



STEM Kit:

Slime

Program Level: All

Who doesn't love making slime?

Supplies Provided:

- Bowls – large (3+)
- Bowls – small (12)
- Measuring cups
- Measuring spoons
- Spatulas
- Funnels
- Borax
- Bartholomew and the Oobleck book

What to Bring:

- Slime ingredients! (see recipes to figure out what you need to bring based on your troop size – you can also look online for more slime recipes – these are just a few we like)

Borax and Glue SLIME

- borax powder
- water
- Elmer's white glue
- teaspoon
- bowl
- measuring cup (2 cups)
- measuring cup (1 cup)

1. Pour 1 cup of glue into measuring cup.
2. Add 1 cup of water to measuring cup – stir gently to combine.
3. In a separate bowl, mix two cups of water and 2 teaspoons of borax powder.
4. Slowly stir the glue mixture into the bowl of borax solution.
5. Place the slime that forms into your hands and knead until it feels dry. (Don't worry about the excess water remaining in the bowl.)
6. The more the slime is played with, the firmer and less sticky it will become.

Sta-Flo Slime

Mix equal parts of Elmers Glue and Sta-Flo fabric starch in a bowl. Use your hands to mix, a spoon will not incorporate things together quickly. Let the girls each take a piece of slime and let them explore. If you work in a carpeted area, you should move to an area with a hard surface. Ask the girls if their slime is a liquid or a solid, and ask them to explain why. *Why? Slime is always a good thing for kids to play with, the tactile part is fun and new, and the classifying discussion is important. Girls should be able to form an opinion and support their thought with evidence ("I think the slime is a liquid because it pours*

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out of my hand like water.”), and scientists are doing the same thing every day by supporting their findings with evidence.

Oobleck Slime

Supplies:

- 1/2 cup cornstarch per girl
- water and pitcher
-
- disposable cups
- one large mixing bowl
- paper towels (clean up)

Instructions:

1. To make the Oobleck, pour the cornstarch into a mixing bowl. Slowly start pouring the water into the cornstarch. You will want to mix with your hand as you go, making sure to incorporate the dry cornstarch. If you are preparing this ahead of time, you may want to add enough water to make the mixture runny because it will start to harden if you let it sit for a few hours. You can always add more cornstarch or more water to get it to the right consistency.
2. Divide the Oobleck into cups so each girl has their own cup of Oobleck. It may be easier to pour the Oobleck into the cups rather than try to scoop it out of the bowl. You may also have to mix in a little more water at this point if the mixture isn't runny enough.
3. Let the girls explore as much as time allows – you may need to restock some Oobleck cups if there is a lot of spilling. Let the girls squeeze it in their hands, and let it drop from their fingers. Have them show you how it has properties of a solid and of a liquid.
4. Clean up – girls will need to rinse their hands with water, table surfaces will need to be wiped down several times with damp paper towels.
5. Have a discussion about the different properties of Oobleck: What did it feel like? What did it remind you of? How could something like this be useful?

Why?

Oobleck is a non-Newtonian fluid, meaning that it has properties of a liquid and properties of a solid at the same time. It is a great way to get messy and ask good questions. Dr. Seuss wrote a book, [Bartholomew and the Oobleck](#), which can spark an interesting discussion about how Oobleck could affect the community, and how the girls would design a cleanup plan.

Alternative:

Let the girls make the Oobleck in small groups in mixing bowls. Each group can have a pitcher of water and a bowl of cornstarch to work with.