**“Topic: Science: Clouds ”**

Water Cycle Cloud Experiment

**Subject**: Science

**Grade**: First

**Instruction Time**: 30-40 minutes

**Materials**:

1. Water Cycle Definition Chart
2. Water Cycle Worksheets
3. Mason Jars
4. Water
5. Water Cups
6. Droppers
7. Food Coloring
8. Promethean Board with Projected Instructions
9. Scientific Method Worksheets

**Lesson Focus**:

Students will demonstrate an understanding of condensation and precipitation by participating in a cloud experiment and recording observations and conclusions.

**Common Core Standards**:

**Subject:** Science

**Grade:** First

**Area:** Earth Sciences

**3.**  Weather can be observed, measured, and described.

**Area: Investigation and Experimentation**

**4.B.** Record observations and data with pictures, numbers, or written statements.

**ELD/SDAIE Strategies:**

* Use of visual representation.
	+ Chart Paper with definitions in words or pictures
	+ Front loaded vocabulary accompanied by student created diagrams and animated video
	+ Student sharing of ideas an opportunities to work in pairs/ groups

**Vocabulary:**

* Evaporation – When water turns into water vapors due to heat
* Condensation – When water vapor read cooler places, they change into water
* Precipitation – When show, rain or other types of water fall

**Introduction (on rug):**

* I will orally introduce students to the idea of our experiment today, and explain the behavior expectations to make everyone safe

**Guided Practice (on rug):**

* Together, the students and I will review our three vocabulary words, and I will draw a picture of a cloud, and have them help me label the condensation and precipitation of the cloud.
* I will then introduce students to our scientific method sheet, and go through the steps. I will remind students how we can count the drops, and give the example of our brownie tally chart.
* Here, Ms. Gurerro and I will demonstrate one experiment, to show students how to work in pairs.
* I will then have students make a prediction of how many drops they think their “cloud” can hold before it “rains”.
* Here, Ms. Gurerro will help students record predictions, collect clip boards and introduce partners while I set up remainder of jars and water.

**Independent and Guided Practice Hybrid**:

* Students will work in pairs to drop colored water into jars with shaving cream clouds” each pair will switch off between recorder and dropping five drops of water. Students will record their findings in our premade scientific method sheet.
* Students who finish early will be encouraged to either help me clean up or draw a picture on the back of their sheets.
* Most cleaning will be done by adults because of glass jars

**Closure**:

* I will have students come back to rug, and discuss their observations.
* **Assessment:** Each student will make sure their findings are recorded, and that their partners answers were recorded. On their Scientific Method sheets.
* We will review the steps of the water cycle, and I will encourage students use “condensation” and “precipitation” in their explanations.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Scientific Method: Clouds

|  |  |
| --- | --- |
| Ask a Question | How many drops can of water can a cloud hold before it rains? |
| Make a Prediction  | I think a cloud can hold \_\_\_\_\_ drops of water before it rains. |
| Observe Experiment  | Take turns dropping colored water into clouds. Count the number of drops. |
| Record Results  |  |
| Draw a Conclusion | A cloud can hold \_\_\_\_\_ drops of water before it rains.  |