



Rain Cloud in a Jar

Grade level:
pre-K - 5

Materials Needed:

- Printed recording sheets
- A large jar
- A small cup
- Shaving cream (not a gel version)
- Gel Food coloring or washable watercolors
- Pipettes or droppers

Lesson Summary

This lesson simulates a rain cloud as it begins to rain in the atmosphere, learn about how the cloud gets 'heavy' so precipitation begins to happen.

Activity Instructions

Set Up:

1. In a small cup, mix the food coloring with some water.
2. Fill the large jar with water until it is about 3/4 full.
3. Place the jar and the cups of colored water on the table. Place a pipette in each cup of colored water.
4. Right before the students are ready to do the experiment, spray a bunch of shaving cream in the jar until it is just a small bit above the top of the jar.

Activity:

1. Give each student a handout and have them make a prediction about what is going to happen, what I think will happen is...
2. Ask the students to pick up some colored water with a pipette and squirt it on top of the shaving cream cloud.
 - a. Repeat this step one or two more times, but pay close attention to what is happening below the cloud!
3. Have the students fill out the "I observed" portion of the handout
4. Have a whole class discussion about what this simulates and fill out the final section of the handout

What is happening...

- The shaving cream represents the clouds
- The water represents the air
- The colored water represents rain

As the colored water saturates the "cloud", it gets heavy and eventually is so heavy that it can no longer hold the water. It "rains" down into the jar – through the "air." It is just like real rain falls through the air.

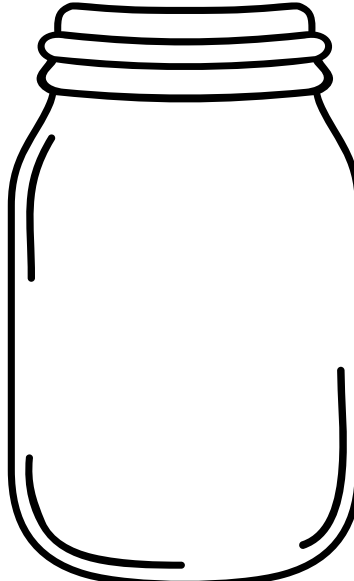


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What I think will happen is . . .



I observed . . .



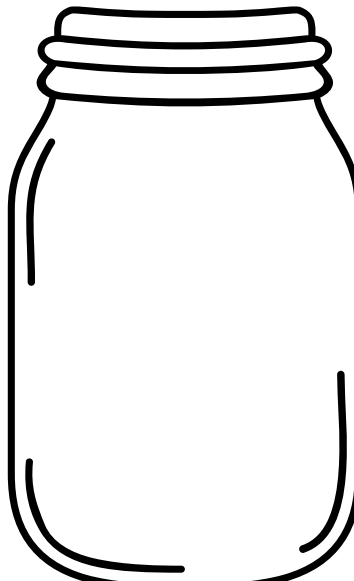
I learned . . .

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What I think will happen is . . .



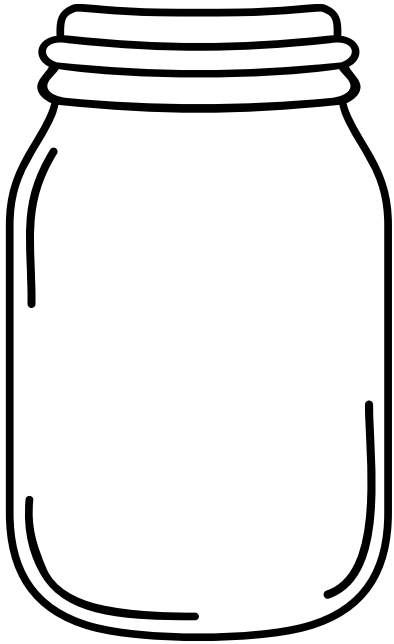
I observed . . .



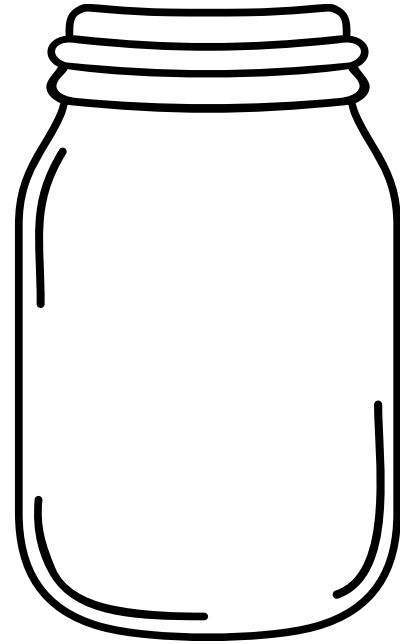
I learned . . .

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What I think will happen . . .

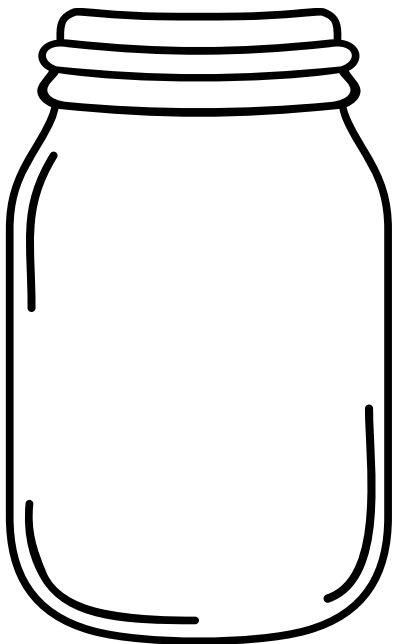


What I observed . . .



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What I think will happen . . .



What I observed . . .

