



## All kinds of bubbles for all ages

Make a bubble wand with just about anything and see what happens.  
 Can you make a square bubble? Can you make a heart bubble?  
 Can you make a bubble using your hands? Explain the results.

Why can you see a rainbow in the bubble? (All the colors in a rainbow reflect on the surface)  
 Why does the bubble rise? (The hot air from your lungs makes it rise. Hot air rises)  
 Poke a bubble with a wet finger. What happens? (Bubbles pop when the water solution evaporates)

Tip for giant bubbles: hold the wands down-wind so the breeze fills the bubble

## Best Bubble Solution Recipe Ever!

- 15 cups hot tap water (heat helps dissolve ingredients)
- 2/3 cup **clear Dawn** dish soap
- 2 teaspoons baking powder
- 2 tablespoons 70% rubbing alcohol
- 1 large teaspoon of **Guar Gum** (found in most markets with gluten free baking)

Mix guar gum and alcohol to make slurry  
 Add the slurry to hot tap water mix very well  
 Add baking powder, mix to remove lumps  
 Add dish soap and mix gently, or shake in container  
Let rest overnight before making bubbles

