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DepED
DEPARTMENT OF EDUCATION

Lesson Exemplar for Science

Quarter 4
Lesson
2

Lesson Exemplar for Science 4
Quarter 4: Lesson 2 (Week 2)
S.Y. 2024-2025

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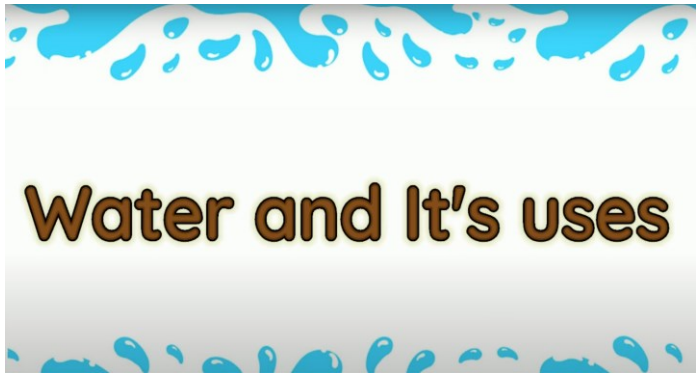
SCIENCE (EARTH AND SPACE SCIENCE) / QUARTER 4 / GRADE 4

I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES	
A. Content Standards	The learners learn that: 1. Soil and water resources are needed by plants and animals to live and grow. 2. Characteristics of the weather can be observed and measured. 3. The Sun is a ball of hot gases about 100 times the size of Earth, which radiates energy needed by living things.
B. Performance Standards	By the end of the Quarter, learners use simple equipment to identify how types of soil hold water to support growth of plants. They use instruments and secondary sources to measure and describe the characteristics of weather and use the information to make predictions about weather patterns in their local area. They demonstrate appreciation for the dangers of extreme weather events and use safe practice to protect themselves if they are caught in bad weather. Learners use personal observations and reliable secondary information sources to describe the Sun and explain its importance to life on Earth.
C. Learning Competencies and Objectives	***Learning Competencies*** *recognize that water is one of the basic needs of plants and animals;*
C. Content	Water as Basic Need of Living Things
D. Integration	• Creativity and innovation • Environmental awareness (Environmental Literacy) • Collaboration • Clean Water and Sanitation (SDG 6)

II. LEARNING RESOURCES
Needs OS living things. What five basic things do living things need to survive? (2021, September 27). Eschooltoday | Learn something new today. https://eschooltoday.com/learn/introduction-to-needs-of-living-things/ Science grade 4 q4 week 2 sources of water [Video]. (2021, June 14). YouTube. https://youtu.be/eS8l_KU7D7k?si=fBPHq25yO36XidNN Uses of water | Importance of water | Water and it's uses | Uses of water for kids | Use of water [Video]. (2020, September 29). YouTube. https://youtu.be/rUQEm3UYu5M?si=Cu3v2tVv2HmGsWpq

III. TEACHING AND LEARNING PROCEDURE		NOTES TO TEACHERS
A. Activating Prior Knowledge	**DAY 1:** **1. Short Review:** Water, Our Lifesaver! Video Exploration *Today, we will investigate the significance of water for all living organisms. We will begin by viewing a unique video that demonstrates the crucial importance of water for animals, plants, and humans. Following the film, we will engage in a discussion and then participate in a creative brainstorming session. Are you ready to explore the mysteries of water? Let's get started!* The teacher shows a video clip on water.  Source: *https://youtu.be/rUQEm3UYu5M?si=VISKMmB7gSrrYUbF* **Discussion Time:** After the presentation, conduct a discussion with the pupils discussing the significance of water as an essential need for all living organisms. Ask basic queries to stimulate their thought process, like: 1. What did you see in the video that showed animals needing water? 2. Why do you think plants need water to grow? 3. How do people use water to stay healthy?"	**Introduction:** Begin by explaining to the pupils that they will watch a short video about water and why it's important for all living things to survive. **Video Selection:** Select a short, engaging video clip highlighting the significance of water as an essential need for all living organisms. Search for videos featuring animals drinking water, plants being irrigated, and children utilizing water for different activities. **Watching the Video:** Present the selected video clip to your pupils. Encourage pupils to attentively observe and consider how water serves as an essential resource for different living things in the video.

