

Tools and Materials Required

- A balloon
- Extra thick kitchen sponge
- Wide plastic tubing
- Small rubber band
- Ruler
- Scissors
- Felt tip pen
- Tub or container to test

Notes

- Cutting should be done by an adult or under adult supervision.
- Water play should be supervised by an adult at all times.

STEM Facts

The stretchy balloon wants to go back to its uninflated shape, so it puts pressure on the air inside it, forcing it out. The force of the air leaving the balloon pushes the boat through the water.

The slit in the sponge holds the balloon neck quite tightly, only allowing the air to escape slowly, so that the boat is gently powered for a while, rather than strongly powered for a second or two!

The tube directs the flow of air, which affects the direction the boat is pushed in. If the tube is facing the back of the boat, the boat will go forward. If it is pointing in another direction, it will most likely go sideways.

The shape of the boat affects how it moves. The pointed front end makes it easier for the boat to move through the water, so the boat will go further if the tube is pointed towards the back than if you try to make the boat move in other directions.

Directions

- Draw two diagonal lines to create an equal sided point at one end of the sponge. This will be the front of your boat. Once you are happy that the shape is even, cut it out.
- Cut a small slit at the centre of the boat.
- Blow your balloon up and let the air out to stretch it.
- Poke the neck of the balloon through the slit in the sponge. Stretch the neck of the balloon around the plastic tubing. You may need to secure it with a rubber band if it's a bit loose.
- Get your water container ready.
- Inflate the balloon by blowing through the tube. Put your thumb over the end of the tube to stop air escaping.
- Put the boat into the water, making sure the tube is pointing to the end of the boat. Take your thumb off the tube and watch the boat go!

