## EXPERIMENT 1 - SUPER SOAP BUBBLES

This experiment is all about physics. Participants will learn about how different surfaces cause different soap bubbles to form. Plan on seeing bubbles. Lots and LOTS of BUBBLES! Older boys (ages 11-13) will have fun building a variety of wireframes while younger boys (ages $7-11$ ) will enjoy seeing all the different bubbles being formed.

## What You Need:

- Glycerin
- Water
- Liquid Dishwashing Detergent
- Wire


## What You Do:

- Put on your protective eyewear
- Make a 50-50 mixture of glycerin and water
- Add 5\% detergent (this could range from a couple of tablespoons to a cup of mixture). The exact proportions are not crucial.
- Make wireframes of different shapes and dip into solution. If the frames are twisted the bubbles will form minimum surface area configuration.