<table>
<tr>
<td>B. Establishing Lesson Purpose</td>
<td>
1. Lesson Purpose: Unlocking Difficulties
<table>
<tr><td>Brainstorming Activity</td><td>Ask the pupils to bring out a sheet of paper and tell them to draw or write one example from the video demonstrating the importance of water for living organisms. Encourage them to utilize colors and images to express their ideas.</td></tr>
<tr><td>Sharing Circle</td><td>Let pupils introduce their drawings or ideas to the class. Write down each student's input on the board to visually illustrate the significance of water for living organisms.</td></tr>
</table>
Fill out the table below to tell us what you THINK you know about water and what you WANT to know about it.
<table>
<tr><td>What we THINK we know
T</td><td>What we WANT to know
W</td><td>What we LEARNED
L</td><td>HOW we know

H</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>
Later on, when we are done with our lesson, we will be answering the last two columns.
</td>
<td>Summarize the main points covered in the video exploration and brainstorming session. Emphasize the importance of water as an essential resource for all organisms and prompt pupils to consider ways they can contribute to water conservation to guarantee its accessibility for every living thing.

Fill the “what we think we know” and “what we want to know” in the TWLH chart as the pupils start to answer and raise questions.</td>
</tr>
<tr>
<td>C. Developing and Deepening Understanding (Using the 5E MODEL)</td>
<td>1. Explicitation (Think-Pair-Share)

Begin the lesson with a "Think-Pair-Share" strategy. Pose the question, "Why do you think water is important?" Allow pupils a minute to think individually, then pair them up to discuss their ideas. Finally, facilitate a class discussion where pairs share their thoughts.</td>
<td>Arrange pupils into small groups and provide them with the necessary materials or pictures showing several water sources.</td>
</tr>
</table>

Sources of Water (Part 1) (10 minutes)
Objective: To identify the different sources of water.
Materials Needed: pictures of different sources of water
Instructions:

1. Look at the pictures on your table. Each picture shows a different source of water.
2. Write the name of each water source in the table below.
3. After completing the worksheet, discuss with your classmates what you learned about each water source.

Name of the Water Source
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Processing Question:
Which water source do you think is the most important for living things? Why?

_____
_____
_____
_____.

Water Source Sorting Game (Part 2) (10 minutes)
Use a "Gallery Walk" approach. Display several pictures of various water sources within the classroom. Divide pupils into groups and give each group a set of questions to discuss as they move through the gallery in rotation. Encourage pupils to make notes based on their observations.

Objective: To reinforce understanding of different sources of water.

Encourage pupils to explore and discuss the various water sources, such as rivers, lakes, oceans, and groundwater. Emphasize the importance of each water source for supporting life on Earth.

Go around the groups to assist in discussions and offer help when necessary.

Instructions:

1. Divide the class into small groups.
2. Post pictures of various water sources, such as rivers, lakes, oceans, rain, and water pipes.
3. Show the pictures to each group and ask them to group them into two groups: "natural water source" and "man-made water."
4. Discuss with each group why they sorted the pictures the way they did and talk about why each water source is important.

Water Sources	
Natural Water source	**Man-made Water**

Ask the pupils to describe the difference between natural and man-made water sources.

Processing Questions:

What did you learn about the different sources of water from this activity?

_____
_____
_____.

Why is it important to have both natural and man-made sources of water?

_____
_____
_____.

2. Worked Example:

Plant Watering Experiment *(Advance preparation is required)*
Objective: To understand the importance of water for plant growth.
Materials Needed: Germinated mongo plant from last week's activity; Water and small cup

Hello, pupils! Today, we'll look at something really cool: how water helps plants grow big and healthy! So, today, we'll do a fun experiment using two plants: Plant A and Plant B. Plant A will

Instructions:

1. With your group, you will conduct a plant watering experiment.
2. You will use your germinated mongo plant's last activity in soil.
3. Label two small pots as "Plant A" and "Plant B."
4. Water Plant A for the whole day until the next morning, but do not water Plant B.
5. Observe the plants. Describe what you see happening to each plant.
6. Discuss with your group what you learned about the importance of water for plants.

