

Build your own speedboat powered by dish soap.

Material:



- carton of a milk or juice box
- a bucket with water or your bath tub
- dish soap
- scissors

Instruction:

Cut a piece of carton in the shape of your boat like it was cut one the picture.



Fill the bucket or your bath tub with some water and let the carton float on the water surface.



Carefully put a drop of dish soap on the slot in the back of the boat. What happens?



Explanation:

The boat moves only powered by the dish soap. The carton floats on the water and around your boat you can see the water surface being influenced by the weight of the paper. It looks like a thin skin. By putting some dish soap in the back of the boat, the dish soap destroys the surface tension and the ripping surface tension accelerates the boat. In order to learn more about the surface tension and its effects, have a look a the swimming paperclip experiment.