Precipitation Station

Ages: 4 years and up (w/adult support)

Activity Summary
Where does rain come from and how does it form? Explore the water cycle by creating your very own model of precipitation!

Learning Objectives
- Participants will create a visual model to explore the water cycle.
- Participants will simulate how water moves through parts of the water cycle.
- Participants will make observations while conducting an experiment.

Materials & Supplies
- 1 clear glass jar
- 1 can of shaving cream
- 1 cup
- 1 bottle of food coloring
- 1 eyedropper (can be substituted for a paintbrush or toothpick)

Setup
- This activity is best done on a tabletop, close to a sink.
- Squirt a few drops of food coloring into the bottom of the cup.

Key Words
Evaporation  Condensation  Precipitation
Water Cycle  Cloud  Rainwater
Safety Precautions

Children should not consume any of these materials. Use caution when handling glass jars and cups.

Directions

1. On a tabletop surface, place a clear glass jar filled two-thirds with water.

2. Demonstrate how to use the shaving cream can. Younger children may need to practice this fine motor skill.

3. Invite your child to cover the water’s surface with a coat of shaving cream.

4. Provide an eyedropper and cup of food coloring. Challenge your child to give the eyedropper a few squeezes to test it out. Can they feel the air leaving the eyedropper, then being sucked back in?

5. Next, invite them to fill the eyedropper with the food coloring, and then drop the liquid onto the shaving cream cloud.

6. Make observations as the dye moves through the shaving cream and into the water! Remind your child this is a model of precipitation, or rain fall.

Going Further

As you continue to explore together ask children open-ended questions such as:

- What do you notice when you add drops of food color? What happens to the water in the jar?

- What does rain sound like to you? What might it sound like using your hands? With your voice?

- What might you do to add thunder? Lightning?

Adaptations

- If you do not have shaving cream, try using cotton balls, stuffing from an old toy, pillow or another fluffy material.

- Instead of an eyedropper, try using a small paint brush or a toothpick to add drops of food color to your model.

- Watch this video to see more about the water cycle and to learn a Water Cycle Song.

Clean up

Pour the shaving cream cloud down the drain and wash all tools with soap and water.

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