

# Build a paddle boat



Make a mini paddle boat and watch as kinetic energy powers it along

## Suitable for Beavers and Cubs

### You will need (per boat)

- shallow plastic container
- elastic bands x 4
- pencils x 2
- thick cardboard
- scissors

### Instructions

- 1** Divide your section into pairs. Each team of two needs enough materials to make one mini paddle boat.
- 2** Working together, the first step is for each group to wrap two of the elastic bands around the plastic container and place two pencils onto the sides, using the elastic bands.
- 3** Ask the teams to take two more elastic bands and stretch them over the ends of both pencils. This will fix them together and balance them out.

**4** Next, ask the teams to cut the cardboard into four hexagonal shapes, small enough to fit in the space between the two pencils. Ask them to cut a slit in the middle of each shape, stopping halfway down.

**5** Show the young people how to make a rotating paddle by slotting the two hexagonal shapes together. Fit the paddles to the elastic bands and twist to wind them up. Fit a paddle to each end for balance. Keeping hold of the twisted rubber bands, place the boat on some water and let go.

**6** Test the paddle boats out on still waters, such as a pond at your local park or in a swimming pool. For guidance on managing activities near the water, visit: [scouts.org.uk/watersafety](http://scouts.org.uk/watersafety).

**Time needed**  
**45 minutes**

### Badge



Royal Navy partners the Time on the Water Staged Activity Badge

### Partner



### Outcomes

This activity will not count towards the badge but will introduce young people to the principles of how a real paddle boat works, as they watch the spinning paddle boards doing the job of oars and pushing against the water. They'll also find out about kinetic energy – the wound-up rubber bands have potential energy which is converted into kinetic energy as they unwind and make the paddles move. The activity will also make them aware of the history of seafaring – in the early days, steamboats used the power of steam to turn the paddles.

### More information

The Royal Navy works around the world preventing conflict, providing security at sea, and offering humanitarian assistance to those who need it the most. The Royal Navy's time spent on or around the sea means it's the perfect sponsor for the Time on the Water Staged Activity Badge. To find out more visit: [scouts.org.uk/royalnavy](http://scouts.org.uk/royalnavy).

