

**Science Report:**

**The Water Cycle Activity**

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**Section:** 12B20ED01

**Course code:** EDU 1802

**Course name:**

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**Word Count:** 841

As a group of three students in the science activity, we recorded our explanation about Water Cycle. Our activity included the five E’s. Each one of us took a part of the lesson activity. Muna recorded the engagement part, I recorded the two parts exploration and explanation, while Fatima recorded elaboration and evaluation. I chose my little sister Shouq to be the student, and I was the teacher. Although it was fun to record the video, we faced some struggles and problems. There was a problem to put all the videos in one video, so it took a long time from us. Also, it was a bit confusing to choose a good corner to record the video. But recording the video wasn’t too hard. It was beneficial to me because I learnt a new science experiment. Moreover, it was the first time to teach a science lesson, so I experienced a new thing.

***Age and Grade appropriate:***

Our lesson activity aimed for grade three, between the ages 8 to 9.

***The learning objectives of the science activity:***

The water cycle lesson activity will benefit the students a lot because it contains different activities, like doing an experiment, showing a video, and letting the students go outside to link the lesson with the environment. At the end of the lesson, the students will be able to recognize the water cycle when shown, name the stages of the water cycle in the right order, differentiate between each stage, relate it to the environment.

***The five E’s:***

The five E’s are five stages of a lesson. It helps the students to build their own understanding from experiences and new ideas.

***1. Engagement:***

Letting the students access the lesson and become engaged in a new concept by asking questions to generate students’ curiosity, or making activities using different materials in the classroom, or showing videos.

***2. Exploration:***

Students work under the teacher’s guidance to discover ideas, and gain knowledge about the lesson through the different class activities and experiments. These activities will help students to understand the lesson well.

***3. Explanation:***

This phase completes the exploration phase. Students will have the opportunity to explain their thoughts about the lesson. Also In this phase, teachers will add new concepts to simplify students’ understanding.

***4. Elaboration:***

Students in this stage are allowed to apply what they have learned from the lesson, to widen their conceptual understanding. Through new experiences, students will improve their ideas of the lesson and skills.

***5. Evaluation:***

This phase gives the students chances to assess their skills and abilities. Teachers evaluate and judge students’ progress to see how far did they.

***The science activities and the five E’s:***

**1. Engagement:**

Muna did the engagement phase. She started the lesson with a short video about the water cycle to engage the students in the new lesson. The video was about all the stages of the water cycle so the students will just take an idea about the lesson.

**2. Exploration:**

In this phase, I did an experiment about the water cycle.

The materials that I needed:

1. Cling wrap

2. Bowl

3. Small cup

4. Spoon

5. Salt

6. Ice

7. Hot water.

- I gave the instructions to the student ‘Shouq’ to make the experiment. First, I pour the hot water in the bowl and let her put some salt in the water and stir it. Then she placed the small cup in the middle of the water. After that, She covered the bowl with a cling wrap. And the last step we put a couple of ice on the top of the cling wrap and we waited for ten minutes.

- We saw the results after ten minutes. The ice melted and some of the water drop inside the small cup that is in the bowl.

- We used this experiment to explain all the stages of the water cycle. The hot salty water is the ocean, the small cup is the land, the cling wrap is the cloud, and the ice is the cold atmosphere. When the hot water evaporated like the ocean, we saw condensation on the clouds, the condensation of the cloud hit the cold atmosphere creating precipitation on the land. This experiment explains the whole lesson of the water cycle.

**3. Explanation:**

After doing the experiment and understanding it, the student explained her understanding of the experiment. I helped her and gave her the formal explanation to simplify her concept of the lesson.

**4. Elaboration:**

In this phase Fatima explained the evaporation stage to the students. She took them outside to show them the temperature, and it was 28 C. Also, she explained that the sun is the reason why the temperature is high, so the ocean evaporates.

**5. Evaluation:**

Fatima also did the evaluation phase. She used a worksheet to see how far did the students go and judge their understanding. The worksheet was about all the stages of the water cycle, and they have to choose the appropriate word and fill it in the right blank.

***Worktable:***

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| --- | --- | --- |
| **Fatima Ahmed** | **Muna Nasser** | **Nada Khalil** |
| - Elaborate and Evaluate stages.  - The worksheet of the evaluation stage.  - Figured out the objectives of the lesson. | - The Engagement stage  - Water cycle video song.  - The definitions of the five E’s.  - Video Editing. | - Explore and explain stages.  - Video editing.  - The experiment of the exploration stage. |

***Bibliography (APA) References:***

**Video references:**

*1. Water Cycle Song Video. (2016). YouTube. Retrieved 13 April 2016, from* [*https://www.youtube.com/watch?v=TWb4KlM2vtshttps://www.youtube.com/watch?v=TWb4KlM2vts*](https://www.youtube.com/watch?v=TWb4KlM2vtshttps://www.youtube.com/watch?v=TWb4KlM2vts)

*2. Grade 3 Science book*

*3. Water Cycle Experiment. (2016). YouTube. Retrieved 14 April 2016, from* [*https://www.youtube.com/watch?v=2rwFK5\_Viqo&app=desktop*](https://www.youtube.com/watch?v=2rwFK5_Viqo&app=desktop)

***Report references:***

*1. The 5 E's . (2002). (Corporation for Public Broadcasting. ) Retrieved from Enhancing education:*[*http://enhancinged.wgbh.org/research/eeeee.html*](http://enhancinged.wgbh.org/research/eeeee.html)

*2. Explore the 5 E’s of Science. (n.d.). Retrieved from School District 54:*[*http://sd54.org/science/5es/*](http://sd54.org/science/5es/)

*3. Constructivism and the Five E's. (2001). Retrieved from Miami Museum of Science:*[*http://www.miamisci.org/ph/lpintro5e.html*](http://www.miamisci.org/ph/lpintro5e.html)