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Lesson Exemplar for Science



Lesson Exemplar for Science 4 Quarter 2: Lesson 5 (Week 5) S.Y. 2024-2025

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Development Team

Writer:

Halimah B. Macada-ag (Mindanao State University)

Validators:

- Dominador D. Mangao (Philippine Normal University Manila)
- Marie Grace S. Cabansag (Philippine Normal University North Luzon)

Management Team

Philippine Normal University
Research Institute for Teacher Quality
SiMERR National Research Centre

Every care has been taken to ensure the accuracy of the information provided in this material. For inquiries or feedback, please write or call the Office of the Director of the Bureau of Learning Resources via telephone numbers (02) 8634-1072 and 8631-6922 or by email at blr.od@deped.gov.ph

SCIENCE (BIOLOGY) / QUARTER 2 / GRADE 4

I. CU	JRRICULUM CO	NTENT, STANDARDS, AND LESSON COMPETENCIES			
A.	Content Standards	Learners learn that animals and plants live in habitats that meet their basic needs.			
Standards Th		By the end of the Quarter, learners identify that plants and animals have systems whose function is to keep them alive. They observe, describe, and create representations to show how living things interact with their habitat, survive, and reproduce in specific environments. They use flowcharts to show the feeding relationship among different organisms within a given environment.			
C.	Learning	Learning Competency			
	Competencies and Objectives	The learners make a list or draw up a table with examples of animals and plants in a particular habitat, such as a garden, rice field, seashore, and mangrove swamp.			
		Objectives:			
		 To explain the importance of studying animals and plants in specific habitats. To explore more on terrestrial habitats, specifically gardens and rice fields, describing their unique characteristics and ecological significance. To explore more on aquatic habitats, specifically the seashore and mangrove swamp, describing their unique characteristics and ecological significance. 			
C.	Content	Plants and animals and their habitats			
D.	Integration	SDG #15 - Life on Land: This goal is about taking care of the places where animals and plants live on land, like gardens, rice fields, and forests. We learn to protect these places and the creatures in them.			
		SDG #14 - Life Below Water: Even though it's about water habitats like oceans, it's important when talking about seashores and mangrove swamps. It reminds us to keep the oceans and water habitats clean and healthy for all the aquatic creatures living there.			

hese two SDGs help us understand why habitats are essential and how we can help make sure they stay safe ar	ıd
hriving.	

II. LEARNING RESOURCES

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III. TEACHING AND LI	NOTES TO TEACHERS	
A. Activating Prior Knowledge	 Day 1 Short Review A. Review the previous lesson by doing Habitat Charades (Terrestrial, Aquatic, Aerial). Prepare cards with habitat names (e.g., Terrestrial, Aquatic, Aerial) and some animal names from each habitat on separate cards. Divide the class into small groups. In each group, choose three players: one student picks a habitat card, another student picks an animal card to portray, and another player makes a guess on the name of the animal. 	

	 Without showing their cards, one student acts out the animal's behavior in its habitat, and the other member makes a guess what animal he/she is portraying. Rotate until each student has had a turn. For plants: Prepare cards with names of plants inhabiting specific habitat. One student picks a habitat card while the other gives clues or riddles about the plant and the other member makes a guess on the name of the plant. 	
B. Establishing Lesson Purpose	 Lesson Purpose Begin by explaining that they are going to explore in more details two examples of terrestrial habitats – gardens and rice fields, and two aquatic habitats – seashores and mangrove swamps and why these habitats are important for both people and other organisms and in maintaining balance in nature. Show images of these four habitats on the board. Ensure they are colorful and visually engaging. Discuss with the class the following guide questions: What kinds of plants and animals do you think live there? Why do we study gardens and rice fields as more examples of terrestrial habitat? What do we get from these habitats? Can you give examples of food and other things we get from gardens and rice fields? What do you think will happen if gardens and rice fields are destroyed or replaced by buildings or converted into residential areas/subdivisions and industrial parks? Why is it interesting to learn about seashores and mangrove swamps as examples of aquatic habitat? What animals and plants live there? How do these habitats help people in their everyday life? What do we get from seashores and mangrove swamps? 	

