

What's the Matter?

Exploring Different Types of Matter at Home with Oobleck



In science **Matter** is anything that takes up space. Your clothes, toys, papers, and even you are made of matter! On Earth, most matter comes in three forms: solid, liquid, and gas. Here is what makes them unique:



Solids keep their size and shape unless broken



Liquids keep their size but change their shape to their container



Gasses change their size AND shape to fill their container

Sounds pretty easy, right? Let's test our knowledge with an experiment. We are going to make Oobleck!

Materials

- 1 cup of corn starch
- Approximately 1/2 cup water
- 1 bowl
- 1 stirring spoon

Want your Oobleck to look even cooler? Add some green food coloring to make it into a sticky slime!

Directions

1. This can be messy so its best to do this outside or on a protected surface like a table cloth or newspaper.
2. Pour corn starch into bowl.
3. Slowly add water and mix until there is no more powder.

Now what?

Reach in and gently touch your Oobleck. Try hitting it hard. Scoop it with a spoon. Now grab a piece in your hand and squeeze. What do you think? What observations can you make? Is it more a liquid or a solid?

What's the Science? Did we stump you? If you are confused, that's okay! Oobleck is a non-Newtonian fluid, meaning it has characteristics of solids and liquids! In nature, we see this in quicksand and lava but you probably have some less dangerous ones in your home! Take a look around! See what you find! You might be surprised how many non-Newtonian fluids you encounter in a week!

Clean-up: Oobleck can be washed off clothing and hands by soaking in water. DO NOT dump your Oobleck straight down the drain or else it might clog. Leave it out to dry back into a powder, then sweep it up and throw it away.

Follow along with our video and discover other activities at:

<https://theleonardo.org/leo-at-home>

Now you try!

How would you sort these items by matter? Are any of them more than one type of matter?

- Milk
- Mountain
- Tree
- Chair
- River
- Balloon
- Steam
- Cloud
- Soda

Share with the Leo community!

Did you find any other cool non-Newtonian fluids at home? Tell us what you found or show us your Oobleck mess on social media with:

#leoathome

and

#museumathome.

