



Oobleck

Material:

- 1 Cup Of Water
- 1.5-2 Cups Of Cornstarch
- Food Coloring (Optional)
- Paper Cups Or Bowls
- Popsicle Sticks

Objective: Explorers will learn about Non-Newtonian fluids

Lesson:

Non-Newtonian Fluids

Start the lesson by explaining to explorers what a Non-Newtonian fluid is. Non-Newtonian fluids are when a mixture is both a solid and liquid in one! This occurs when a liquid is able to take the same shape as any container, aka Newtonian Fluid, but can turn to a solid under stress. (Stress would be the kids pushing on the fluid or squeezing it).

Tell explorers that they will be able to test this out today! Have them observe and discuss their findings after they have completed the experiment.



- Give each explorer their own paper cup/ bowl and a popsicle stick
- Have kids combine the 1 cup of water and 1 ½ cups of cornstarch
- Stir and check consistency (*Add slightly more cornstarch if there's too liquid still*)
- Add food coloring if desired
- Once everything is mixed, have kids stick their hands in the bowls and begin to play with the mixture
- Have them observe what happens.
 - When is the mixture a liquid?
 - When is the mixture a solid?