**LESSON #3**

Teacher Candidate: Cheyenne Mellor Grade Level: 4 Title: Raining cotton balls (water cycle #3)

|  |
| --- |
| **CONTEXTUAL FACTORS** (classroom factors) |
| **Contextual Factors:**  22 Students  -12 males, 10 females  -1 bridging ELL  -1 student with severe allergies to milk, egg, peanuts  -4 students have ADHD  -1 student with a blood disorder (vWF)  **Classroom environment:**  Classroom has a Promethean board and Ipads for each student. Students sit at tables with groups of 5-6 people. One student sits on an exercise ball instead of a chair to help him stay focused. |

|  |
| --- |
| **WALK-AWAY** (As a result of this lesson, what do I want the students to know, understand, and be able to do?) |
| **State Standard/Objective:** 4th grade Science standard 1, objective 1: Describe the relationship between heat energy, evaporation and condensation of water on Earth. C: Compare the processes of evaporation and condensation of water (SIOP 1-3).  **Content Walk-Away:** I will understand that condensation forms clouds and precipitation is when clouds release water.  **Language Walk-Away**: I will write a story about water a water drop might experience as it goes through the water cycle.  **Vocabulary**: Precipitation, condensation, drought |

|  |  |
| --- | --- |
| **ASSESSMENT EVIDENCE** (What evidence do I need to show the students have learned the Walk-Away?) | **Modifications/Accomoda-**  **tions** (ELL, IEP, GATE, etc.) |
| **Formative Evidence** (checking for understanding throughout the lesson):  I will observe students as they work in groups to make the cotton ball rain. I will listen for academic language that they were taught. (SIOP 24)  **Content Walk-Away Evidence** (Summative):  Students will write their own definitions of condensation and precipitation (SIOP 22).  **Language Walk-Away Evidence** (Summative):  Students will share their stories orally. (SIOP17). |  |

|  |  |
| --- | --- |
| Approx.  Time | **ACTIVE LEARNING PLAN** |
| 3 min  5 min  5 min  10 min  5-10 min  (any other free time during the day)  SIOP 26  3 min | **Activate/Building Background Knowledge**  Sing the Water Cycle Song. Students will read over vocabulary words from the day before (vapor, precipitation, evaporation, clouds, dew, condensation, temperature, water cycle) (SIOP 7, 8, 9) with their partners. After they discuss, they will be allowed to look at the definitions to see if they were right.  *Formative assessment:*   |  |  |  | | --- | --- | --- | | Learning Goal | Success Criteria | Assessment Strategy | | Describe the process of evaporation, condensation, and precipitation as they relate to the water cycle. | Students will recall the meaning of each vocabulary word | They will discuss with partners. |   *Modification/accommodations: (ELL, IEP, GATE, etc.)*  Students will be partnered so that the learning levels vary.  **Focus Lesson (“I do it”)**  I will begin the lesson by showing the students a funny picture of the water cycle to get them engaged (SIOP 25, & 4) (see attachment). I will have students raise their hands to share what they think about the photo and share any connections they make with it (ie: the sun is the energy source because it is causing the water to move). I will then bring up the question, “At what point to the clouds release water?” Students will give simple answers like, “When it gets too heavy”. So to get them thinking deeper (SIOP 15) I will ask another question. Student #18 wanted to know *“How can water stay in the clouds long enough for there to be a drought?”*  *Formative Assessment:*   |  |  |  | | --- | --- | --- | | Learning Goal | Success Criteria | Assessment Strategy | | Describe the process of evaporation, condensation, and precipitation as they relate to the water cycle. | The sun causes evaporation. | Students will share the connections they make of the comic with their neighbor. |   *Modification/accommodations:*  **Guided Instruction (“We do it”)**  I will place the worksheet underneath the ELMO so everyone can see it. As a class we will predict how many drops of water will fit into the cotton ball before it starts to rain. I will write in our prediction on my sheet while the students follow along with theirs (SIOP 18). I will then slowly drop water in while the class counts drops. We will go until the cotton ball drops water. We will then write the actual amount. We will find the difference by subtracting the smaller number from the bigger number (SIOP 10-11).  *Formative Assessment:*   |  |  |  | | --- | --- | --- | | Learning Goal | Success Criteria | Assessment Strategy | | Describe the process of evaporation, condensation, and precipitation as they relate to the water cycle. | The water held in the cotton ball represents condensation. | Students will discuss the similarities and differences of condensation in clouds and the water in a cotton ball (SIOP 21). |   *Modification/accommodations:*  As students are discussing the differences between a cloud and cotton ball, I will walk around and prompt those who may be stuck (SIOP 14).  **Collaborative/Cooperative (“You do it together”)**  The students will work in partners to complete the next two trials (SIOP 20). They will predict (SIOP 13) and then take turn dropping water into a dry cotton ball. As partners they will discuss how the experiment relates to the actual water cycle (SIOP 16). They will answer the questions on the back of the worksheet referring to predictions, precipitation, and condensation (SIOP 23).  *Formative Assessment:*   |  |  |  | | --- | --- | --- | | Learning Goal | Success Criteria | Assessment Strategy | | Describe the process of evaporation, condensation, and precipitation as they relate to the water cycle. | Understand how to use past predictions to form a new prediction about condensation within a cotton ball. | Students will fill out the questions on the back of the worksheet. |   *Modification/accommodations:*  Each student is in charge of filling out their own worksheet even though they are working in partnerships. I will ensure that all students are working together and not merely giving answers to each other.  **Independent (“You do it alone”)**  During a different part of the day students will each write in his or her journal (SIOP 12). The prompt for today is: “You are a water droplet. Write a story describing your journey through the water cycle.” I will first show them a youtube video of one person’s story (SIOP 6). Students will be encouraged to use their vocabulary journals to refer to for definitions. This activity will help lead into the “Incredible journey” lesson.  ***Summative Assessment:***  I will read their stories to assess their knowledge and understanding of the water cycle process (SIOP 30).  *Modification/accommodations:*  I will have each student write at least a paragraph. I will encourage higher learners to write three paragraphs (SIOP 5). I will place on the board the necessary vocabulary words for them to refer back to (SIOP 19).  **Closure/Review of walk-aways, vocabulary, and essential questions**  *(Note: Closure includes student interactions, reflection, and/or demonstrations.)*  I will have some students share the connections they made between the experiment and the real water cycle. I will clarify that the real water cycle does not involve cotton balls, only water droplets (SIOP 27-29). |