	8. Why are seashores and mangrove swamps important in maintaining balance of nature or ecosystem?	
	9. How can we take care of gardens, rice fields, seashores, and mangrove swamps?	
	10. What can we do to protect the animals and plants in these habitats? 11. Why is it essential to have these habitats in our natural environment?	
	Day 1	
	 1. Unlocking Content Area Vocabulary Reinforce and practice vocabulary related to different habitats, including gardens, rice fields, seashores, and mangrove swamps. Introduce new vocabulary words that are related to habitat such as: ecosystem, predator, survival, interaction, biodiversity, conservation, species, shelter, nesting, adaptation, community, pollination, etc. Ask learners to create a statement using any of these vocabulary words to show their initial understanding. 	
C. Developing and Deepening Understanding	Day 1 and 2 SUB-TOPIC 1: Understanding the Concept and Importance of Habitats	Write the quote (as "In nature, nothing exists alone." - Rachel
	SUB-TOPIC 1: Understanding the Concept and Importance of Habitats	nothing exists alone." - Rachel Carson) in the board and ask the
Deepening		nothing exists alone." - Rachel
Deepening	 SUB-TOPIC 1: Understanding the Concept and Importance of Habitats a. Explicitation Begin the lesson by discussing what habitats are and why they are important. Explain that habitats are specific environments where plants and animals live, and they are crucial for biodiversity. Guide the students to perform Activity: Lesson 1 Exploring Distinctive 	nothing exists alone." - Rachel Carson) in the board and ask the learners of its meaning. Relate their answers to the lesson (what is habitat and why are they
Deepening	 SUB-TOPIC 1: Understanding the Concept and Importance of Habitats a. Explicitation Begin the lesson by discussing what habitats are and why they are important. Explain that habitats are specific environments where plants and animals live, and they are crucial for biodiversity. Guide the students to perform Activity: Lesson 1 Exploring Distinctive Features and Importance of Habitats (50 minutes) in the Worksheet. 	nothing exists alone." - Rachel Carson) in the board and ask the learners of its meaning. Relate their answers to the lesson (what is habitat and why are they
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- Invite each group to present their assigned habitat to the class.
- After all groups have presented, facilitate a short class discussion. Encourage students to ask questions or share insights about the habitats they learned about.
- Conclude the activity by asking students to reflect on what they've learned about the diversity of habitats and their role in supporting life on Earth.

b. Worked Example

- Reinforce the understanding of the students of different habitats and the importance of studying animals and plants in specific habitats through an engaging and interactive bingo game.
- Guide the students to perform **Lesson 1 Activity 2: Habitat Exploration Bingo Worksheet**. This activity offers students the opportunity for independent and extended practice, reinforcing their understanding of habitats and emphasizing the importance of studying organisms in their natural environments.
- Create bingo cards with 4x4 grids (16 squares) on each card. In each square, write the name of a specific habitat (e.g., forest, ocean, desert, grassland) or draw simple habitat icons. Prepare enough bingo cards for each student in the class.
- Distribute one bingo card and markers or counters to each student. Explain the rules of the game as follows:
- 1. The teacher will read habitat clues or descriptions.
- 2. If the student has the corresponding habitat on their bingo card, they will mark it.
- 3. The first student to complete a row (horizontal, vertical, or diagonal) shouts "Habitat Bingo!" and wins that round.
- Start reading habitat clues or descriptions aloud, one by one. For example, you can say, "This habitat is characterized by tall trees, dense vegetation, and abundant rainfall." Students with "forest" on their bingo card would mark it. Continue reading clues until a student calls out "Habitat Bingo!" and wins the round. Play multiple rounds to provide varied practice.

- After each round, briefly discuss the habitat mentioned and its importance. Ask questions like:
 - 1. Why is it important to study animals and plants in this habitat?
 - 2. What kind of animals or plants might you find there?
 - 3. How might the habitat affect the organisms living in it?
- Summarize the key points about habitats and the importance of studying organisms in their respective habitats. Encourage students to think about how the knowledge gained can contribute to our understanding of ecosystems and conservation efforts.
- For an extended activity, have students draw and label an animal or plant they might find in one of the habitats mentioned during the game. Alternatively, ask students to research and present a short report on a specific habitat of their choice.

