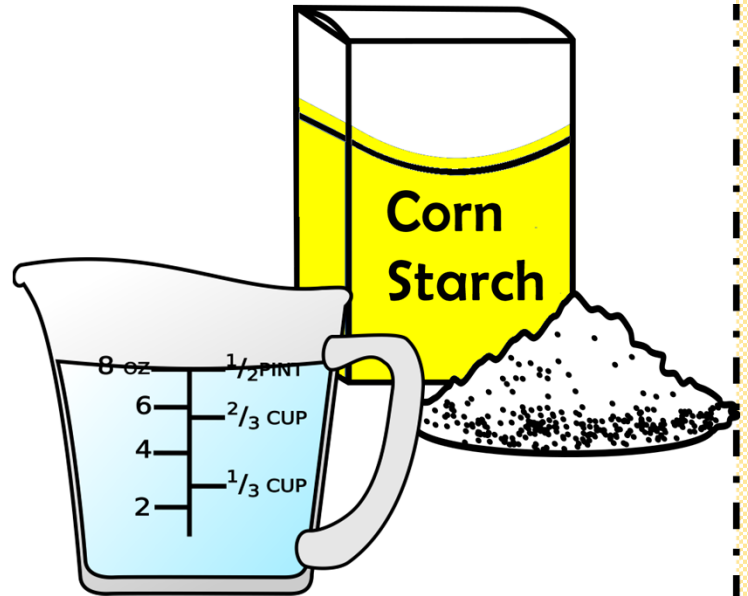


States of Matter: Oobleck

Learning about states of matter by investigating Oobleck:

What's needed:

- 1 Cup Cornstarch
- ½ Cup Water
- Food coloring
- Mixing bowls
- Spoons
- Measuring cups
- Plastic containers
- Paper towels



What to do:

- In a mixing bowl, mix two parts cornstarch to one part water. Add a few drops of food coloring if desired.
- Mix the cornstarch and water together thoroughly using a spoon. The mixture should be a liquid when you stir it slowly, but it should feel solid when you press it or squeeze it in your hands.
- Pour it into different containers and observe how the Oobleck behaves.
- Discover how Oobleck is different than other fluids which is why it is called a Non-Newtonian fluid.

Record, report and explain your findings, include drawings of how the Oobleck behaves and identify all the states of matter used and discovered with Oobleck. Explain how Oobleck is different than other fluids and why it's called a non-Newtonian fluid.

Teacher Notes:

- Introduce the concept of Oobleck and explain that it is a non-Newtonian fluid which means that can behave like a solid or a liquid depending on the force applied to it.
- Encourage the students to play with the Oobleck by poking it, squeezing it, and rolling it into a ball. Have them observe how the Oobleck behaves like a liquid when they pour it, but behaves like a solid when they apply pressure to it.
- Ask the students to describe what they noticed about the Oobleck. What happened when they squeezed it? What happened when they tried to pour it quickly? How did the Oobleck behave when they let it sit in their hand?
- Discuss with the students how Oobleck is an example of matter changing its state. It can behave as a liquid and a solid depending on how much pressure is applied to it.
- Encourage the students to experiment with the Oobleck further. Have them try adding more water or cornstarch to see how the consistency changes. You can also add objects to the Oobleck, such as small toys or marbles, to see how it behaves differently with different objects.
- To use in centers, provide materials to make 4-5 batches of Oobleck.