California State University of Bakersfield, Department of Chemistry

How to make slime

Standards:

Grade 5: Physical Science. 1a: During chemical reactions, atoms in the reactants rearrange to form products with different properties.

Introduction:

Slime is a fun material that you can make yourself using common household ingredients. The ingredients start out as liquids, but when you mix them together chemical bonds form between the molecules in the slime, forming a substance known as a polymer. You encounter polymers every day. Examples of common polymers include the cellulose in paper and trees, keratin in hair and nails, and all types of plastics.

Materials:

- Borax powder
- water
- 4 ounce (120 mL) Elmer's glue
- teaspoon
- bowl
- measuring cup
- food coloring (optional)
- measuring cup

Safety:

- Always have an adult with you to help you during your experiment.
- Always wear eye protection and gloves when doing chemistry experiments

Procedure:

1. Pour the glue into the jar. If you have a big bottle of glue, you want 4 oz or ½ cup of glue.
2. Fill the empty glue bottle with water and stir it into the glue (or add ½ cup of water).
3. If desired, add food coloring. Otherwise, the slime will be an opaque white.
4. In a separate bowl, mix one cup (240 mL) of water into the bowl and add 1 teaspoon (2mL) of borax powder.
5. Slowly stir the glue mixture into the bowl of borax solution.
6. Place the slime that forms into your hands and knead until it feels dry. (Don't worry about the excess water remaining in the bowl.)
7. The more the slime is played with, the firmer and less sticky it will become.
8. Place your slime in a zip-lock bag in the fridge otherwise it will develop mold.

Data and Observations:

Write what you saw in the space provided below.

Questions:

Did your experiment work?

How can you improve the experiment?

References:

1. How to Make Slime.