SUB-TOPIC 2: GARDEN AND RICE FIELD HABITATS (Day 2 and 3)

1. Explicitation

- Begin by focusing on specific habitats, such as gardens and rice fields. Explain what these habitats are like and their significance in the local context.
- Using images or illustrations of common plants and animals found in **garden** and rice field habitats, engage the class for a discussion of the different types of plants and animals commonly found in these habitats.
- Encourage teamwork, critical thinking, and discussion while reinforcing the concept of habitat diversity and its impact on different organisms.
- You may use on the facts provided as concept snippets
- Divide the class into small groups of 3-4 students each.
- Explain to the students that they will be participating in a Scavenger Hunt to identify and match the names of plants and animals commonly found in garden and rice field habitats.

- Distribute the cards with the names of plants and animals to each group. Make sure each group has the same set of cards. Display the images or illustrations of the plants and animals on the board or projector.
- Once the groups have matched the names with the correct images, bring the class together for a brief discussion. Ask each group to share one plant and one animal they identified and discuss whether these are typically found in a garden or a rice field. Encourage them to explain their choices.
- Summarize the activity by emphasizing the types of plants and animals commonly found in garden and rice field habitats. Highlight the diversity and importance of these habitats in supporting various species.

Day 2 and 3

Worked Example

• Share a short story or example of how people interact with these habitats in their daily lives.

Marawi City Adventures: Exploring Gardens, Fields, and More By: Halimah B. Macada-ag

In the lively city of Marawi, five friends named Fatima Zahra, Ruqayya, Zaynab, Rabi'ah, and Hussien had a special connection with nature. They lived in a place surrounded by gardens, rice fields, lakes, and a little forest, and these places were a big part of their daily lives.

One bright morning, the friends decided to show each other how they interacted with these habitats.

First, Fatima Zahra took them to her beautiful garden filled with colorful flowers like roses and tulips. They also saw fruit trees like mango and papaya. She explained how she cared for the plants and how they made her family's meals more delicious. They even spotted butterflies fluttering around the flowers.

Then, Ruqayya led them to the rice fields nearby. They saw green and golden rice plants swaying in the breeze. There were also friendly Here are some guide questions that build on the story and involve learners in developing their understanding of the topic:

- 1. What are the different habitats mentioned in the story, and how are they described?
- 2. How did Fatima Zahra interact with her garden, and what plants and animals did they see there?
- 3. What did Ruqayya share about the rice fields, and why are rice fields important to her family?
- 4. What did Zaynab explain about Lake Lanao, and how does it benefit the people in their city?
- 5. What did Rabi'ah show her friends in the little forest, and why is it important for wildlife and people?
- 6. How did Hussien connect with nature in the heart of the

ducks waddling through the rice fields, eating insects. Ruqayya told her friends about her family's tradition of growing rice and how it was an important part of their meals.

Next, Zaynab guided them to the serene Lake Lanao, where they watched the fishermen catch fish like tilapia and catfish. Zaynab explained how the lake provided food and jobs for many people in their city. They also saw water birds like egrets standing by the water's edge.

Rabi'ah showed her friends a little forest near her home, where they heard birds singing like sparrows and robins. They saw squirrels jumping from tree to tree and even a cute bunny nibbling on some grass. Rabi'ah told them how this forest was a home for wildlife and a peaceful place for people to visit.

Lastly, Hussien took them to his rooftop garden in the heart of the city. He grew herbs like basil and mint in containers and vegetables like tomatoes and lettuce. They even spotted a friendly ladybug on one of the leaves. He showed how even in the city, people could connect with nature and make their own food.

When they returned to their meeting spot under a big tree, the friends realized how much they loved and depended on Marawi City's habitats. They promised to take care of these places, knowing that their actions helped keep the city beautiful and its people happy by providing them food and other needs.

• Ask comprehension and reflection questions to encourage learners to reflect on the story's content, consider the significance of different habitats, and explore the role they can play in conserving their local environment.

