



Go Fish, Go!

Teach your children how surface tension works by making a paper fish, fueled by soap, swim across the water.

Fun Facts/Information:

- Surface tension energy occurs all around us:
 - ◆ Water molecules like to stick together.
 - ◆ Some insects, like the water slider, can walk across water.
 - ◆ Leaves float and water forms droplets on things like pennies.
- Cold water has more surface tension than hot water.

Materials:

- Fish template
- Index cards or cardstock
- Writing utensil
- Scissors
- Large, rectangular pan or cookie sheet (w/ one-inch high sides)
- Water
- Liquid dish soap

Procedure:

- Gather materials.
- Explain that the soap will act as the fuel for the paper fish, creating surface tension.
- Trace, or draw freehand, a two-inch fish on an index card or cardstock.
- Cut out the fish drawing.
- Cut a small, rectangular slit in the back of the fish's tail.
- Fill the tray $\frac{3}{4}$ of the way with cold water.
- At one end of the tray, place the paper fish in the water.
- Place a small drop of dish soap at the back of the fish, where you made the rectangular slit.
- Watch as the fish speeds across the tray!

Extensions

- Become an engineer by designing and testing different fish templates.
 - Draw your own fish. Do they all work the same? Do some work better than others?
- Use various materials to make the fish.
 - Does the experiment work if you use an aluminum foil fish? What happens if you use a leaf instead of a fish cut-out?

