## The Amazing Paper Boat Illustrated by Laurel Aiello



You Will Need

index card, water, bowl, liquid soap or a tiny piece of bar soap, medicine dropper

## What to Do

 Draw a boat on an index card. Make it the same size and shape as shown in picture 1.
Fill a bowl with water. Float the boat along the edge of the bowl and point it toward the middle of the bowl. Do not touch the water.
Add a drop of soap or a tiny piece of soap in the

slot at the back of the boat as shown in picture 2.

## What Did You Observe?

The boat quickly moved toward the center of the bowl. Try adding more soap after the boat

stopped. Did it move again? If you want to repeat the activity, rinse the bowl and add fresh water. Make a new boat. Do not put your fingers in the water. The oil on your skin could interfere with the activity.

## Why It Works

Insects like the water strider use the "skin" to walk on the water's surface. This "skin" is actually water molecules holding together. We can think of this "skin" like it's an elastic sheet. When you learn about the water's surface, you are studying surface tension. Adding soap reduces the surface tension causing the boat to move.

Want to make a paper boat move by using soap? You can do it by breaking the "skin" on the surface of the water. That's right! Water has a "skin." You will learn about it later.



