

Halloween Oobleck for a Frightfully Fun Time!

September 30, 2024 / DIY / STEM Activities / Chemistry / Ages 3 - 5 / Halloween Oobleck



Are you ready to explore a magical substance? Oobleck looks like a liquid but can instantly turn into a hard solid with just a touch! Imagine stepping on it and not sinking in - how is this possible? In this experiment, you'll create this "mysterious substance" with your own hands and uncover the scientific secrets behind it.

- Age: 3-5
- Time: Less than 30 minutes
- Mess Level: Messy

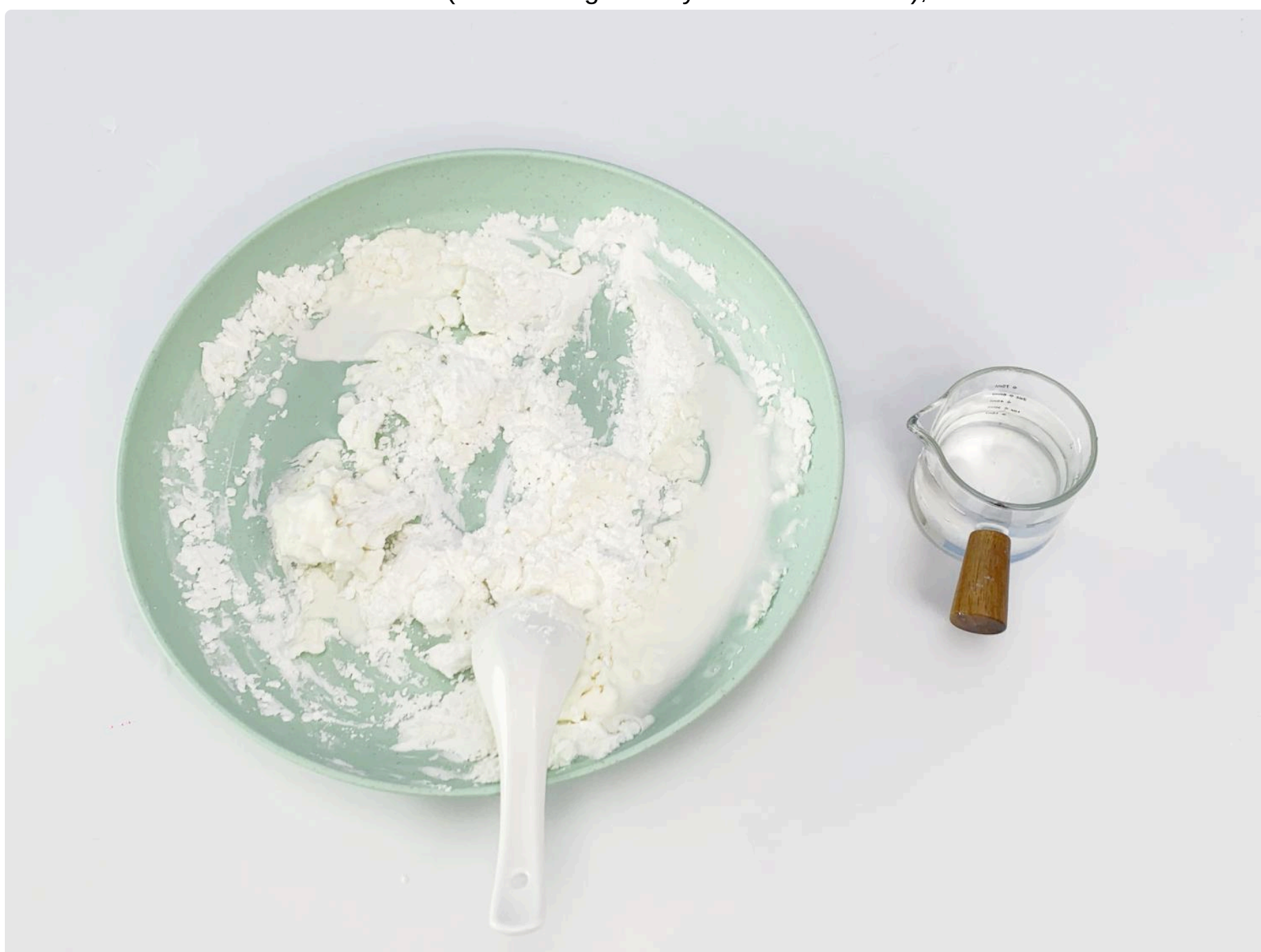
Materials Needed:

- 2 cups cornflour
- 1 cup water
- Food colouring
- Plastic spiders
- Bowl
- spoon



Step-by-Step Instructions:

1. Add cornflour and water to the bowl (add water gradually in small amounts), with a ratio of 2:1.



2. Stir them together, adding food colouring during the mixing process.



3. Take a small handful of Oobleck and place it in your palm. If it flows like a liquid, but hardens like a solid when you squeeze it, your experiment is successful. If your Oobleck doesn't achieve this state, you'll need to add water or cornflour as necessary until it reaches this condition.



4. If you're doing this experiment for Halloween, you can add some spooky elements like plastic spiders or eyeballs to the Oobleck.



5. Observe what happens when you gently place small, heavy objects on the Oobleck. Will they be "swallowed" by it? What happens if you drop the objects onto the Oobleck from a height?



The Science Behind It:

Oobleck is a substance made from a mixture of cornflour and water. It exhibits properties of both liquids and solids, which is characteristic of non-Newtonian fluids.

Unlike Newtonian fluids (such as water or oil), Oobleck's viscosity is not constant but changes with the amount of force applied. When a slow and gentle force is applied, it behaves like a liquid and flows easily. However, when a quick and strong force is applied, it behaves like a solid and becomes hard.