

MY MANGROVES

Mangroves | Environment

Approximate Length of Lesson

1 class session

Approximate Number of Minutes Weekly

45 to 60 minutes

Materials

- Word wall vocabulary cards
- Mangrove elder interview video
- Equipment for video projection
- Drawing supplies – paper, markers or crayons, tape or tac

Teaching Notes

Which content standards from your entity address the essential questions?



Essential Question:

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

Students will be able to:

- Describe mangroves (trees, water, animals, human activity)
- Describe benefits provided by mangroves
- Describe harmful activities done by people
- Explain, with reasons, the importance of mangroves

Content Standards

(Record corresponding standards in space below. E.g., Gr. 5: FSM Sci.4.5.4 List and explain some of the negative human activities that have long-term effects on plants and animals.)

Teaching Notes

FA: Notice which students need additional help with language and provide immediately or next day.

SA: Assess the poster using rubric criteria: a) inclusion of information from video; b) responds directly to questions; c) use of key vocabulary. Levels for each criteria: emerging (1), satisfactory (2), effective (3).

Model for students how to create sentences before asking them to create their own.

Add new vocabulary to the word wall as needed while students share out descriptions of drawings.

Observe students' draw as they respond to the questions and pause the lesson to provide support to individual, small group, or whole class as needed on life in the mangroves (e.g., sharing a student's idea with others; pointing out details of tree roots; noting the variety of animals that live in the mangroves).

Formative Assessment (FA)

Observe students' use of language to construct ideas during drawing and interview video activities. Pause to support individuals, small groups, or whole class with a mini lesson e.g., how to use a range of adjectives to describe, how to give reasons and/or examples when explaining.

Summative Assessment (SA)

On poster, student responds in writing to questions about mangroves: benefits and harmful human activities. Use rubric to provide specific feedback on the written ideas that helps students move to the next level of the rubric.

Learning Sequence

Introduce vocabulary

- Using vocabulary cards, show students each word and give definition. Post words on a wall.
- Have class draw pictures about each word and use key vocabulary to create meaningful sentences related to picture.

Activate Prior Knowledge

- Read aloud the essential questions for this lesson.
- Give students some time to think about the questions.
- Ask for volunteers to share their thoughts.

Imagine and Draw: Favorite Place in the Mangroves

Ask students to imagine taking a walk to visit their favorite place in the mangroves in their mind. Use the following prompts to guide imagination: Where is this place? Is it close to your house or school?

- Ask students to draw:
 - Trees. What do the leaves look like? What do the roots look like?
 - Water. Is your favorite place near the ocean or a river?
 - Animals. Do you see clams? Crabs? Fish? Birds? Other animals?
 - People. How do people use this place? Do they swim? Play? Paddle a canoe? Do they gather fish, clams, or crabs to eat? Do they cut down trees?
 - Favorite activity. What do you like to do in this place?
- Ask volunteers to share.

Teaching Notes

Instead of watching video, students can use same questions from video or generate their own, and interview elders in their village.

Before asking students to create their own sentences, teacher should model a response by co-writing with students and/or use demonstrate how to use sentence frames to answer to answer questions about the interview, e.g., in English:

- *People in Kosrae/my community use mangroves for _____.*
- *People in my community use mangroves for _____.*
- *My family benefits from the mangroves by _____.*
- *People are _____, which harms the mangroves.*
- *People are noticing _____.*
- *I can _____ to protect the mangroves.*

Observe students' language use and provide support to individual, small group, or whole class as needed.

As students share out, note areas of strengths, needs, and interests. Use this information to tailor tomorrow's lesson.

Before next class, assess posters using rubric. Next class provide feedback to improve student learning.

Watch Interview Video With Elders on Mangroves in Kosrae

Show video and stop after the first interview question. Ask students the following questions and have them share orally and then write their responses on their drawings:

- How do people in Kosrae use mangroves?
- How do people my community use the mangrove?
- How does my family benefit from the mangroves?

Ask students to add any additional features to your drawing (other trees, animals, people).

Continue video and stop after the second and third interview questions. Ask students the following questions and have them share orally and write their responses on their drawings:

- What are people doing that harms the mangroves?
- What changes are these elders noticing in the mangroves?

Ask students to add any additional features to your drawing (other trees, animals, people).

Continue video. After the last interview question, ask students the following question and have them share orally and write their response on their drawings:

- What can I do to help protect the mangroves?

To summarize, ask students to share their responses out loud:

- Why are mangroves important to us?
- What are people doing that is harming the mangroves?
- What can we do to protect the mangroves?

Gallery Walk

Students post drawings on a wall, view other students' posters, and write comments/give peer feedback about poster statements of benefits and harms.

Lesson Closure

Review the essential questions for this lesson with class.

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?

Have students respond to each other in small groups. Have groups share out to whole class.

Constructing Ideas

Language Functions	Related Sentence Structures in the Local Language (to be completed by teacher)	Related Sentence Structures in English
State the location and describe relationship		The mangroves are located (at/near/) _____ . from, to, in
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 _____ .

Key Vocabulary in Local Language:

Key Vocabulary in English: benefit, change, harm, mangrove, protect

