

EXPLORE THE SHORE

Topic

Planning a Visit to the Rocky Shore

Duration

One session

Vocabulary

conservation
expectations
guidelines

STANDARDS

Practices

Obtaining, Evaluating, and Communicating Information

Core Ideas

Human Impacts on Earth Systems

Crosscutting Concepts

Science Addresses Questions About the Natural and Material World

OCEAN LITERACY PRINCIPLES

OLP 1, OLP 5, OLP 6, OLP 7

FOCUS QUESTION

How can I be prepared to visit the rocky shore?

OVERVIEW

Students create expectations for a classroom visit to the rocky shore. Students discover appropriate guidelines for visiting the shore. Students write a poem or song to help them remember their expectations.

OBJECTIVES

Students will be able to:

- ★ Identify expectations for a visit to the rocky shore
- ★ Discover appropriate guidelines for a visit to the rocky shore
- ★ Write a form of literature that outlines their rocky shore expectations

MATERIALS NEEDED

- ★ Paper/pencils
- ★ Whiteboard/SMART Board/Projector
- ★ Computers/Printer
- ★ Copies of Explore the Shore Tips (if decided upon, page 226)

TEACHER PREPARATION

1. Reserve computers or tablets (one per student).
2. Prepare enough paper/pencils for each student.
3. Make sure to have a whiteboard/SMART Board available to record student feedback.
4. Print out copies of Explore the Shore Tips for each student if decided upon by the teacher.

BACKGROUND

The rocky shore, like any ecosystem, needs to be treated by humans with care and respect. It is important that when visiting an ecosystem humans understand what steps they need to take to ensure the safety of the organisms that live there, as well as what steps they need to take to ensure their own safety. Considering the size and fragility of many of the rocky shore's organisms, it is vital that





Teacher Tips

- ★ Seek the assistance of the school's music teacher to help students create one song about expectations when visiting the rocky shore.
- ★ Have students work only on computers/tablets to draft, revise and edit their song or poem to expedite the lesson.
- ★ For struggling writers, type the rocky shore expectations and then print it out for students to refer to when creating their song or poem.



Extension Suggestions

- ★ Have students come up with a list of expectations to use when visiting their local ecosystems (i.e., forest, lake) or their school's nature trail (if possible).
- ★ Prepare a scavenger hunt for students to participate in or find a premade scavenger hunt online.

BACKGROUND (CONTINUED)

those visiting the rocky shore be knowledgeable of how to conduct themselves appropriately so that they can do their part to conserve the ecosystem. It is also important that humans visiting any ecosystem be aware of the dangers they might encounter.

PROCEDURE

Part One

1. Ask students what stories they can recall that have giants as main characters. Suggestions may include giants from the *BFG* by Roald Dahl, or the giant from *Jack and the Beanstalk*.
2. Ask students what they think life would be like if we had giants as tall as skyscrapers walking around our town.
3. Ask students if they can make a connection between the topic of giants and visiting the rocky shore. Assist students if necessary in determining the connection that a human visiting the rocky shore is similar to a giant visiting their town.
4. Ask students what kind of “giants” they think they should be when visiting the rocky shore.
5. Inform students that they are going to work in partners to come up with at least five expectations of how they should behave when they visit the rocky shore.
6. Assist students with their partnerships, provide them with paper and pencils if necessary, and allow them five to ten minutes to come up with expectations.
7. Have partners share their expectations and record their feedback on a whiteboard or SMART Board. Put check marks next to “repeat” expectations.
8. Determine the “Top Five” or “Top Seven” tips you would prefer the students to remember and either circle them or highlight them for later use.
9. Inform students that it is not only important to consider how to behave when planning a visit to the rocky shore, but it is also important to plan on making the visit enjoyable and educational.
10. Share and review the Explore the Shore Tips document with students using a projector or SMART Board, or print out a copy for each student.
11. Point out similarities between the student list of expectations and the Tide Pooling Tips document if possible.





Books

- ★ *Beachcombing: Exploring the Seashore* by Jim Arnosky
- ★ *What If Everybody Did That?* by Ellen Javernick
- ★ *One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia* by Miranda Paul



Websites

- ★ Check out “Exploring for Tide Pool Creatures!” on the Brave Wilderness YouTube Channel. Have students pay close attention to how the tide poolers treat the animals and the rocky shore.
- ★ Watch “Monterey Bay Aquarium Tide Pool Tips with Jim Covel” on the Pottery Barn Kids YouTube Channel. Compare the tips Jim Covel provides with the ones students have already reviewed.



Scientist Notebook

- ★ Students can record their expectations for visiting the rocky shore and the tide pool tips they learned.

Part Two

12. Inform students that they are going to be working with their previous partners to write either a song or poem to help them remember their “Rocky Shore Expectations.”
13. Provide paper/pencils for partners to use to write their song or poem drafts.
14. Assist students with revising and editing their work.
15. Allow students to “publish” their song or poem of expectations using a computer or tablet with printing capabilities.
16. Have students print out their finished poem or song of expectations and have them share with the class if they feel comfortable doing so.

WRAP-UP

- ★ Ask students to identify the expectations they created as a class and that the teacher decided upon.
- ★ Ask students to recall as many tips as possible from the Explore the Shore Tips document.



EXPLORE THE SHORE TIPS

by Mr. Smith

1. **Check the Tides**—Explore the shore at LOW tide. You can find local tide charts online.
2. **Protect the Feet**—Wear appropriate footwear. The rocky shore is tough on the toes. Old shoes and water shoes work.
3. **Wait for It**—Be patient while you search for creatures in a tide pool. Observe and move around slowly.
4. **Look out Below**—Rocky shore creatures don't prefer to sunbathe. Look under seaweed, rocks, and overhangs.
5. **Easy Does It**—Be very gentle when holding rocky shore creatures, and return them exactly where you found them.
6. **Don't Move**—Rocky shore creatures like sea stars and limpets hold on tight. Do not move them, you'll hurt them.
7. **Resist Temptation**—Taking objects from the rocky shore can impact the ecosystem negatively. Take photos instead.
8. **Move Slow**—Expect to slip every step, step to the lowest point every time, and lean forward and not backward.
9. **Bring a Bin**—Bring a plastic container to observe creatures more closely and for extended amounts of time.
10. **Make it Fun**—Plan a scavenger hunt. Choose specific algae and animals to look for and see what you can find!