- city, and what did he grow in his rooftop garden?
- 7. What did the friends realize about their connection to Marawi City's habitats at the end of the story?
- 8. Why is it important to take care of these habitats, and how can individuals help preserve them?

These questions

Day 3- Week 5

c. Lesson Activity

- Take the class on a virtual or real field trip to a school/local garden or rice field if available and possible. If not, show images and videos to illustrate these habitats.
- Guide the students to perform Lesson 2 Activity 1: Exploring Gardens and Rice Fields
- Show a series of images and videos that depict local gardens and rice fields. Encourage students to observe the features of these habitats and the plants and animals they can spot. Distribute observation sheets to each student, where they can note down their observations.
- After the virtual or an actual exploration, ask students to share their observations and the names of plants and animals they identified. You can create a list on the board or screen as students contribute. Discuss the diversity of life in these habitats.
- Guide a class discussion on the importance of conserving gardens and rice fields. Emphasize how these habitats provide food, support biodiversity, and contribute to the local community. Discuss the potential threats to these habitats, such as urbanization or pollution.
- Have students reflect on what they learned during the exploration and discussion. Ask questions like:
 - 1. What surprised you the most about these habitats?
 - 2. Why is it important to protect gardens and rice fields in our city?
 - 3. How can we contribute to conserving these habitats?
- Summarize the key points discussed during the activity and highlight the role students can play in conserving these habitats. Encourage them to be mindful of their environment and promote responsible practices.
- Conclude the activity by expressing the significance of understanding and preserving these habitats for future generations.
- This activity provides students with a virtual exploration of local gardens and rice fields, allowing them to observe and identify plants and animals. It

also fosters a discussion on the importance of conservation, promoting environmental awareness and responsibility.

SUB-TOPIC 3: SEASHORE AND MANGROVE SWAMP HABITATS

(Day 3 and 4)

1. Explicitation

- To introduce students to the seashore and mangrove swamp habitats and their significance, begin by asking students if they have ever been to the beach or seen pictures of the seashore.
- Display images or illustrations of the seashore habitat, showcasing its features such as sand, waves, seashells, and the boundary between land and sea. Explain that the seashore is where the land meets the ocean and is sometimes covered by water during high tide.
- Display images or illustrations of the mangrove swamp habitat, emphasizing its unique characteristics like tall trees with roots that grow in water. Explain that mangrove swamps are found in coastal areas and are home to a variety of plants and animals adapted to living in both saltwater and freshwater environments.
- Discuss the ecological significance of these habitats: Seashores are important nesting grounds for sea turtles, provide a home for crabs and birds, and are places where many different species find food. Mangrove swamps act as natural buffers against storms, provide shelter and breeding grounds for fish, and filter pollutants from the water.
- Encourage students to ask questions about seashore and mangrove swamp habitats. Discuss why it's essential to protect these habitats and the plants and animals that depend on them.
- Summarize the key points discussed emphasizing that seashore and mangrove swamp habitats play crucial roles in supporting various forms of life and maintaining a healthy ecosystem.

Day 3 and 4

2. Worked Example

- Discuss specific plants and animals found in seashores and mangrove swamps
- On the board, draw two columns, one for "Seashores" and one for "Mangrove Swamps." Ask students to brainstorm and name specific plants and animals they think can be found in each habitat. Write down their responses in the respective columns.

Example:

Seashores	Mangrove Swamps
Seagulls	Mangrove Trees
Crabs	Mudskippers
Clams	Fiddler Crabs
Sandpipers	Shrimp
Sea Turtles	Mangrove Snapper

Share a brief real-life scenario related to the conservation of seashores or mangrove swamps. You can tell a short story or describe an actual conservation effort. Discuss why it's important to protect these habitats and the plants and animals that live there.

Example Scenario (Simplified):

"Once upon a time, in a place near the sea, people noticed that the mangrove swamps were disappearing because of new buildings. This was causing problems because the mangroves protected the coast from big waves during storms. So, a group of people worked together to plant more mangrove trees and teach others why it's crucial to save them. This way, they helped protect their coastline and the creatures that depend on mangroves."

