

## Bouncing Bubbles

Youth will enjoy playing with these sturdy bubbles and bouncing them off various surfaces!

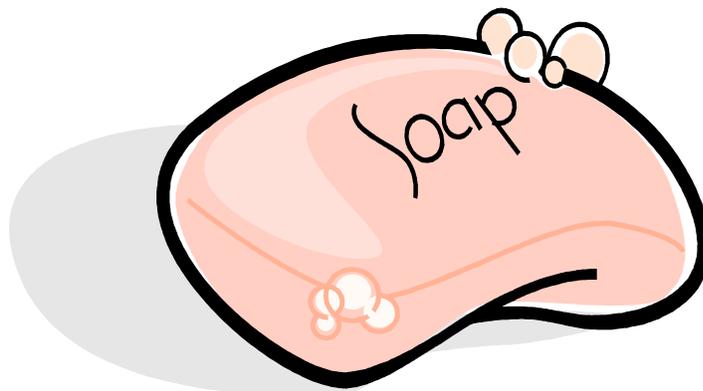
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### Materials

- Distilled water
- Dish soap
- Glycerin or corn syrup
- Cotton gloves
- Small plastic pipettes (cut off tip of fat end to make bubble blower) or bubble wand

### Double or more of Mix

- 1 cup of distilled water
- 2 tablespoons of Dawn® dish soap
- 1 tablespoon of Glycerin (or corn syrup)



### Bouncing Bubbles

Prepare a batch of Bouncing Bubble Solution.

Blow a bubble about the size of a baseball. Bounce the bubble off of your gloves. Try bouncing the bubble off of your shirt or pants. As you'll soon see, some fabrics work better than others.

Play catch with the bubbles with gloved hands. How many passes can you make before they pop?

Blow bubbles onto a table top or other surface. Try to blow a bubble within a bubble. Bubbles will form on any smooth surface that is coated with bubble solution.

### Ingredients in bubbles

**Water** - The single most important part of the bubble solution is the water. Good quality water that does not contain high levels of iron or minerals is best. If you're uncertain as to the quality of your tap water, invest in a gallon of distilled water from the grocery store.

**Soap** - When it comes to soap, Dawn® dish soap just seems to work the best for home-made bubble solutions.

**Glycerin** - Glycerin is the secret additive that gives a bubble its extra strength. Don't be too shocked by the price on a bottle of high quality Glycerin. Contact the pharmacist at your local grocery store for availability. (Note: Some bubble recipes substitute Karo® Syrup for

Glycerin due to the expense and availability of Glycerin.)

Bubble Colors - Similar to the way we perceive the colors in a rainbow or an oil slick, we see the colors in a bubble through the reflection and the refraction of light waves off the inner and outer surfaces of the bubble wall. You can't color a bubble since its wall is only a few millionths of an inch thick. A bubble reflects color from its surroundings.

The air we blow into the soap film is a gas, the soap film is a liquid.

Experience tells you that regular bubbles burst when they come in contact with just about anything. Why? A bubble's worst enemies are oil and dirt. A "super" bubble will bounce off of a surface if it is free of oil or dirt particles that would normally breakdown the soap film.