

MY MANGROVES - MANGROVES, ENVIRONMENT

Grade 4

ESSENTIAL QUESTIONS: WHY ARE MANGROVES IMPORTANT?

- What do humans and other living things get from the mangrove environment/ ecosystem?
- What kinds of things can harm mangrove environment/ecosystem?

LEARNING GOALS

What should learners know and be able to do by the end of the lesson?

Students will be able to:

- Explain importance of mangroves to themselves and their families
- Explain how certain things and actions can harm mangrove ecosystem
- Share new learning on mangrove ecosystem with others

Approximate Length of Lesson: 1 class

Approximate Number of Minutes Weekly: 45 to 60 minutes

BENCHMARKS

Gr. 4: Sci.4.4.3 Recognize factors that cause or contribute to rapid changes in the environment and describe the impact of such rapid changes on animal and plant life.

SUMMATIVE ASSESSMENT

Poster of a favorite mangrove area with responses to questions about how we benefit from the mangroves and how people may be harming the mangroves.

FORMATIVE ASSESSMENT TOOLS

- Responses to essential questions at beginning of lesson
- Student drawings of mangrove environments
- “Temperature check” questions

FOCUSED LANGUAGE FEATURES: VERNACULAR + ENGLISH

Language Functions	Related Sentence Structures/ Patterns (Examples)	Vocabulary
State the location and describe relationship	The mangroves are located (at/near/) _____ . from, to, in	benefit change harm mangrove
Describe characteristics and physical features	Mangroves have _____ . We can find _____ in mangroves.	
Explain importance of mangroves/how things and actions can cause harm	because, as a result of, this leads to, if...then My family benefits from mangroves _____ . I like to _____ (from / in) the mangrove. _____ harms the mangroves.	
Ask and answer questions about mangroves	Who/What/When/Where/Why questions	
Present information to others	My _____ is about _____ .	

LEARNING SEQUENCE

Lesson: How are mangroves important to me?

Introduce vocabulary	<ul style="list-style-type: none"> Using the vocabulary cards, show each word and give the definition. Post the words on a wall. Have the class draw pictures to each word and use the key vocabulary to create meaningful sentences related to the picture. Teacher can model first.
Activate Prior Knowledge	<ul style="list-style-type: none"> Read aloud the essential questions for this lesson. Give students some time to think about the questions. Ask for volunteers to share their thoughts.
Take an imaginary walk in your favorite place in the mangroves and draw the features of this place	<ul style="list-style-type: none"> Visit your favorite place in your mind -- Where is this place? Is it close to your house or school? <ul style="list-style-type: none"> Draw the trees - what do the leaves look like? What do the roots look like?

	<ul style="list-style-type: none"> ○ Draw the water - is your favorite place near the ocean or near a river? ○ Draw the animals - do you see clams? Crabs? Fish? Birds? Other animals? ○ Draw people - How do people use this place? Do they go swimming here? Playing? Paddling in a canoe? Do they gather fish, clams, or crabs to eat? Do they cut down trees? ● What is your favorite activity to do in your favorite place in the mangroves? <ul style="list-style-type: none"> ○ Example sentence frame: I like to _____ (from / in) the mangrove. ● Ask volunteers to share
Watch elder interview video on mangroves in Kosrae	<ul style="list-style-type: none"> ● <u>Stop after the first question and answer this on your drawing:</u> <ul style="list-style-type: none"> ○ What are some of the ways that people in Kosrae use the mangrove? ○ What are some of the ways that people in my community use the mangrove? ○ How does my family benefit from the mangroves? ○ Add any additional features to your drawing (other trees, animals, people) ● <u>Stop after the second and third question and answer this on your drawing:</u> <ul style="list-style-type: none"> ○ What are people doing that harms the mangroves? ○ What changes are these elders noticing in the mangroves? ○ Add any additional features to your drawing (other trees, animals, people) ● <u>After the last question, answer the following on your drawing:</u> <ul style="list-style-type: none"> ○ What can I do to help protect the mangroves?
Students may use sentence structures to answer questions. Examples:	<ul style="list-style-type: none"> ● People in my community use the mangroves for _____. ● My family benefits from the mangroves by _____. ● People are _____, which harms the mangroves. ● People are noticing _____. ● I can _____ to protect the mangroves.
To summarize, ask students to share their responses out loud:	<ul style="list-style-type: none"> ● Why are mangroves important to us? ● What are people doing that is harming the mangroves? ● What do you think we can do about it?
Gallery Walk	Students post drawings on a wall and view other students' posters.
Essential Questions:	Review the essential questions for this lesson. Ask for responses based on what we have learned.

RESOURCES

- Word wall vocabulary cards
- Pictures of different mangroves and organisms
- Mangrove elder interview video
- Drawing supplies - paper, markers or crayons, UHU