Soap Power

Can you use soap to power a boat? Well, maybe, a very small one—in a basin or in the bathtub.

What to do: From the index card, cut out a boat approximately 2 inches x 1 inch (5 cm x 2.5 cm), with a small slot for the "engine" in the rear, as in the illustration.

Float the boat in the pot of water. Pour a few drops of detergent into the engine slot.

What happens: The boat travels through the water.

Why: The soap breaks the water’s elastic "skin," the surface tension behind the boat. The boat sails forward—and will stop only when the soap reduces the surface tension of all the water in your "lake."

YOU NEED

• index card
• ruler
• scissors
• pot of water
• detergent