**Lab 5- ECE 219 Simple Experiments**

**Station 1: Static Electricity**

Take the cloth and rub on the bottom of the Styrofoam plate. The try to stack the plates (bottom to bottom). Take the cloth and the rub the PVC pipe and then put it next to the soda can (on its side).

**QUESTIONS TO ASK CHILDREN BUT FOR YOU TO ANSWER**

How is static electricity generated?

What did you observe about the affect of charges on the movement of objects?

What causes a person / thing to have a lot of static electricity?

**QUESTIONS FOR YOU TO ANSWER AND TO THINK ABOUT WHEN PLANNING**

Why would children be interested in learning about static electricity?

What are 5 new words you can teach preschool-age children?

What open-ended questions you ask to get the children to hypothesize? List 3

**Station 2: Silky and Stretchy Play Dough**

Add 1 cup hair conditioner and 2 cups corn flour/cornstarch and knead.

**QUESTIONS FOR YOU TO ANSWER AND TO THINK ABOUT WHEN PLANNING**

What is different about this dough, compared to other play dough you have explored?

What materials could you add to this experiment to engage children in exploring? Describe 3.

Describe how you would discuss the process of making this dough with children.

What open-ended questions you ask to get the children to hypothesize? List 3

Write 3 Illinois Early Learning Standards that go along with this activity.

**Station 3: Anti-Gravity Water**

Drape the cloth over the glass, making sure you push the center of the cloth down into the glass. Fill the glass ¾ full with water by pouring water into the middle of the cloth. Slowly pull the cloth down the sides of the glass making it tight across the top. Grip the ends of the cloth at the bottom of the glass. Place one hand over the mouth of the glass and turn it over with the other hand. Pull the lower hand away from the glass slowly.

**QUESTIONS TO ASK CHILDREN BUT FOR YOU TO ANSWER**

Why did this experiment work or not work?

What is gravity and why is it relevant to us?

**QUESTIONS FOR YOU TO ANSWER AND TO THINK ABOUT WHEN PLANNING**

How could you introduce this experiment to children?

What new words could you teach the children while engaging in this experiment? List 5

**Station 4: Water Drop Races**

Place drops of water on the wax paper. Use the straw to blow the droplets around the wax paper. Race your peers!

**QUESTIONS FOR YOU TO ANSWER AND TO THINK ABOUT WHEN PLANNING**

How could you introduce this experiment to children?

What new words could you teach the children while engaging in this experiment? List 5

What questions could you ask the children while engaging in this experiment? List 3.

Why would children be interested in this experiment?

**Station 5: Bubbles**

Make a bubble solution out of dish soap and water in a bowl. Turn/mix the eggbeater in the bubble solution to mix the solution.

**QUESTIONS FOR YOU TO ANSWER AND TO THINK ABOUT WHEN PLANNING**

What happened in this experiment?

What activities could have been done in the classroom prior to this experiment?

What math/science concepts would children learn from this experiment? List 3.

What age group would this be appropriate for? Why?

What questions could you ask the children while engaging in this experiment? List 3.