Drawing:

Plant A	Plant B

Processing Questions:

1. What differences did you observe between Plant A (watered regularly) and Plant B (not watered)?

   _____
   _____
   _____

2. How does this show the importance of water for plants?

   _____
   _____
   _____

receive water, but Plant B will not. We're going to observe what happens to each plant over time. Are you excited to be a plant scientist beside me?
Before we begin, let's make a guess: What do you think will happen to a plant without water? What about a plant that gets enough water? Let's discuss our observations, and then get ready to investigate!

Conduct a hands-on activity where pupils observe and discuss the effects of watering on plant growth using germinated seeds or potted plants.

Remind pupils to record their observations while learning the importance of water in plant development and health. Encourage pupils to consider how plants use water and the importance of watering them on a regular basis.

DAY 2:

3. Lesson Activity

Animal Habitat Exploration (20 mins)
Objective: To understand how water is essential for different animals and their habitats.
Materials Needed: pictures of various animals and their habitats

Instructions:

1. Work in a group.
2. Together with your teammates, perform the activity.
3. Provide each student with a worksheet containing pictures of various animals and their habitats, such as a lion in the savannah, a fish in the ocean, a frog in a pond, and a camel in the desert.
4. Ask pupils to observe each picture and identify how water is important for the survival of the animal in its habitat.
5. Encourage pupils to discuss with their classmates and share their observations.
6. After completing the worksheet, facilitate a class discussion to review the importance of water for animals in different habitats and how they adapt to obtain water.

Processing Questions:

1. How do animals in different habitats obtain water to survive?

   _____
   _____
   _____
   _____

2. Why is water important for animals living in deserts, forests, oceans, and other habitats?

   _____
   _____
   _____
   _____

Give pictures of different animals and habitats for students to look at and discuss. Encourage pupils to take a look at how different animals obtain water and why it is so important to their being alive.

Get your pupils to think about how the animals' activities are related to their needs for water. Encourage groups to ask questions and talk about them.

Water Usage Chart

Follow the "Think-Pair-Share" method. After presenting the water usage charts, tell pupils to consider the individual ways they use water during the day. Then, we organize them in pairs to compare the differences between their lists. Finally, arrange a class discussion in which partners share their findings.

Objective(s): To illustrate how water is used in daily life and understand the importance of water conservation.

Materials Needed: Record notebook or Chart

Instructions:

1. Use the chart below to track your water usage for one day.
2. Record how much water you drink and use for washing hands, bathing, and any other activities.

Activity	Amount of Water Used (in cups or liters)
Drinking	
Brushing Teeth	
Washing Hands	
Shower/Bath	
Cleaning	
Other (specify)	
Total	

After filling out the chart, answer the following questions:

1. Why is it important to drink water?
   _____
2. How do you use water to keep yourself clean and healthy?
   _____
3. What are some ways you can save water at home?
   _____

Distribute water usage charts to pupils and encourage them to record their water usage for one day, including activities like drinking, bathing, and hand washing.

Facilitate a class discussion about the need of water conservation using the students' recorded observations. Encourage pupils to think about how they might save water in their daily lives.

This chart provides a simple and structured way for pupils to track their water usage throughout the day, helping them understand how water is used in various activities and promoting awareness of the importance of water conservation.

