Cornstarch Science --- Quicksand Goo!

**Concept:** Matter and Energy **Topic**: Properties of Liquids and Solids

**Grade 6 Expectations:** Students will:

* investigate the properties of and interactions between liquids and between liquids and solids
* describe the properties of liquids and solids, using their observations
* Use appropriate vocabulary in describing their investigations, explorations, and observations (e.g., use such words as, particles, viscosity, pressure, surface tension, and fluid when describing solids, liquids, and gases.

**Question:** Is the substance we made a solid or a liquid?

**Procedure:**

1. If your teacher has already made Oobleck for your class, get some of it in a container, and skip to Step 2. If your teacher has not made Oobleck, follow all directions below.
   1. Place ¼ cup of water in the plastic cup. Begin slowly adding cornstarch and stirring constantly. Why the mixture begins to t thick, keep adding and stirring.
   2. When the mixture becomes too hard to stir quickly, you’ve made Oobleck.
2. The first part of your experiment with Oobleck involves observation. Play with Oobleck. Pour a little in your hand, and see how it reacts when you push it. Write your observations in your science journal.
3. Do the following tests on your sample of Oobleck, and write what happens in your science journal.
   1. Slowly poke your finder into the Oobleck.
   2. Quickly poke your finger into the Oobleck.
   3. Poor Oobleck into a plastic bag. (Does it pour? Does it take the shape of bag)
   4. Roll the Oobleck into a ball.
   5. Tap the Oobleck with a pencil.
   6. Bounce the Oobleck (on your desk, not the floor)
   7. Sink you entire hand into the glop and try to grab the fluid and pull it up. That’s the sensation of sinking in quicksand!
   8. Drop a plastic toy animal into the cornstarch mixture and then try to get it out.
4. Make your final observations, and answer the following lab report requirements on the back. When you are finished, pour the glop into a large zipper-lock plastic bag for later use.

**DO NOT PUT THE MIXTURE DOWN THE DRAIN**

**Lab Report Requirements on Back**

**Quick Sand Goo Lab Report:**

1. Purpose: What are you interested in finding out?
2. Hypothesis: What do you think will happen? Remember it needs to be in an *If…then…* statement.
3. Results: Describe your observations. Be sure to use at least 3 vocabulary terms in your description. What did you find out that you did or didn’t expect?
4. Discussion: What happened? How did it compare to what was expected? What errors could have occurred? Could this experiment be improved?
5. Conclusion: Write a conclusion **paragraph.** What did you learn from doing this investigation? Summarize the results and explain if you think the mixture is a solid or a liquid. Be sure to give supporting evidence and explain how this experiment applies to real life.