

# MANGROVES: MANGROVES ON THE ISLAND

Grade 3

## ESSENTIAL QUESTIONS: WHY ARE MANGROVES IMPORTANT?

- How do mangrove swamps connect to other environments/ecosystems on an island?

## LEARNING GOALS

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

Students will be able to:

- State where mangroves can be found
- Describe the relationship between a mangrove environment/ecosystem and other environments/ecosystems on the island, using a common feature such as water

**Approximate Length of Lesson: Two 45-minute class sessions**

**Approximate Number of Minutes: 90 minutes**

## BENCHMARKS

Grade 3: Sci.5.3.1 Name and describe living things that are found in the ocean, reefs, and swamps.

## SUMMATIVE ASSESSMENT

Illustration with labels showing mangrove in relation to other environments on an island

## FORMATIVE ASSESSMENT TOOLS

- Responses to comprehension questions
- K-W-L chart

## FOCUSED LANGUAGE FEATURES: VERNACULAR + ENGLISH

Language Functions	Related Sentence Structures / Patterns (Examples)	Vocabulary
State the location	<p>_____ is/are located (at/near/on) _____.</p> <p>The mangroves grow <u>between</u> _____ .</p> <p>_____ live <u>in</u> mangroves.</p> <p>We can find _____ <u>in</u> _____.</p>	<p>environment</p> <p>flooded</p> <p>protect</p> <p>habitat</p>
Describe relationship	Water flows <u>from</u> _____ <u>to</u> _____.	
Describe cause/effect relationship	If _____, then _____.	
Ask and answer questions	Who/What/When/Where/Why questions	

## LEARNING SEQUENCE

## Lesson: Mangroves on the Island

Activate Prior Knowledge	<ul style="list-style-type: none"> <li>Refer to the Gallery Walk posters from lesson 1 and remind students of the key points discussed and learned: Why are mangroves important to us? What are people doing that is harming the mangroves? What do you think we can do about it?</li> <li>Read aloud the essential questions for this lesson. Give students some time to think about the questions. Ask for volunteers to share their thoughts.</li> <li>Show pictures of different mangroves and complete the “K” (What we know) and “W” (What we want to know/questions) columns of K-W-L chart on mangroves.</li> </ul>
Introduce vocabulary	<ul style="list-style-type: none"> <li>Write each key vocabulary on flash card, show each word, and give the definition. Post the words on a wall.</li> <li>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.</li> </ul>
Do a picture walk to identify title, author, and ask questions about <i>Our High Island Home</i> .	Read aloud pp. 2 (“Who Lives Where on Our Island?”) and 9 (“Mangrove Swamp”).

**Ask comprehension questions for “Mangrove Swamp” (p. 9)**

- Answer the following questions:
  - Point to the map and ask: Where do mangroves grow? (“Mangroves grow between \_\_\_\_\_.”)
  - Point to the illustrations on the right and ask: What can we find in mangrove swamp? (“We can find \_\_\_\_\_ in mangrove swamp.”)
  - What do mangroves do? (“Mangroves protect the land and animals. Mangrove swamp is a habitat for \_\_\_\_\_.”)
- Do a word study on the following: similarities and differences between the terms “mangroves” (general term that is used to the mangrove trees), “mangrove swamp” (specifically referring to the habitat/flooded areas with mangrove trees), and “mangrove forest” (specifically referring to an area with mangrove trees and shrubs)
- Have students add to their Gallery Walk posters to reflect new learning from “Mangrove Swamp”
- Add new words to the word wall as needed to describe mangrove swamp (e.g., words for animals and plants)
- Observe students and ask volunteers to share responses as “temperature check”

Refer to illustrations from *Our High Island Home* and pictures of different mangroves.

**Discuss the relationship between a mangrove swamp and other environments on the island**

- Where do mangroves grow? (The mangroves are located (at/near/) \_\_\_\_\_. The mangroves grow between \_\_\_\_\_.)
- How is the mangrove swamp connected to other environments?
- Where does the water come from? Where does the water flow?

**Create a model and demonstrate the water flow in and out of mangrove**

- Use modeling clay or mud to build “land” with slope, a tray of salty water with sand that connects to “land”.
- Use fresh water and create a “river” going downhill from the top of the slope.
- Ask students
  - What happens to the area where the fresh and salty water meets (brackish water)?
  - What happens when we throw things into water from top of the slope?

Create an illustration that shows how water flows between mangroves and other environments and connects them. Label the illustration using words from word wall (lessons 1 and 2).

Revisit K-W-L chart and answer questions/record new learning.

**Essential Questions**

Review the essential questions for this lesson. Ask for responses based on what we have learned

## RESOURCES

- Flash cards
- UHU
- IREI's *Our High Island Home* (gr. 3-5)
- Pictures of different mangroves
- K-W-L chart
- Materials to demonstrate water flowing in and out of mangrove swamp: modeling clay, mud, small rocks, tray, salt water, sand
- Paper to create illustration
- Markers