



Spectacular Slime

Students will learn about molecules and polymers by doing a science favorite - MAKING SLIME!

3rd - 5th
Grade

Materials

- 🧪 ¼ cup of water
- 🧪 ¼ cup of white glue
- 🧪 ¼ cup of liquid starch
- 🧪 Borax (if you don't have liquid starch)
- 🧪 Food coloring
- 🧪 Mixing bowl
- 🧪 Mixing Spoon

Check out these awesome slime videos!

Slime 1

Slime 2

What's the Matter?

Matter is defined as anything that has mass and takes up space. The smallest whole unit of matter is called an atom. Atoms are too small for us to see with just our eyes but they are everywhere and make up everything! In nature, we typically find atoms existing as molecules rather than single atoms. Molecules are groups of atoms that are bonded together, such as H₂O (a water molecule).

Directions

1. Pour the ¼ cup of glue into the mixing bowl.
2. Pour the ¼ cup of water into the mixing bowl.
3. Stir the glue and water together until thoroughly mixed.
4. Add a drop of food coloring and stir it in.
5. Slowly add in the ¼ of cup liquid starch while **constantly** stirring. If you do not have liquid starch, you can use borax instead. This can be found at any convenience store in the detergent section. You would need to add ½ teaspoon of borax to ¼ cup of water.
6. All the ingredients should be linked together now. Feel free to pick up your slime and stretch it out!

What happened?

Polymers are most typically long chains of the same repeating molecules. In this experiment, the glue is a liquid polymer and the tiny molecules found in the glue are in strands like a chain. The water helps make the slime stretch and flow. Changing the amount of water will change how “slimy” your concoction turns out.

When the liquid starch(or borax) is added, the strands of the polymer glue begin to tangle up and hold on to one another. The starch (or borax) acts as a cross-linking agent that literally links the long chain molecules together.

