

MAKING SLIME LESSON PLAN

Time Required: 45 – 60 mins for process, plus you can allow time for research and findings.

Age groups: Prep to year 9.. Obviously you will need some more time and assistance with the younger and possibly older kids.

Learning Intentions: To understand what a Polymer is and how chemical reactions can change the state of certain ingredients.

Intro: We are going to make slime, any ideas how we can do it? What ingredients do you think we'll need?

Show video on YouTube <http://www.youtube.com/watch?v=emIW5Jh-AHc&feature=relmfu>

- ✓ Go through step by step instructions of how to make the slime (Paper based instructions included below - Make sure Logistics are good)
- ✓ Students then create the slime and put it in a bag to take home and show.

Answer the following questions once slime is made.

1. What happened to the slime when you added the borax powder?
2. How could we make the slime better, what variations could be offered?

Science Elements:

Now for the SCIENCE part.... This **POLYMER** is unique because it has qualities of both a solid *and* a liquid. It can take the shape of its containers like a liquid does, yet you can hold it in your hand and pick it up like a solid. As you might know, solid molecules are tight together, liquid molecules spread out and break apart (drops) POLYMER molecules CHAIN themselves together (they can stretch and bend like chains) and that makes them special. Jell-O, rubber bands, plastic soda bottles, sneaker soles, even gum are all forms of polymers. The polymer you made should be kept in a sealed plastic bag when you aren't playing with it. Also, be sure to keep it away from young kids or pets who might think it's food. Have fun!

Recap: What is a polymer? Both a solid and a liquid. Molecules which are tiny little molecules chain together which makes an item hold its shape and then can be altered.

What are some other examples of polymers?

Extension Activity

Who can stretch their slime the longest contest?

Who find and display a practical use for it.

HOW TO MAKE SLIME



Slime is easy to make. It only takes a few ingredients and a few minutes to make a batch. Follow these step-by-step written instructions or [watch the video](#) to see how to make slime. To get started, gather the following materials:

- water
- white glue (Such as Elmer's™)
- borax
- food colouring (unless you want uncoloured white slime)



There are two components to slime. There is a borax and water solution and a glue, water, and food coloring solution. Prepare them separately.

- Mix 1 teaspoon borax in 1 cup of water. Stir until the borax is dissolved.
- In a separate container, mix 1/2 cup (4 oz) white glue with 1/2 cup water.
- Add food colouring, if desired.



After you have dissolved the borax and diluted the glue, you are ready to combine the two solutions. Stir one slime solution into the other. Your slime will begin to polymerize immediately.



The slime will become hard to stir after you mix the borax and glue solutions. Try to mix it up as much as you can, then remove it from the bowl and finish mixing it by hand. It's okay if there is some coloured water remaining in the bowl.



The slime will start out as a highly flexible polymer. You can stretch it and watch it flow. As you work it more, the slime will become stiffer and more like putty. Then you can shape it and mold it, though it will lose its shape over time. Don't eat your slime and don't leave it on surfaces that could be stained by the food colouring.



Store your slime in a sealed ziplock bag, preferably in the refrigerator. Insect pests will leave slime alone because borax is a natural pesticide, but you'll want to chill the slime to prevent mold growth if you live in an area with high mold count. The main danger to your slime is evaporation, so keep it sealed when you're not using it.

Slime images courtesy of [about.com](#)