- Open the floor for a brief discussion. Ask students:
 - a. What other plants and animals did they learn about for seashores and mangrove swamps?
 - b. Why do you think it's important to protect these habitats?
- Summarize the key points discussed during the activity. Emphasize the importance of conserving seashores and mangrove swamps for our environment and wildlife.

Day 3 and 4

3. Lesson Activity

- Begin by explaining that today, students will go on a virtual field trip to seashores and mangrove swamps to discover the plants and animals living there. Show images and videos of seashore and mangrove swamp habitats, explaining their unique features and the types of plants and animals found in each.
- After the virtual exploration, ask students to share their observations. Write their findings on the board. Discuss the plants and animals they identified and ask if anyone noticed anything special about them.
- If feasible, organize a field trip to a local seashore or mangrove swamp area. Alternatively, use images and videos to simulate the experience. Guide students in observing and identifying the flora and fauna in these habitats.
- Facilitate a discussion on the importance of preserving seashore and mangrove swamp habitats for coastal communities and marine life.
- Guide the students to perform Lesson 3 Activity 4: Exploring Seashores and Mangrove Swamps to learn about seashore and mangrove swamp

		 habitats, observe the plants and animals, and discuss their significance for coastal communities and marine life. Facilitate a class discussion about why it's important to preserve seashore and mangrove swamp habitats. Ask questions like: How do these habitats help coastal communities?, Why are they essential for marine life?, and What can happen if these habitats are not protected? Share a simple, age-appropriate real-life story or scenario related to the conservation of seashores or mangrove swamps. Emphasize the positive impact of conservation efforts. Ask students to reflect on what they've learned during the activity. Have them think about why it's crucial to protect these habitats and how they can contribute. Summarize the main points discussed during the activity, stressing the importance of understanding and conserving these habitats. Assign students a short homework task, such as drawing their favorite plant or animal from the virtual field trip or writing a few sentences about why seashores and mangrove swamps should be protected. 	
4. Mak Gen	ring eralizations	 Day 4 - Week 5 1.Learners' Takeaways Guide the learners to make generalization of what they have learned in the whole week through this guide questions. Make immediate corrections if you observe mistakes. Divide the class into four groups, assigning each group one habitat (garden, rice field, seashore, mangrove swamp). Give each group an image or poster of their assigned habitat. Ask students in each group to closely observe the image and discuss among themselves what they see, including plants and animals. Provide drawing paper or notebooks and art supplies to each student. In their groups, have students draw a picture of the habitat they explored, including some of the plants and animals they discussed. 	

 Each group presents their drawing to the class and briefly explains the unique features of their assigned habitat. Encourage students to share what they find interesting or important about their habitat. Lead a brief discussion with the entire class, asking questions like: a. What did you learn about gardens, rice fields, seashores, and mangrove swamps today? b. Why are these habitats essential for nature and people?
Summarize the key points of the lesson, emphasizing the significance of studying and protecting these habitats.

/. EVALUATING LEAD	NOTES TO TEACHERS	
A. Evaluating Learning	 Day 4 Formative Assessment This formative assessment, using a Habitat Diorama, allows you to evaluate students' understanding of habitats, their creativity in representing them, and their ability to explain the importance of each habitat: gardens, rice fields, seashores, and mangrove swamps. Provide students with materials such as cardboard, colored paper, markers, and small figurines or cut-out images of plants and animals to create a diorama that represents their chosen habitat. They should include key elements such as plants, animals, and unique features. Encourage creativity and attention to detail. During their presentation, students should explain the features of their chosen habitat and its ecological importance. Classmates can ask questions or share their observations after each presentation. 	Rubric for Diorama, Presentation and the Word search Work sheet are availabl in the worksheet.

	Conclude the assessment by asking students to reflect on what they've learned through this activity. What did they find most interesting or surprising about their chosen habitat?			
B. Teacher's Remarks	Note observations on any of the following areas:	Effective Practices	Problems Encountered	
	strategies explored			
	materials used			
	learner engagement/ interaction			
	others			
C. Teacher's Reflection	Why did I teach the <u>students</u> What roles did my	he teaching d beliefs informed my lesson? e lesson the way I did? students play in my lesson? nts learn? How did they learn done differently?	?	