

Experiment steps:

1. Mix white school glue (such as Elmer's) and water in a 2:1 ratio. Two parts glue to one part water.
2. Pour about half a cup of glue/water mix into a bowl.
3. Add about 2 tablespoons contact solution. Important: The brand of contact solution you are using must have boric acid or sodium borate as one of the ingredients.
4. Mix these two together.
5. Once the contact solution and glue are completely mixed, add in one-two cups of shaving cream. Mix well. Once it all sticks together, now its time to get your hands in it! The more you play with the slime, the more the chemicals will react and the firmer the slime will be.
6. The amount of shaving cream you add will be different for each batch of slime. Play around with the proportions and see if you can make slime that looks and feels different each time!
7. If you would like to add glitter, food coloring, or other add ins, it is best to do it before you mix in the shaving cream. But play around with this too!



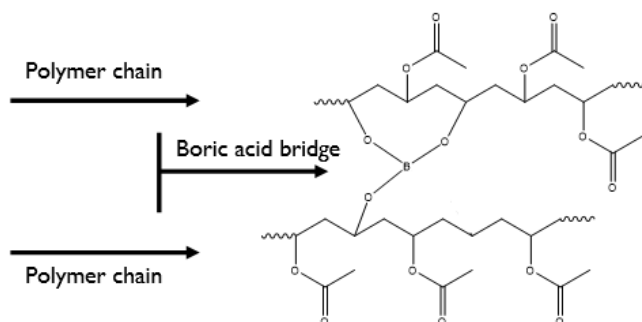
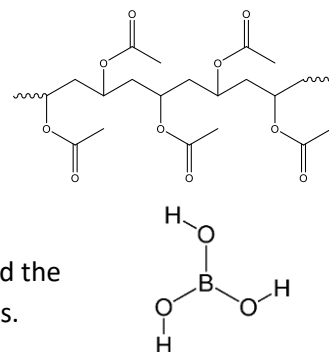
Science Explanation:

Crosslinking- A chemical reaction that connects chains of polymers together creating a solid from two liquids.

Molecule- A group of atoms bonded together. For example, a water molecule (H_2O) is made of hydrogen (H) and oxygen (O).

Craft glue is made primarily of a molecule called polyvinyl acetate ($CH_2CHOCOCH_3$). Many units of this molecule link together, end to end, in long chains to form a linear polymer. The polymer chains are not linked together, side to side, which is why the glue is a liquid.

Boric acid (found in contact solution) is a molecule made of oxygen, hydrogen, and the element boron. This molecule reacts with the glue polymer to crosslink the chains.



The boric acid molecule forms a bridge between the glue polymer chains crosslinking them. When the chains are crosslinked, the liquid glue becomes more solid. The more contact solution you add, the more crosslinking that occurs and the more solidified the putty becomes.