

by jok church

Dear Jax,

Why are bubbles
always spherical
in shape?

Alex Solo Mathew
Kottayam, Kerala
India

Dear Alex,
Answering a question all the way from India is a glorious way to end the 2013 season of *You Can with Beakman & Jax*. Thank you for writing.

Free, separate bubbles are round because that's the smallest shape an object can be and still hold the most stuff.

Bubbles are soap films, and soap films shrink to be as small as possible.

I'm sure you've seen bubbles in hexagonal shapes in a sink, as in our drawing. And you can make many more strange shapes with today's fabulous experiments. And have a Happy New Year!

Jax Place
Jax Place

WHAT YOU NEED: Wire 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 wires do not touch each other where the wires twist into shapes. 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.



Shrinking Soap Films

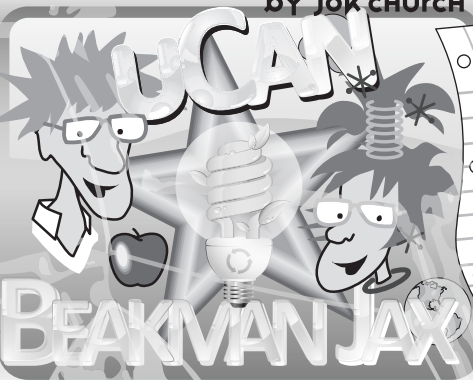
WHAT YOU NEED: 2 cups dishwashing soap – water – rubber band

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.



Google: soap film images