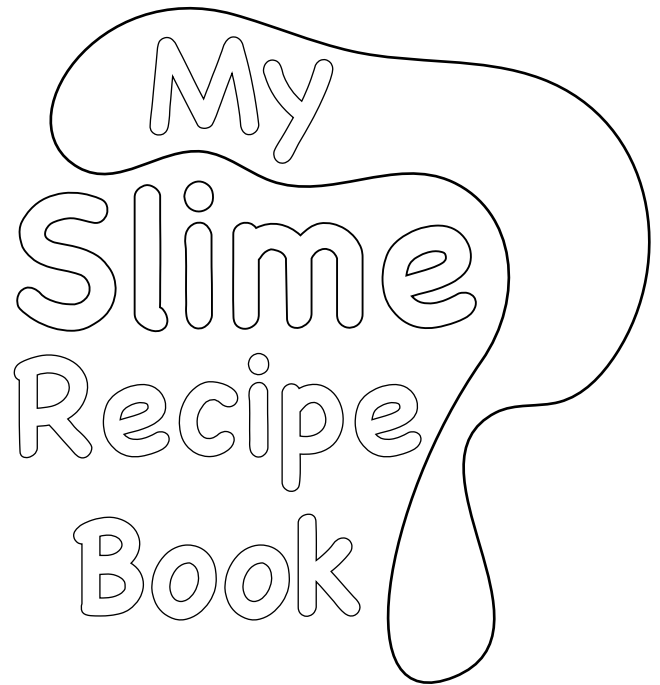




This book is a free download created by Jenny Ballif. More printouts available online.

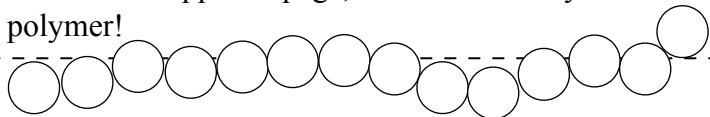


How does it work?

The biggest ingredient in glue—besides water—is a long polymer called polyvinyl acetate. These long strands slide past each other very easily in ordinary school glue. But when we add borax or boric acid to the glue, that causes crosslinking to occur. Now the strands don't slide past each other nearly as easily, and the texture of the glue is very different!

○ Cool Science Word: *Polymer*

A polymer is made of repeating units (called monomers). If you put a bunch of single things (like pearls) together in a long chain, then you get a polymer (in this case, a pearl necklace). Color the chart on the opposite page, and then invent your own polymer!



METHOD 1: (the dunk)

After mixing the water and glue thoroughly with food coloring, pour the mixture into the large container of borax solution. Lift it out and place it on a flat surface. Knead it for a couple minutes.

Method 2: (the mixing bowl)

After mixing the water and glue thoroughly with food coloring, put 1 Tablespoon of prepared borax solution into the water glue mixture. Stir well and add another Tablespoon full of slime. Knead it for a couple minutes. If the slime is tacky or too sticky, sprinkle on a little more borax solution.

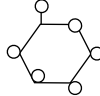

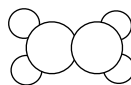



Classic Slime Recipe

(also called flubber, oobleck, and ooze)

4 oz white school glue
4 oz water
Food coloring (optional)
Borax solution

To make the borax solution, mix borax powder and water together with a ratio of 1 Tablespoon of borax powder to 1 cup of warm water. If you are creating slime using version 1 (the dunk), make a large batch (2 Tbsp borax plus 2 cups water). If you are using version 2 (the mixing bowl) make a small batch (3/4 teaspoon borax plus 1/4 cup water)

1

These monomers:	give you these polymers:
GLUCOSE <i>THAT'S A SUGAR!</i> 	STARCH <i>LIKE IN A POTATO!</i> 
ETHYLENE 	POLYETHYLENE  <i>The world's most common plastic</i>
ELEPHANT 	LINE OF ELEPHANTS 
INVENT YOUR OWN!	

6

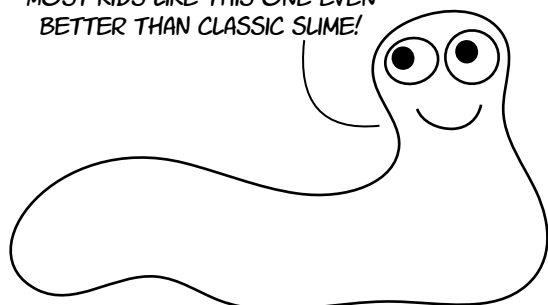
"Borax-free" Slime Recipe

(also called contact solution slime, or saline solution slime...)

4 oz white school glue
1/2 Tbsp baking soda
1 Tbsp contact lens solution
Food coloring (optional)

Mix the glue and baking soda and food coloring (if using). Then add the contact solution and knead it together.

MOST KIDS LIKE THIS ONE EVEN BETTER THAN CLASSIC SLIME!



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Science Mom Slime

(I like some ooze to my slime, so this is my favorite ratio of water, glue, and crosslinking activator. You can experiment and come up with your own favorite recipe!)

4 oz white school glue
2 oz water
1/2 Tbsp baking soda
1 Tbsp contact lens solution
Food coloring (optional)

Mix the glue and water and baking soda together. Add food coloring (if using) and mix again. Then add the contact solution and knead it together.

ADDING MORE BAKING SODA AND CONTACT SOLUTION GIVES YOU A STIFFER AND BOUNCIER SLIME.

INCREASING THE WATER GIVES YOU A MORE OOZY SLIME.

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