



## STEM Activity Idea:

### Oobleck

**Suggested Program Level: Brownie**

Is it a liquid or a solid? This is a slimy way to learn about the states of matter.

#### Supplies:

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

#### Instructions:

1. To make the Oobleck, pour the cornstarch into a mixing bowl. Add a couple drops of food coloring to a pitcher of water (if desired) and then 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.