

CURIOSITY AT HOME

Oobleck

Make Oobleck, then become a material scientist and test your new creation. What can Oobleck be used for?

MATERIALS

- 1 spoon
- 1 small bowl or Ziplock bag
- water (1/2 cup)
- food coloring (a few drops, optional)
- corn starch (will need ~1 cup)

PROCEDURE

- Put the water and food coloring in a large bowl and begin adding corn starch while mixing.
- Keep adding a little cornstarch at a time and mixing until it's thick.
Tip: if making in a plastic bag instead of a bowl, remove the air before sealing and squeezing to mix the ingredients.

CURIOSITY FOR ALL AGES: EXPLORE MORE

Play with the Oobleck and make some observations:

- How would you describe it (sticky, slimy, crunchy...)?
- Squeeze it into a ball shape; how long does it hold its shape?
- Leave a little Oobleck out overnight. What happens?
- What else can you do with your slime?

Experiment continued on next page...



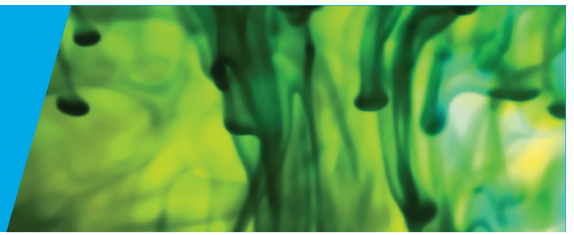
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CURIOSITY FOR GRADES 3–5, 6–8: EXPLORE MORE

Material scientists study and develop materials we need for making things that we use every day, like metals, plastics, sports equipment, shoes ... just about everything! They often test materials to figure out how they could best be used. Be a material scientist and test your Oobleck to discover what it could be used for.

Below are some different ideas of how Oobleck could be used and some different ways to test it. Fill in the rest of the table with your tests and ideas.

Use ideas:	What property is needed?	Tests you could perform:
Sticking papers to the wall	Stickiness	Stick a piece of paper to the wall with a little slime. Time how long it stays up.
	Bounciness	Use a ruler to measure how high it will bounce.
Seal for leaks		Put some water in a cup. Stretch the Oobleck across the top. Over a sink, turn the cup upside down. Time how long it will hold the water.
Make boats out of it	It can float	
	Stretchiness	
		Put part of it over the edge of the table, and measure how far it will stretch.

What other properties of your Oobleck can you test?

What's Happening?

Sometimes the Oobleck seems like a liquid, and sometimes it seems like a solid. Because it is a weird liquid that doesn't follow Newton's Laws of Fluids, it is called a *non-Newtonian fluid*. Ketchup is another non-Newtonian fluid: it changes how runny it is when you shake it!

Special note:

If you use food coloring in your slime, make sure it doesn't stain any surfaces it touches like tables or walls.



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