

Create your own Gak (Silly Putty or Slime)

Materials:

1. Glue
2. Borax
3. Beakers of Water
4. Clear Plastic Cups
5. Plastic Spoons
6. Plastic Pipette
7. Graduated Cylinder
8. Paper Towels
9. Food Coloring

Directions:

1. Make one **borax and water mixture** for your group in one cup. Your entire group will share and use this one cup.
 - a. Measure 100 mL of water in the graduated cylinder.
 - b. Pour the 100 mL of water in a clear, plastic cup.
 - c. Add one level spoonful (not heaping) of Borax to your 100 mL of water in the cup.
 - d. Stir for about 2 minutes. Try to get all of the Borax dissolved.

Borax/Water Questions:

1. Look at the cloudy water mixture. Is it a homogenous or heterogeneous mixture? Explain or defend your answer.
 2. Is it a solution or a suspension? Explain or defend your answer.
 3. Which part of the mixture is the solvent?
 4. Which part of the mixture is the solute?
2. Set this Borax-water mixture in the middle of the lab group desk since all will use this later.
 3. Each person will now make their own **Glue and Water Mixture** in their own cup.
 - a. Each person should add 2 level spoonful's of glue to their empty cup.
 - b. Add one spoonful of plain water to the glue in the cup.
 - c. Add 1 drop of food coloring if you want (you don't have to). No more than one drop!
 - d. Stir this mixture until all is dissolved evenly.

Glue/Water Mixture Questions

1. Is this mixture a homogenous or heterogeneous mixture? Explain your answer.
 2. Is this mixture a suspension, solution or colloid? Explain.
4. Each person will now make their own **Gak!**
 - a. Measure one level spoonful of the Water/Borax mixture. Pour the one spoonful of the water/Borax mixture into your glue/water/food coloring mixture.
 - b. Stir the mixture until it becomes somewhat solidified or jelly like.
 - c. Take the Gak out of the cup and roll it in your hand.
 - d. When you are done forming it, store it in a plastic ziplock bag.

Gak Questions:

1. Is your Gak a solid, liquid, or gas? Explain.
2. Is your Gak a heterogeneous or homogeneous mixture? Explain.
3. Is your Gak more like a solution, suspension or colloid? Explain.

Explanation of Gak----

http://www.sciencekidsathome.com/science_topics/amazing-polymers.html

Great information on Colloids:

<http://www.middleschoolchemistry.com/atomsworld/2012/08/colloids-weird-stuff-weird-name/>

