

LESSON 4 Guess Who?

Lesson at a Glance

Students use the vocabulary and what they have learned about the structures and adaptations of shoreline organisms to write “guess who?” riddles (“I” statements). These statements will describe the organism and other student’s will make educated guesses about which organism is being described and validate their hypothesis. First, the teacher will model; then have students create their own statements to share in either small groups or as a large group activity.

Lesson Duration

One 45-minute period

Essential Question(s)

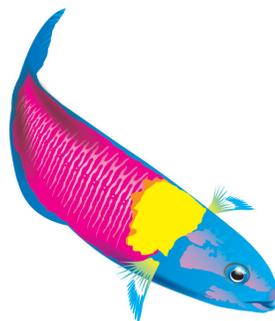
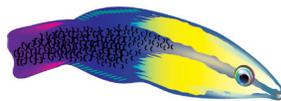
How do distinct physical and behavioral features of organisms enable them to survive in their environment?

Key Concepts

- Riddles require use of precise language.
- Words can be used to “*paint*” a visual picture, a skill useful for communicating observations to others.

Instructional Objectives

- I can use vocabulary to write a riddle appropriate for a third grade class.
- I can write legibly and use correct spacing and capitalization.



Related HCPSIII Benchmark(s):

Science SC.3.4.1
Compare distinct structures of living things that help them to survive.

Science SC.3.5.1
Describe the relationship between structure and function in organisms.

Language Arts LA.3.1.3
Use new-grade appropriate vocabulary introduced in stories, informational texts, word study, and reading.

Language Arts LA.3.4.1
Write a variety of grade-appropriate formats for a variety of purposes and audiences.

Language Arts LA.3.4.6
Write legibly, adhering to margins, correct spacing between letters in a word, and words in a sentence.

Assessment Tools

Benchmark Rubric:

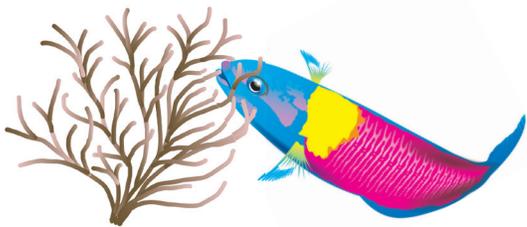
Topic		Cells, Tissues, Organs, and Organ Systems	
Benchmark SC.3.4.1		Compare distinct structures of living things that help them to survive	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Group living things by the distinct structures that help them to survive and provide justification for 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		Unity and Diversity	
Benchmark SC.3.5.1		Describe the relationship between structure and function in organisms	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Classify the structures of organisms according to their function	Describe the relationship between structure and function in organisms	Identify the relationship between structure and function in an organism	Recall that structures in organisms are related to the functions they perform

***Note:** This activity may meet other Language Arts benchmarks depending on how detailed the teacher would like to analyze the student work samples.

Topic		Vocabulary and Concept Development	
Benchmark LA.3.1.3		Use new grade-appropriate vocabulary, including homophones and homographs, introduced in stories, informational texts, word study, and reading	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Use new grade-appropriate vocabulary, including homophones and homographs, with precision, fluency, and accuracy	Use new grade-appropriate vocabulary, including homophones and homographs, with no significant errors	Use new grade-appropriate vocabulary, including homophones and homographs, with difficulty and a few significant and/or many minor errors	Use new grade-appropriate vocabulary, including homophones and homographs, with great difficulty and/or many significant errors

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
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Topic		Punctuation, Capitalization, Spelling, and Handwriting	
Benchmark LA.3.4.6		Write legibly, adhering to margins and correct spacing between letters in a word and words in a sentence	
Rubric			
Advanced	Proficient	Partially Proficient	Novice
Write neatly and legibly, adhering to margins and correct spacing between letters in a word and words in a sentence to create a highly effective product	Write legibly, adhering to margins and correct spacing between letters in a word and words in a sentence	Write with some legibility, partially adhering to margins and correct spacing between letters in a word and words in a sentence	Write with little legibility, not adhering to margins and correct spacing between letters in a word and words in a sentence

Assessment/Evidence Pieces

Lesson
<ul style="list-style-type: none"> Student written Shoreline Riddles

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"> Writing Paper Construction paper Plain white paper Crayons/Markers 	<ul style="list-style-type: none"> None

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 into 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 nowhere else in the world.

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 and alternately covered by water and exposed to air during each tidal cycle.

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.

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.

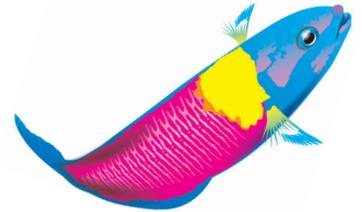
salinity: the amount of salts dissolved in a liquid, such as water in a lake, river, bay, or ocean.

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.

