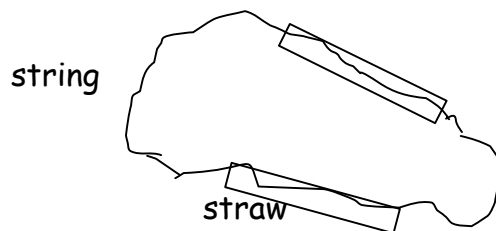


Science Outside the Box recipe for

Bubble Juice

What you need:

- 1/4 cup Joy or Dawn dish detergent
- 5 cups water
- 1 teaspoon light corn syrup
- a big, flat pan (9"x13" is a good size)
- two plastic drinking straws
- 4' of cotton string



storage container for Bubble Juice

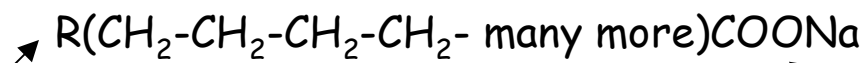
What to do:

- Gently mix the detergent, water, and corn syrup in the flat pan.
- Make a bubble blower with straws and string. Hold the two straws together and dip the blower in the Bubble Juice. Open the bubble blower into a square or rectangle as you pull it through the air.
- If your finger is wet with Bubble Juice, you can poke it right through a bubble without breaking it! If your bubbles break too quickly, add more water.
- Bubble Juice lasts practically forever! Find a container to store it in, and be sure to LABEL it with your name and the contents.

Why does it work?

Have you ever tried to blow bubbles with plain water? Water just doesn't stretch enough! When you add soap or detergent to water, the water gets "wetter" or stretchier so you can make a bubble.

Soaps and detergents have very L O N G molecules, like this:



This end sticks to oils or grease.

This end sticks to water molecules.

So a soap or detergent can "hold onto" both water and greasy stuff. These two-ended molecules are called surfactants, because they make the surface of water much more active.

Make some BIG bubbles outdoors on a cloudy, humid, still day! They're beautiful!