

SOAPY BOAT



How can you get a boat moving on water without any power? Have you ever tried using soap?

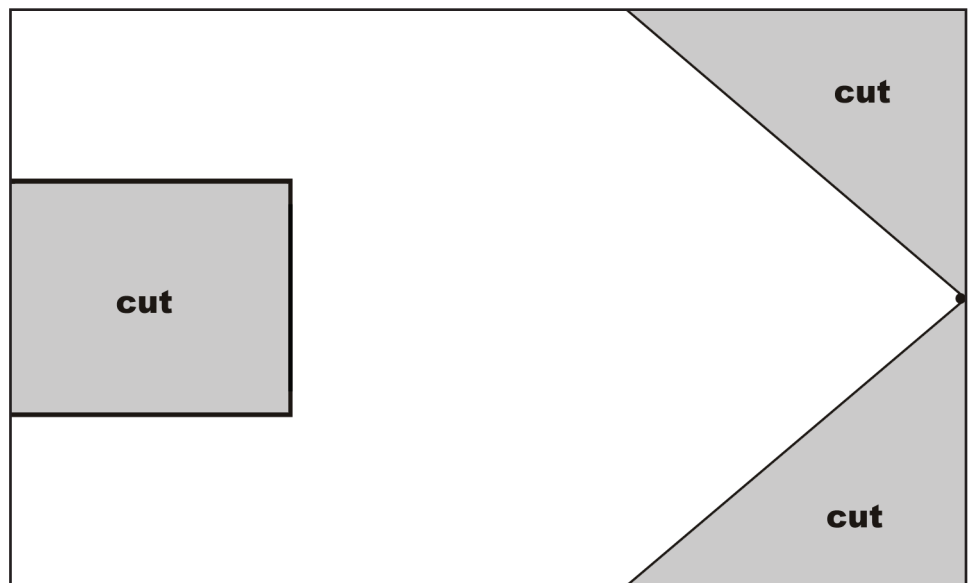
WHAT YOU'LL NEED

- 3 X 5 card, cardboard, or light balsa wood for "boat material"
- Scissors
- Boat shape from this page
- Water
- Liquid dish detergent

WHAT TO DO

1 Cut out the boat shape from this page and trace it onto your boat material. (You can also draw your own boat shape, about 2 1/2 inches long and 1 1/2 inches wide.) Cut out your boat.

2 Fill the container, baking dish or sink with water.



ACTIVITY CONTINUED ON NEXT PAGE (PAGE 1 OF 2)

This activity was modified and adapted from the LHS *Bubble-ology* Teacher's Guide published by LHS Great Explorations in Math and Science (GEMS).

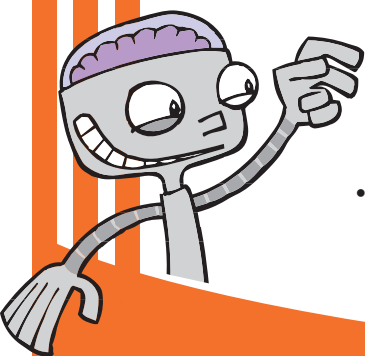
BUBBLES BOAT

(ACTIVITY CONTINUED)

3 Lay the boat flat on the surface of the water. Point the boat in the direction you want it to move.

4 Drip a little detergent onto the water in the cutout notch part of the boat. What happens?

When a drop of soap is added to the water, it changes the water's surface tension, and the water molecules break away from each other. The boat is sitting on the water gets pushed forward along with the water molecules.



DID YOU KNOW?

- Insects called water striders can walk on water because of surface tension.

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