

CULMINATING LESSON

My Shoreline Habitat Report

Lesson at a Glance

In lesson 5, students examined the past and present practices in shoreline management and prepared a group oral presentation of the problems and possible solutions of the shoreline habitat. In the culminating lesson, each student will demonstrate what he/she learned by writing a mini-action paper or creative writing piece about their solution(s) to a shoreline habitat problem. The paper should include pictures and writing that describes the shoreline habitat problem and possible solutions.

Lesson Duration

Three 45-minute periods

Essential Question(s)

How can I help Hawaiian shoreline habitats that are threatened by human impacts?

Key Concepts

Changes in human behavior can have a beneficial impact on shoreline habitats.

Instructional Objectives

- I can describe some of the animals that live in the shoreline habitat, and what special features they have that allows them to survive in their particular habitat.
- I can write a mini-action paper that explains possible solutions to a problem facing the animals that live in a shoreline habitat in Hawai'i.

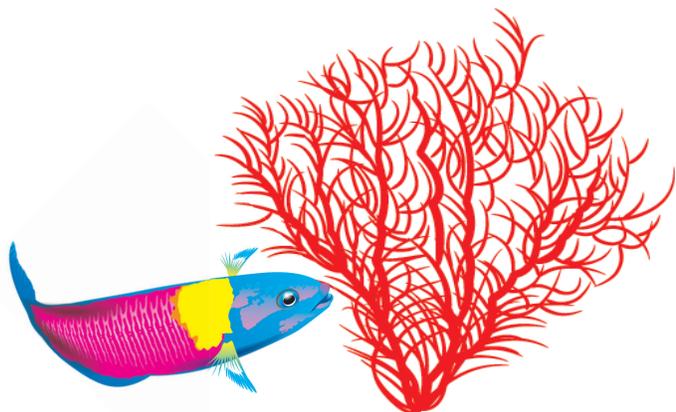
Related HCPS III Benchmark(s):

Science SC.3.4.1

Compare distinct structures of living things that help them to survive.

Language Arts LA.3.4.1

Write in a variety of grade-appropriate formats for a variety of purposes and audiences, as a short report on content area topics.



Assessment Tools

Benchmark Rubric:

Topic		Cells, Tissues, Organs, and Organ Systems	
Benchmark SC.3.4.1		Compare distinct structures of living things that help them to survive	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Group living things by the distinct structures that help them to survive and provide justification for the grouping	Compare distinct structures of living things that help them to survive	Describe a few ways in which distinct structures of living things help them to survive	Name distinct structures of living things that help them to survive

Topic		Range of Writing	
Benchmark LA.3.4.1		Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as: <ul style="list-style-type: none"> • stories with a beginning, middle, and end and poems with sensory details • short reports on content area topics • pieces related to completing tasks • friendly letters • responses to literature • pieces to reflect on learning and to solve problems 	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Insightfully adapt writing to grade-appropriate formats for a variety of purposes and audiences	Adapt writing to grade-appropriate formats for a variety of purposes and audiences	Write with some adaptation to grade-appropriate formats for a variety of purposes and audiences	Write with little adaptation to grade-appropriate formats for a variety of purposes and audiences

Task Specific Rubric			
Advanced	Proficient	Partially Proficient	Novice
Clearly states problem, identifies multiple solutions that are realistic	States problem, identifies multiple possible solutions	States problem, identifies single solution	States problem but is vague and or may identify solution but it is not a plausible one.

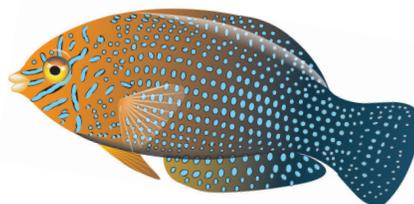
*Note: other Language Arts Writing benchmarks may be covered with this lesson. The teacher may decide which other writing benchmarks to address in this lesson.