	Processing Question: List down the different ways to save water. _____ _____ _____.	
D. Making Generalizations	**DAY 3:** **1. Learners' Takeaways** **Think Big! Making Generalizations** **Start with Examples:** Begin by showing pupils specific examples or situations related to the topic, such as different ways water is used at home or at school. **Find Similarities:** Help pupils look for things that are the same or similar in each example. Ask questions like: "*What do you notice about all these examples?"* *"Do you see any patterns or things that are alike?"* **Make a Big Idea:** Once pupils identify similarities, guide them to come up with a broad idea that connects all the examples. Keep it simple and easy to understand. For example: *"We use water for many things every day."* *"Saving water helps our planet."* **Test the Big Idea:** Have pupils think of new examples to see if the big idea still fits. Discuss whether it works in different situations. **Think Again:** Encourage pupils to think about their big idea and whether it still makes sense. Ask questions like: *"Does our idea work for everything we talked about?"* *"Is there anything else we should consider?"*	Summarize the main ideas discussed in the lesson and emphasize the significance of water for living organisms. Emphasize the importance of conserving water as a valuable resource to guarantee its availability for future generations. Aside from the strategy used, the teacher can also use the following: 1. real-life scenario analysis 2. role playing for synthesis 3. concept map 4. poster

2. Reflection on Learning

Go back to the **TWLH Chart**. Let the pupils reflect and check if their answers in the **THINK** column are correct. Ask them also if their answers in the **WANT** column were addressed during the conduct of the various activities. Finally, let them accomplish the **LEARNED** and **HOW** column.

What we **THINK** we know **T**	What we **WANT** to know **W**	What we **LEARNED** **L**	**HOW** we know **H**

IV. EVALUATING LEARNING: STUDENT ASSESSMENT AND TEACHER'S REFLECTION		**NOTES TO TEACHERS**
A. Evaluating Learning	**DAY 4:** **Performance Task** ***Water Usage Story (30 mins)*** **Objective:** To illustrate how water is used in daily life and understand the importance of water conservation. **Materials Needed:** Paper; pen; art materials **Instructions:** 1. Write a short story or draw a comic strip showing how water is used in your home and community. 2. Include different activities where water is used, such as drinking, cooking, bathing, and watering plants. 3. Think about ways you can save water in each activity and include them in your story or comic strip. 4. Share your story or comic strip with your classmates and discuss how everyone can help conserve water.	Assessment should be carried out throughout the lesson in the form of discussions and the written responses to the various activities. Give examples and useful tips for saving water, such as turning off the tap when brushing your teeth or taking shorter showers. Emphasize the long-term effects of small changes in water-use habits.

	Processing Questions: 1. What are the various ways water is used in daily life? _____ _____ _____ 2. What are some creative ways you included in your story to conserve water? _____ _____ _____ *See Annex A (Rubric for Water Usage Story)* **2. Homework/Student Reflection** ***Water Conservation Pledge*** **Objective:** To make a commitment to conserve water and understand the importance of water conservation. **Instructions:** 1. Use the space below to write a promise to save water. Make a list of at least three things you will do to save water. 2. Put your promise up in the classroom after you've signed it. 3. Talk to your friends about why it's important to save water and what each person can do to help. **My Water Conservation Pledge:** • I promise to _____ • I promise to _____ • I promise to _____ • I promise to _____ • I promise to _____ • I promise to _____ Signature: _____	Create an easy reflection or exit ticket for students to write down a key concept they have learned about water and its significance. Urge them to consider how they could apply this knowledge to their everyday activities.

<table>
<tr><td></td><td colspan="3">Processing Questions:
1. In what ways does making a promise to save water make you more aware of how you use water?
_____
_____
2. How can you encourage others to join you in conserving water?
_____
_____</td><td></td></tr>
<tr><td rowspan="5">B. Teacher's Remarks</td><td>Note observations on any of the following areas:</td><td>Effective Practices</td><td>Problems Encountered</td><td rowspan="5"></td></tr>
<tr><td>strategies explored</td><td></td><td></td></tr>
<tr><td>materials used</td><td></td><td></td></tr>
<tr><td>learner engagement/ interaction</td><td></td><td></td></tr>
<tr><td>Others</td><td></td><td></td></tr>
<tr><td>C. Teacher's Reflection</td><td colspan="3">Reflection guide or prompt can be on:
▪ <u>principles behind the teaching</u>
What principles and beliefs informed my lesson?
Why did I teach the lesson the way I did?
▪ <u>pupils</u>
What roles did my pupils play in my lesson?
What did my pupils learn? How did they learn?
▪ <u>ways forward</u>
What could I have done differently?
What can I explore in the next lesson?</td><td></td></tr>
</table>