

# SOAP BOATS



## GOAL

Students experiment with cause and effect.

## GRADE LEVEL

Early elementary

## MATERIALS

- Large container of water.
- Dishwashing liquid

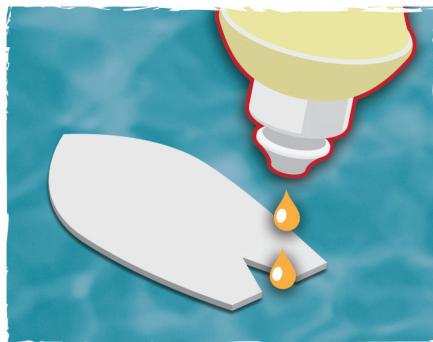
Per student or team:

- A small (approx. 1 inch long) piece of cardboard cut into a boat shape, with a "V" shape cut into the stern.
- Small piece of soap.

Put the cardboard boat onto the water.

Carefully place a few drops of dishwashing liquid on the top of the water in the "V" cutout. What happens? Now try it again, but this time instead of using the liquid,

wedge a small piece of soap into the "V." What happens?



The dishwashing liquid mixes into the water and weakens the attraction between the water and the back of the boat. The pull of the water on the front of the boat

is now stronger, which moves the boat forward. Ask students: would soap be an efficient way to move large boats? If you become an engineer, you might find a new fuel to run boats and cars, heat our homes, and generate electricity – all without creating more pollution or depleting scarce natural resources.

*Adapted from "365 Science Experiments", with permission from Hinkler Books Pty Ltd 2007. [www.hinkler.com.au](http://www.hinkler.com.au)*



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