Assessment/Evidence Pieces

Unit
<ul style="list-style-type: none"> • Mini-Action Paper or creative writing piece

Materials Needed

Teacher	Class	Group	Student
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • 10 – index cards • Materials for illustration



Instructional Resources

None

Student Vocabulary Words

adaptation: a feature of an organism that develops over time and allows it to survive in its environment.

anoxic: without oxygen.

brackish water: water that is partly fresh and partly salty.

camouflage: the structural adaptation that allows species to blend in to their surroundings to avoid detection by predators. Colors that help an animal hide are called camouflage.

community: all the plants and animals that live in the same area and interact with one another.

ecosystem: a community of different living organisms and the physical environment in which they are found and interact with.

endemic species: a naturally occurring species that lives in a particular area and is found no where else in the world.

erosion: the breakdown and transportation of solid materials.

estuary: a partly enclosed bay where salty ocean water is mixed with freshwater from rivers or streams.

function: how a structural feature of an organism is used or what it does.

habitat: the environment in which an organism naturally lives and grows.

hydric soil: soil that is formed under saturated conditions where the top portion becomes anoxic. The water in the soil forces air out. This soil is found in wetlands.

hydrophyte: plants that have adapted to living in or on aquatic environments.

intertidal zone the area between low- and high-tide marks

marine: related to the ocean or sea as opposed to the land.

native species: species that occur naturally in an area.

organism: an individual living system, for example, an animal, plant, bacteria, or fungus.

pollution: introduction of substances (chemicals, ash, smoke, dust etc.) to the soil, water or atmosphere that are harmful to organisms.

runoff: rainwater that flows over the land and into streams and lakes. It often picks up soil particles along the way and brings them into the streams and lakes.

salinity: the amount of salts dissolved in a liquid, such as water in a lake, river, bay, or ocean.

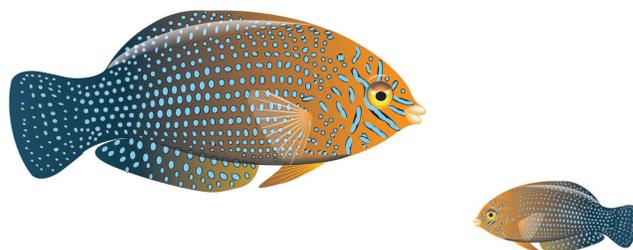
species: a group of related organisms having some common characteristics or qualities, distinct from other organisms.

structure: a distinct physical feature which helps the plant or animal survive in their environment.

structural feature: unique quality of a plant or animal structure.

sustainability: a process of resource use to ensure there is enough of the resource for future generations.

terrestrial: related to the land or earth, as opposed to a fresh water, or marine habitat.



Lesson Plan

Lesson Preparation

- Collect a variety of resources of plants and animals of the shoreline habitat from the library for the students to use in their research.
- Students should write the mini-action paper individually.
- Provide students with index cards for the research and planning process.

I. *Shoreline Habitat Mini-Action Paper or creative writing piece*

- Explain to the students that they are to write a mini-action paper or creative story about the plants and animals that live in the shoreline habitat.
[Suggestion: You may want to have students write their creative story or mini-action paper from the perspective of the shoreline organism.]
- They are to pick an animal or plant that lives in the shoreline habitat, and discuss what it is like to live there. They need to include specific features about their animals that help them survive in the shoreline habitat. Remember to include the *elements* discussed in the brainstorming session below. (For example, the crab may get sick from chemical runoff from nearby golf courses.) Compare the structures and features of your organism with another organism in that same zone.
- Pass out index cards to the students. Explain that students are to use these cards to write information they got from their research and also write down the source where they got the information. They may also collect pictures or create illustrations that will be included in their report. [Suggestion: Students may also use the index cards to record ideas on them. They can then use the cards to shuffle and organize their ideas into paragraphs before writing their draft.]
- Write the first draft of the paper, using the *elements* listed in Section I.B above.
- Teacher will collect and make corrections on the paper and return to the student to prepare a final copy of the mini-action paper.
- Optional: You may want to encourage students to send a copy of their paper to the appropriate agency, and place another copy into their student portfolio and share with their family during conferences.

II. *Mini-Action Paper Elements*

- Brainstorm with students what their papers should look like. What elements will everyone need to include? What would make a “good” story/paper? Some suggestions for criteria are below.
- The first paragraph is a description of what the paper is about. Simply tell the reader what the purpose of this paper is.
- In the second paragraph explain in detail what the problem is and include some background information.
- In the next paragraph(s) explain the possible solution(s), using a new paragraph for each solution.
[Suggestion: You may want to remind students that they can use one of the solutions they developed with their group or come up with one of their own.]
- Conclusion is a one-paragraph summary of why your solution is the best solution to the problem for the shoreline organism chosen.