

## Why So Tense?

Discover the magic of surface tension in this fun activity!

### Materials

- Mason Jar w/ screw-on ring lid
- Laminated card
- Screen
- Water

### Process

1. Fill jar  $\frac{3}{4}$  full
2. Stretch screen over mouth of jar, screw lid on
3. Hold laminated card tightly to lid of jar
4. Quickly flip jar over, let go of the card. What happens?
5. Slowly slide the card out from under the jar. What happens?
6. Tilt the jar a little bit. Now what happens?



### So What's Happening?

*Surface tension* is a *force* – a force powerful enough to keep water from spilling out of an open jar when it is turned upside-down! It is also one of the forces that helps keep boats afloat. In this project, a fine mesh screen in the lid of the jar provides hundreds of tiny surface tension “*membranes*” that, in addition to air pressure, will support the weight of the water!

### Vocabulary

- **Surface Tension** – an effect within the surface layer of a liquid that causes that layer to behave as an elastic sheet
- **Force** – an influence that may cause an object to speed up.
- **Membrane** – a thin, flexible, and often absorbent sheet of any natural or artificial material

### For More Information

United States Environmental Protection Agency. “What is Surface Tension?” Last Modified 2011. <http://www.epa.gov/owow/NPS/kids/surfacetension.html>