



Join ACM's S.T.E.A.M. Team!

OOBLECK and OOEY-GOOEY CHALLENGE!

Plan – Design – Make – Test – Evaluate

This Week's Challenge: *Can you make some Ooey-Gooey fun?*

First, choose from the recipes below to make either an Oobleck or slime mixture (or both). Then, using materials around your home (ask permission first): plan, design and create a new ooey-gooey mixture of your very own.

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| <p>OOBLECK: What you'll need:</p> <ul style="list-style-type: none"> • 1-part Water • 1.5 – 2-part Cornstarch • Food Coloring (optional) • Bowl or Basin | <p>Instructions:</p> <ol style="list-style-type: none"> 1. Pour the water in a bowl 2. Slowly add ½ of the cornstarch and mix 3. Continue adding cornstarch a little at a time until desired consistency (it may be easiest to mix with your hands) 4. Add food coloring if you'd like and mix |
| <p>IMPORTANT: DO NOT put this substance down the drain ... it is NOT a liquid. It could clog</p> | |

Now play with the Oobleck

- ✚ Experiment with different ways to handle and manipulate the mixture.
- ✚ Let it run through your fingers
- ✚ Watch what happens when you quickly jab at it verses when you slowly place your fingers in it.
- ✚ Try rolling into a ball, then stop. What happens?

Is Oobleck a solid or a liquid, or BOTH?

Oobleck is a non-Newtonian fluid, which means it has properties of both liquids and solids. If you slowly dip your hand into the mixture, it acts like a liquid, but if you move it around quickly forming it into a ball, it feels like a solid.

For more Oobleck fun, check out the book Bartholomew and the Oobleck by Dr. Seuss!

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| <p>SLIME: What you'll need:</p> <ul style="list-style-type: none"> • ½ cup shampoo • ¼ cornstarch • Food coloring (optional) • 6 tablespoons Water • Bowl | <p>Instructions:</p> <ol style="list-style-type: none"> 1. Place shampoo and cornstarch in bowl and mix well. 2. Add a few drops of food coloring (optional) 3. Add 1 tablespoon of water and stir. 4. Slowly add more water, 1 tablespoon at a time. 5. Manipulate and stretch the slime. Continue to knead until desired consistency is obtained. (Approximately 5 minutes) |
| <p>*If mixture does not reach the desired consistency after 5 minutes of kneading, mix in more cornstarch, a little at a time, until the slime is fluffy, light and stretchy.</p> | |

Now it's your turn to design your own!

Plan & Design:

1. Will you work alone, or collaborate with others to create your own recipe?
2. What type of goo mixture will you choose to make?
3. Will you choose to add extra decorations or materials to your recipe?
4. Will you determine your ingredients and measurements before you start, or just add them as you go?

Once created, put your design to the test!

Test:

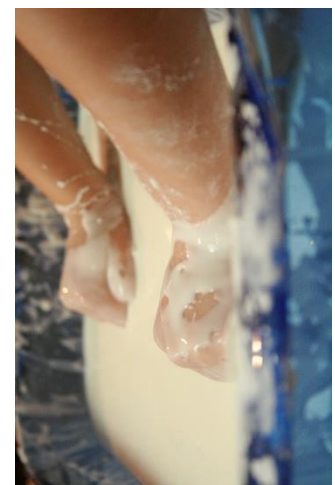
1. Play with and manipulate your goo mixture.
2. Can you pull on it, stretch it; is it still gooey?

Evaluate:

1. Does your goo mixture look and feel as expected? Can you use the way you expected? If not, WHY?
2. What factors affect your results?
 - a. The choice of materials?
 - b. Any others?
3. Do you need to make any changes? If so, redesign and try again.

Extend an invitation for at least one other person to try your goo mixture. (adult or child).
What will you call your new goo?

Don't forget to share your photos and videos! <https://www.instagram.com/p/BfZlfaHDg1/>



Next time you're at the museum, visit our Little Monster Maker Space and explore!
Want to try more activities like this one? Sign up for one of our S.T.E.A.M. Team Saturday Workshops!
<https://akronkids.org/calendar/programs>