**Purpose: To learn the importance of a lab notebook and to practice proper lab procedure**

**Prediction/Hypothesis: When the constituent substances are mixed, a non-newtonian fluid that exhibits properties of both a liquid and a solid will be formed.**

**Hypothesis 2: Substances will mix together and form a putty that is very morphable.**

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| Procedure & Methods: | Data & Observations: |
| 1. Cover workspace in paper towels 2. Obtain a small (~100 mL) beaker and add 4 scoops of corn starch 3. Add 5 mL of warm tap water to the beaker and mix 4. If the substance is too watery, add starch 5. If the substance is too powdery, add water | 1. Paper towels. 2. Corn starch is corn starching 3. Mixture is clearly water with substance in it 4. Added 4 additional scoops, substance is now very resistant when actively moving through, but flows off when not being moved |
| 1. 2) Pour one full pipet of water into a Ziploc bag 2. Pour approximately the same quantity of glue into a Ziploc bag 3. Add approximately the same quantity of borax solution to the bag 4. Mix the bag for approximately 1 minute 5. Remove the substance from the bag and knead for 1 minute | 1. It’s water! 2. Glue mixed with water, but was still very liquid-y 3. Substance became less liquid once borax solution was added 4. Substance became very solid over course of mixing – some residue was left behind in bag with properties more similar to glue 5. Kneading the substance is very squishy and morphable – it bounces! |
| 3) |  |
| 4) |  |
| 5) |  |
| 6) |  |
| 7) |  |

**Questions:**

1. **Oobleck**
   1. **(What happens when pressure is applied to oobleck?) The oobleck becomes very solid, then flows into a liquid when you release it’s liquid**
2. **Polymer**
   1. **Applying pressure to the puddy it conforms to the shape of the hand, then it maintains shape**
   2. **Goofy putty slowly stretches apart, then eventually rips – tearing at a higher speed accelerates the rate of rip**

**Tables/Graphs/Charts/Sketches:**

**Conclusion:**

**Post-Lab Questions:**

1)

2)

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