

# Fluffy Slime

Did you know every time you make slime you are observing a chemical reaction? Slime is formed when a chemical reaction occurs between polyvinyl acetate, or PVA, and borate ions. Discover more below while making fluffy slime!

## Materials:

- Bowl
- Measuring Spoons
- Baking Soda
- Liquid Starch
- Spoon
- White Glue
- Shaving Cream
- Food Coloring (optional)

## Procedure:

1. Pour 2 tablespoons of glue into the bowl.

2. Add  $\frac{1}{4}$  teaspoon of baking soda to the glue in the bowl. *If you are using food coloring, add 2 – 3 drops to the glue and baking soda now.* Stir the mixture until it is fully combined.

3. Add a dollop of shaving cream and stir everything together until combined.

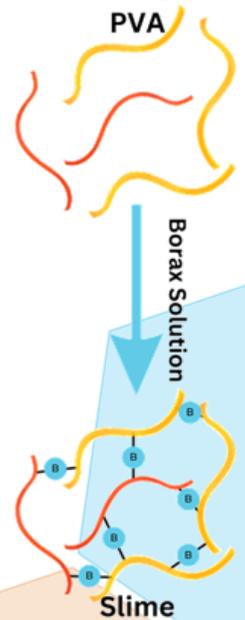
4. Add 2 teaspoons of liquid starch, then mix everything together. *What's happening?* Continue mixing until it starts to pull away from the sides of the bowl.



# Fluffy Slime

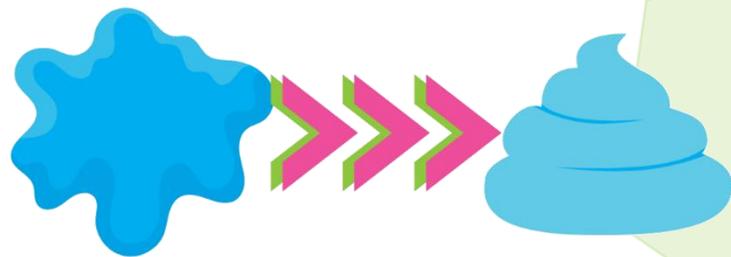
**What's happening?** Slime is formed from a chemical reaction between **polyvinyl acetate**, or **PVA**, which is the main ingredient found in washable school glue and **borate ions**, which are present in the liquid starch solution.

In this reaction, the *borate ions* link together the long strands of molecules in the *PVA* creating a **Non-Newtonian fluid**. *What happens to your slime as you mix it quickly or hold it loosely in your hands?*



**As the shaving cream is dispensed, can you hear something?**

That hiss that you hear is a **gas**, such as butane, propelling the creamy shaving cream from the can. As the **gas** escapes from the can, it creates little bubbles making the cream nice and fluffy! When we add it to our slime, that fluffy shaving cream changes the **texture** of the slime.



## DID YOU KNOW?

A **chemist** is someone who studies everything about the different chemicals that exist in our world, even slime! If you liked exploring this activity, maybe chemistry is for you!