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



Lesson Plan

Lesson Preparation

- Review the Science Background provided in the Unit Overview.
- Locate, or recall examples of riddles. For examples, see: *I Am a Creature of the Tides: What Am I? - He I'a Wau: Pehea Ko?* Pauahi Publications, by Kynaston Kaika Lindsey. You may want to select and write at least one riddle on chart paper, which you will use to introduce a sample of a written riddle.
- Write out and post the five senses with the terms—Looks like, Feels like, Smells like, Tastes like, and Sounds like—as labels either on a bulletin board, or a word wall.
- Assemble three pieces of chart paper, as follows, in order to model the activity:
 - Bottom piece: Drawing of *opihī*.
 - Middle piece: Riddle. (Write out the example riddle provided.)
 - Topic piece: Cover sheet. (labeled “Who Am I?”)
- Notice that in Procedure I, the sample riddle is a rhyming poem. Decide whether you want the students to write their riddles using words that rhyme. This is optional.
- Hang the students sketches covered by written riddle creations on the bulletin board.

I. How to Write a Riddle (“I” statement)

- Post a sample written riddle and read it aloud to the class. Invite students to make guesses of what organism is being described by the riddle, and record the words they use in making their guesses. Ask them what clues they used to make their guesses? Point out that the words in the riddle provided the clues. This will serve as a motivator and example of using descriptive words.

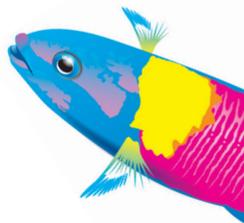
- B. Ask students how they could create riddles about shoreline organisms. Invite their suggestions, leading them to think about how they can use what they already know.
- 1) Review the interactive bulletin board organisms and their adaptations. [Suggestion: You may want to refer to slide show, and/or print out pictures for use.] Have students observe pictures carefully so they can paint a picture in the minds of others in their riddle. Remind students that scientists always have to be very specific with their words when recording their observations. They must be specific as scientists.
 - 2) Brainstorm a word bank of science words that are good descriptors to help students get started. Remind students that we all have five senses and that we use these to experience the world. Use a five-senses chart to prompt their thinking about terms they can use to describe shoreline organisms and the habitat they live in. Record the descriptive words, and invite students to add to the list. They may also think of words to add to the list throughout the activity.

LOOKS LIKE	SOUNDS LIKE	SMELLS LIKE	FEELS LIKE	TASTES LIKE
Round	Crashing	Salt	Smooth	Fish
Sharp	Pounding	Fish	Rough	Salty
Wide	Still	Fresh	Soft	Crunchy

- C. Now, model with the students how to create a riddle about a shoreline organism, and how to present it to the class.

- 1) Refer to the example that you prepared before starting the lesson. Remove the cover sheet labeled “Who Am I?” to reveal the written riddle. Read aloud to the students this example for *‘opihī*:

“I live on the rocks where the waves will pound.
 My shell is hat-shaped with grooves and round.
 My strong foot helps me function.
 It acts just like a very strong suction.
 I eat algae in the wave impact zone.
 The features of my special shell help keep me safe in my home.
 Who am I?”



- 2) Prompt students to find the descriptive words in the written riddle that provide the clues they use to guess where the organism lives. For example, the first line states that the organism lives on rocks. Highlight, or underscore these words.
- 3) Also prompt students to find the descriptive words that provide clues about the organism’s structure, and what the organism looks like. This example says that the organism is a shell, and that its shape is round with grooves.

- 4) Set the following expectations for solving the riddle. Write down the descriptive words that provided the clues and helped them envision the organism. Make a sketch. When giving their answer, the students are to show their sketches, and must be ready to point out the descriptive words that provided the clues.

[Suggestion: This may be done on student whiteboards to save paper.]

II. *My Shoreline Riddle*

- A. Engage students in writing their own riddle about a shoreline organism, and drawing a sketch to illustrate the organism they select.
- B. Allow students time to compose their riddle, and write a draft on paper. Circulate among them as they work, helping them to think of descriptive words, and how to state their riddle.
- C. Once they have their draft completed, give students two pieces of construction or chart paper, one for making a sketch of the organism, and the other for writing out the words to their riddle. Ask them to staple the written words over their illustration. Post these when they are finished.
- D. Conduct a gallery walk. Read each riddle, and then lift the flap to reveal the answer.
[Suggestion: You may also want students to use sticky notes to leave a positive message or benchmark reflection for the writer.]
- E. Post-gallery discussion: Compare the structural features of the organisms that help them survive in a particular zone of the shoreline habitat.

Extended Activities

Integrate the following reading into this lesson, or add this book to your classroom library for the duration of the unit: *I Am a Creature of the Tides: What Am I? - He I'a Wau: Pehea Ko'*, Pauahi Publications, Kynaston Kaika Lindsey.