St. Peter's
EARLY CHILDHOOD DEVELOPMENT CENTER
EST. 1980

Where Does Rain Come From?

STEAM Train Experiment Instructions

PREPARE

Location: Room E133

Materials:
- 1 clear plastic cup with holes punched through on the bottom
- 1 mason jar
- Measuring cup
- Blue food coloring
- 5 cotton balls

1. Add water (from sink in E133) to the marked line on the mason jar.
2. Place the plastic cup inside the mason jar.
3. Add about 3 cups of water to the measuring cup.
4. Put 1 or 2 drops of blue food coloring in the measuring cup. Gently swirl to mix.

Location: Classroom

1. Set the materials on the top shelf of the STEAM Train cart in front of the kids so they can see.

PRESENT THE EXPERIMENT

1. Say: "Does anyone know where rain comes from? (Be ready for some interesting answers and enjoy all of the ways children think of and process the world around us.)
    - Answer: "A cloud is made up of tiny drops of water. The wind pushes the clouds across the sky and the clouds collect more and more tiny drops of water. When the water is too heavy for the clouds, it rains."

2. Say: "The cotton balls here will act as our clouds. Does anyone want to put some clouds in the cup for us?" (You can ask the class to count to 5 together while student places 5 cotton balls in the plastic cup.)

3. Say: "We are going to pour this blue water onto the clouds. What do you think will happen?"
   Allow time for answers and then say: "Let's see what happens!"

4. Pour the blue water on top of the cotton balls until it starts to "rain". You might need to swirl it a little for the water to make it through the cotton balls.
    - Answer: "The cotton balls absorb some of the water, but as soon as the water becomes too heavy, it starts to rain."

EXTENSION QUESTIONS

1. What does rain do?
    - It helps plants and trees grow, and helps farmers grow food for us to eat.
2. What kinds of organisms/plants/animals need water?
    - All living things need water.
3. Where does the rain go?
    - It goes to rivers, lakes, and streams that eventually lead to oceans.