

JR-SCIENTISTS

ELECTRIC CORNSTARCH

It's alive! This cornstarch slime is a fun twist on the classic oobleck recipe.

INSTRUCTIONS:

STEP 1: Add 3 tablespoons of cornstarch to a plastic cup or bowl.

STEP 2: Slowly add vegetable oil to the cornstarch, stirring until the consistency is that of a pancake mix.

STEP 3: Blow the balloon up partially and tie it off. Rub against your hair to create static electricity.

STEP 4: Move the charged balloon towards a spoonful of the dripping cornstarch and oil mixture. Watch what happens!

THE SCIENCE

When you rub the balloon on a rough surface like your hair you give it additional electrons. These new electrons generate a negative static charge. On the other hand, the cornstarch and oil mixture, being a non-Newtonian fluid (neither a liquid or a solid) has a neutral charge.

When an object has a negative charge, it will repel the electrons of other objects and attract that object's protons. When the neutrally charged object is light enough, like the dripping cornstarch in this case, the negatively charged object will attract the lightweight object. Dripping the cornstarch means it is easier for it to swing towards the balloon.

SUPPLIES

Cornstarch
Vegetable oil
Balloon
Spoon
Bowl

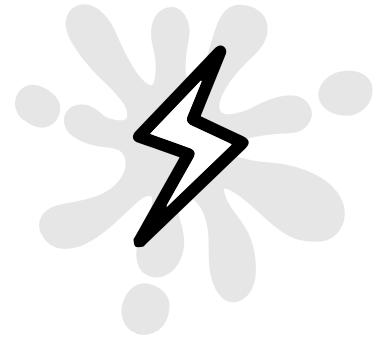
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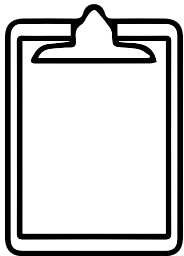


Electric Cornstarch Observations

Use this worksheet to process and evaluate your work.



Would you say the cornstarch and oil is liquid, or is it more like a solid?



RECORD

What did you observe when you moved the balloon close?

What happened to your hair when you rubbed the balloon on it?

Move the cornstarch towards a part of the balloon that is not charged.
What happens now?
