California State University of Bakersfield, Department of Chemistry

Rain Cloud Jar

Standards:

K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.

K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

Introduction:

Have you ever wondered how rain is created? Did you know that rain is liquid water in the form of a droplet? Droplets condense from atmospheric water vapor and then precipitate. This experiment is an easy way to demonstrate how rain in clouds form.

Materials:

- water
- clear jar/beaker/glass (either one will do)
- food coloring
- shaving foam/cream
- pipette

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Safety:

- Always have an adult with you to help you during your experiment.
- Always wear eye protection and gloves when doing chemistry experiments

Procedure:

1. Fill your clear glass beaker halfway with water
2. Next, squirt shaving cream on top of the water
3. Then, drop a few drops of food coloring in different areas of the shaving cream
4. Finally, sit back and enjoy your own raining cloud in a jar!

Data and Observations:

1. Record your observations here.

Questions:

2. How is this experiment similar to clouds when it rains?

References:

1. "Exploratory Art for Kids. Squirty Foaming Paint." Learn with Play at Home. N.p., n.d. Web. 23 July 2014.

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