the boat the quickest?
- Adding weight to the inside of your tub. What difference does it make?

Fact:

Early paddlewheel boats, built in China over 1,500 years ago, were powered by people - much like larger versions of the pedalo boats you can hire on holiday!

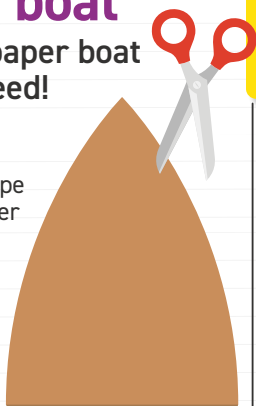
How to make a soap boat

Launch a paper boat at high speed!

STEP 1

Cut a boat shape from your paper or card.

- Take care using scissors.

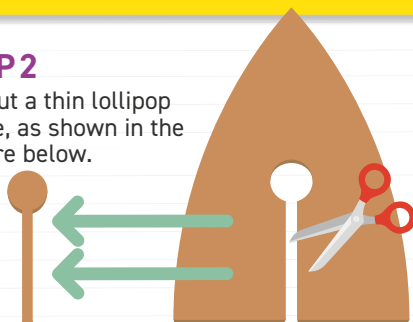


YOU WILL NEED:

- Stiff paper, card or cardboard
- Scissors
- Soap or washing up liquid
- A tray or sink
- Water

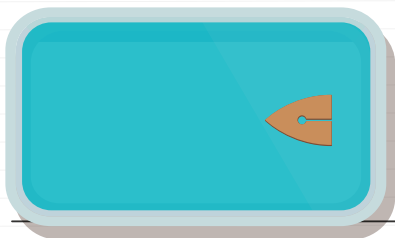
STEP 2

Cut out a thin lollipop shape, as shown in the picture below.



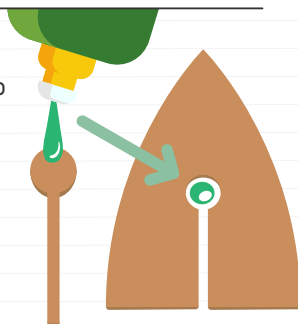
STEP 3

Float your boat in a tray of water.



STEP 4

Put a drop of soap on the base of the circle part of the lollipop shape, then carefully dip inside the circle gap in your boat.



STEP 5

WHOOSH!



You will need to change the water before you try again!

Try:

- Using different boat shapes - change the water each time you test.
- Making boats from different materials.
- Adding more soap.

Fact:

The soap reduces the water's surface tension behind the boat, so the water ahead pulls it forward. Surface tension is how pond skater insects walk on water. If there was soap in their water, they would sink!

Share your creations with us on social media @scienceatlife
For more activities you can do at home, go to life.org.uk/life-goes-online