

A STEM in the Park Take Home Activity

STEM in the PARK

Science, Technology, Engineering, and Mathematics

Oobleck



Recommended for ages 4- Adult

Oobleck is a suspension of cornstarch and water that sometimes seems like a solid and other times seems like a liquid. It all depends on how much pressure you apply.

What You Need

A mixture of about 1.5 cups of cornstarch to 1 cup of water is a good starting point. You will have to experiment to get the perfect mixture.

- Cornstarch
- Pitcher of water
- Aluminum pie pans
- Measuring cups
- Mixing spoon
- Newspaper for covering tables
- Food coloring or tempera paint (for fun)

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What To Do

1. Pour the cornstarch into a large mixing bowl and slowly add the water. You will have to experiment with more or less cornstarch or water until you get the right mixture.
2. If you want to color your Oobleck add some tempera paint or a few drops of food coloring. (Note to parents: food coloring tends to stain more than the paint)

When you are done playing with your Oobleck, please do not pour it down the drain. It can separate in your drain pipes and leave a hard clump of cornstarch that will block the drain. It is best to put it in the trash.

Whats the science?

Oobleck is an example of a non-Newtonian fluid, a fluid that's viscosity is not constant. It changes depending on the stress or forces applied to it. If you apply a large force, it becomes very viscous and stays in place. If you gently pour it, applying little force, it will flow like water.

Inquiry

Once you have it mixed together, put your hands into the Oobleck and start squeezing it. What happens when you try to make a ball by moving it around in your hands?.

Fill a pie plate with a think layer of Oobleck. What happens when you slap the surface with your open hand?

***This activity brought to you by Rainbow Cooperative Preschool.
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