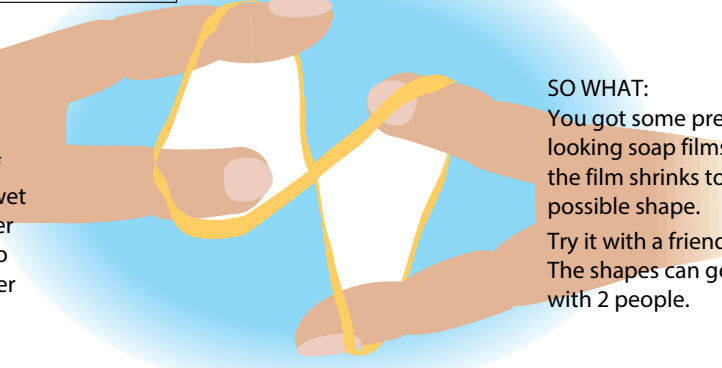


experiment #1

Shrinking Soap Film

WHAT YOU NEED: 2 cups dishwashing soap – water – rubber band

WHAT TO DO: Add the soap to a sink of water and stir well. Get your hands all wet and soapy. Stretch the rubber band over your fingers, turning and twisting it into weird shapes. Dip it into the soapy water and then lift it out.



SO WHAT:

You got some pretty strange-looking soap films. That's because the film shrinks to its smallest possible shape.

Try it with a friend's helping hands. The shapes can get even stranger with 2 people.

Dear Jax,
Why are bubbles round and not cubes?
Laura Sutherland
Concord, California

Dear Jax,
Why do cats curl up into a ball?
Kara Vesely
Walnut Creek, California

Beakman or Jax,
P.O. Box 30177
Kansas City, MO 64112
Send your question & address.

Dear Kara and Laura,
Cats and bubbles are round like balls for the same reason. They're working to be small.

The shape that does that better than any other is a ball – a sphere (sfeer). Cats try to be as small as possible to stay warm. The smaller they are, the less skin is exposed to the cold outside air.

Bubbles do it because soap film always shrinks to be as small as it can be. The smallest shape bubbles can be and still contain the same amount of air is a ball. Today's experiments are better to do than read about!

Jax Place
Jax Place

experiment #2

Getting Extreme

WHAT YOU NEED: Coat hangers - sink of soapy water from Experiment #1

WHAT TO DO: Bend the coat hangers into twisted springs and tangled messes of wire. Just make sure that the tangles do not touch each other when the wires cross. Take the time to pull touching places apart.



MORE STUFF:
Hold the hook and dip the whole thing into the sink. Pull it out slowly. The soap film will look like a beautiful twisted slide.

Try other shapes. Just make sure the wires do not touch when they cross.

Mirror Message:
Now you've got a sink full of soapy water, let's see how the bubbles do the dishes!