|  |
| --- |
| **SIOP Indicators** *(Add SIOP number and description within the lesson plan)*  **Preparation:** 1-Content objectives, 2-Language objectives, 3-Content appropriate, 4-Supplementary materials, 5-Adaptation of content, 6-Meaningful activities  **Building Background:** 7-Linked to background, 8-Linked to past learning, 9-Key vocabulary  **Comprehensive Input:** 10-Appropriate speech, 11-Clear explanation, 12-Variety of techniques  **Strategies:** 13-Students use learning strategies, 14-Scaffolding, 15-Higher-order thinking,  **Interaction:** 16-Opportunity for interaction, 17-Grouping supports objectives, 18-Wait time, 19-Opportunity for L1 students  **Practice/Application:** 20-Hands-on materials, 21-Activities to apply content/language knowledge, 22-Language skills: reading, writing, listening, speaking  **Lesson Delivery:** 23-Content objective supported, 24-Language objective supported, 25-Students engaged, 26-Pacing  **Review/Assessment:** 27-Review vocabulary, 28-Review concepts, 29-Feedback, 30-Assessment |

|  |
| --- |
| **TEACHING NOTES** |
| ***What do I need to remember to do?***  *Partner up the students*  *Don’t forget to clarify that a CLOUD is not made of cotton, only water.*  ***What materials do I need to have ready?***  *\*Cotton balls*  *\* Water dropper*  *\* pans to catch water*  *\* PowerPoint*  *\* Student work sheet*  ***What is the approximate time needed for this lesson?***  *30 minutes* |

|  |
| --- |
| **REFLECTION AFTER LESSON** |
| *I was surprised that it took so much water to fill a cotton ball. Next time, drop a WHOLE dropper’s worth as one drop instead of one small drop at a time. Students loved this activity and I would definitely use it again in the future. Modeling was very important and helped them to know what they were to be doing.*  *Next time, have a procedure in place for when the students are done with the materials. Explain ahead of time what they are to do when they are finished.* |