



Slime

Take & Make Kit

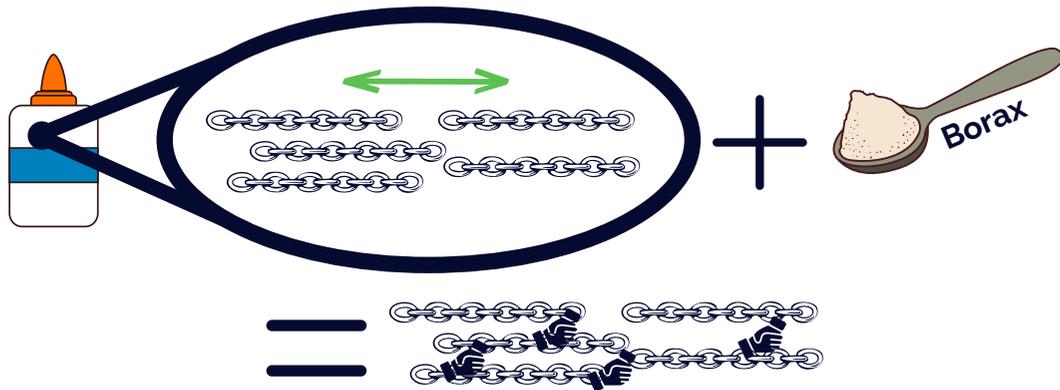
Watch ImagineIt's Liza's tutorial here:
tinyurl.com/TeenSlime



What is slime?

Squishy wonderful slime: what is it? Slime is a **non-Newtonian fluid** -- it defies Newton's Law of Viscosity -- and is neither a liquid nor a solid.

Liquids like water keep the same **viscosity** (flowiness) under pressure but slime gets less flowy the more you squeeze or tug it. That's because the glue in slime is a polymer. **Polymers** are long chains of molecules containing many repeated parts, like silk, wool, or DNA. Glue is long chains of polyvinyl acetate molecules. Glue flows because the chains slide past each other easily. When you add borax to glue, borate ions cause the polymer molecules to **cross-link**, creating a less viscous mixture called slime.



When the slime is at rest, the chains coil up and can slide pretty easily, but when tugged or stretched suddenly, slime's coils tangle and can't flow. The bonds between the borate ions and the polymer molecules are pretty weak, so the slime rips if you move it quickly.



Borax (Sodium Tetraborate) is a mild irritant. Avoid touching face, mouth, and eyes when handling Borax and slime. Wash hands with soap and water afterwards. Keep out of reach of small children and pets.

If Borax is ingested, gets in eyes, or causes a skin reaction, flush with water and call **Poison Control at 1-800-222-1222**.

Dispose of excess Borax solution in kitchen sink under running water.

For more information: tinyurl.com/BoraxSafety



When you mix up your own batches of slime, you may notice that it feels cool to the touch. This is called an **endothermic chemical reaction**, a reaction that absorbs all the heat around it.

Method

Make the glue mixture



Materials

- 4 oz (1/2 cup) school glue
- 1/2 teaspoon borax
- warm water
- 2 bowls
- 2 stirring utensils
- plastic baggie or jar
- glitter, food coloring (optional)



1. Scoop the glue into your bowl, add an equal amount of warm water. Customize with glitter, food coloring, paint, old powdered eyeshadow, or shaving cream. Mix well.

Make the activator



2. Add 1/2 teaspoon of borax* to about a cup of warm water and stir with a clean stirring utensil until all the powder has dissolved. Don't use the glue stirrer or the activator will start to react.

*If you're using the ImagineIF slime kit, the borax and glue are pre-measured.



Combine the glue mixture and activator



3. Slowly drizzle the activator into the glue mixture a little at a time, stirring well. Drip tiny amounts of activator into the glue until the mixture no longer feels sticky. You will have leftover activator.



4. Use your hands to mix your slime. The slime will become smoother as you knead it. For even smoother slime, add a couple squirts of hand lotion. Store your slime in a baggie or jar to keep it from drying out.

