DID YOU KNOW?
The word "oobleck" was invented by author Dr Seuss in his book *Bartholomew and the Oobleck* to describe a solid that sometimes behaves like a liquid.

Go crazy with oobleck

Test your chemistry skills and make a weird substance that is both liquid and solid.

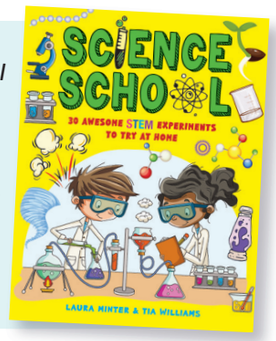
What you need

- 150g cornflour
- Jug
- 120ml water
- Spoon
- Food colouring
- Cocktail sticks
- Deep dish
- Small toys to bury
- Tray
- Paintbrush

How does it work?

To understand how this strange substance works, you need to know about Newtonian and non-Newtonian fluids. They are named after the scientist Sir Isaac Newton, who made some of the first studies of how fluids move. A Newtonian fluid is a substance that doesn't change its consistency when you apply pressure to it – water, for example, doesn't get runnier or gloopier when you stir it. Oobleck, however, is a non-Newtonian fluid. It changes its thickness when you stir it, prod it or shake it. It behaves this way because it is made of tiny particles of solid cornstarch held suspended in water. When you apply sudden pressure the particles stick together, trapping the water molecules. This makes the substance thicker and can even turn it solid. Kinetic sand, toothpaste and tomato ketchup are other examples of non-Newtonian fluids.

Inspired by *Science School* by Laura Minter and Tia Williams, Button Books, RRP £12.99, online and from all good bookshops.



1 Put the cornflour in the jug and gradually add water, stirring constantly. The mixture should be difficult to move a spoon through. You now have oobleck to play with.

2 Explore the properties of oobleck. Add food colouring and stir the colours into the mixture. Try rolling it in your fingers and squeezing it with your hands. What happens?

3 You could also make your own fossil dig site. Pour the oobleck into a dish, add some small toys and leave it to dry out for about 24 hours. The putty will crack as it dries.

4 Tip the dry oobleck onto a tray and go fossil hunting. Chip away at the "earth" using cocktail sticks, and brush away the dust with a paintbrush to reveal the fossils.

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