



This activity is gross!

Kids can learn some pretty great physics in this hands-on exploration of polymers and color mixing!

Materials Needed:

Per Student/Child

- 1 large measuring cup filled with polymer mixture (1:1 white glue and water)
- 1 tray pigments
 - 3 3oz cups with diluted food coloring, 1 red, 1 blue, 1 yellow
 - 3 pipettes (1 for each color)
- Measuring spoon
- Measuring cup
- Easy pour beaker with Cross-Linking Agent (1 cup warm water, 1 ½ teaspoon Borax, dissolved)
- Permanent marker
- 1 plastic sandwich bag for each student
- 1 plastic cup per student
- 1 craft stick per student

What now?

1. Ask if students/child have ever heard of a **polymer**. Explain to them that polymers are all around us. Point out various plastics and even the shoes they are wearing and explain that polymers are great to use because they are strong and often stretchy.
2. Tell students/child we are making slime today.
3. In order to make slime as cool and gross as it is, we need a polymer.
4. We will be using glue as our polymer. We have mixed it with water so that our molecules have more liquid to slide around in.
5. **Have students/child measure ½ cup of polymer solution and pour into mixing cup**
 - a. Explain the proper way to measure liquids by demonstrating with a student (set container on table & squat down so that desired line is at eye level.)
6. **Now have students/child add up to 5 drops of pigment to the glue and stir with the craft stick**
7. Did they make any new colors? Any unexpected results?
8. It takes more than long molecules to make slime. We need to somehow connect all those molecules. That is why we add a **cross-linking agent**.
9. **Have students/child measure 1 tablespoon of the Cross-linking agent and slowly stir it into the glue and pigment mixture.**
10. It takes a bit of strong stirring (about 3 minutes) before it all clumps together.
11. If you need to, add a small amount more of the cross-linking agent until the glue has all been absorbed.
12. Have students/child place their slime in a baggie with their name written on it.