



STEM Exploration - Cup of Rain

Materials: two clear containers like cups or jars, water, shaving cream, blue food coloring or liquid watercolor, a pipette, dropper, or spoon

Background Information: Weather is the daily state of the atmosphere, or air, in a given place at a given time. Factors of weather include temperature, humidity, precipitation, cloud cover, air pressure, wind speed, and wind direction.

STEM Career Connection: Meteorologists - scientists who study the environment and lower levels of the atmosphere in order to track and predict weather patterns.

Directions:

1. Gather materials.
2. Fill one container $\frac{3}{4}$ full of water.
3. Add shaving cream to the top.
4. Fill the other container $\frac{1}{4}$ full of water and color with the blue food coloring or liquid watercolor.
5. Slowly add drops of the colored water to the shaving cream and water container using the pipette, dropper, or spoon.
6. Watch as the shaving cream becomes saturated and colored water begins to seep through and fall to the bottom like rain.
7. Make observations and connections. What does the shaving cream represent? What does the colored water represent?
8. Clouds are made up of water droplets. When clouds become heavy with moisture, the moisture is released and precipitation falls to the earth. Liquid precipitation is rain. The model you made today is like the clouds when they are full of moisture and they release rain.

