

RESOURCE LIBRARY
ACTIVITY : 50 MINS

Plankton Migration/Haiku Creation

Students listen to a read aloud of a children's science book and watch a short video on how plankton migrate in the ocean. Students write a poem describing their feelings about what they heard and saw.

GRADES

3 - 5

SUBJECTS

Earth Science, Oceanography, English Language Arts

CONTENTS

1 Video

OVERVIEW

Students listen to a read aloud of a children's science book and watch a short video on how plankton migrate in the ocean. Students write a poem describing their feelings about what they heard and saw.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/plankton-migration-haiku-creation/>

DIRECTIONS

1. Introduce ocean migration and plankton.

Tell students they are going to explore ocean migration. Explain that *migration* means "movement from one place to another." Ask: *What are some examples of animals that migrate?* Explain that students are going to learn about the migration of some of the tiniest organisms that live in the sea: plankton. Ask: *What can you tell me about plankton?* Write students' ideas on the board.

2. Read aloud about ocean plankton.

Show students the cover of the book *They Swim the Seas*, by Seymour Simon, and ask students to listen carefully and to write down information they think is important or interesting as you read to them about the migration of ocean plankton. Read page six, which is devoted to plankton. Be sure to read slowly and to emphasize important information such as what plankton are, when and why they migrate up, and when and why they migrate down.

3. Have a class discussion about the reading.

Ask:

- *What do you think the author was trying to communicate, or say, about plankton?*
- *What did you learn about plankton and their migration?*
- *Did the author explain why plankton migrate up and down every day? (No, he did not.)*
- *What are some possible reasons why plankton migrate?*

4. Watch a video about ocean plankton.

Show students the 1½-minute National Geographic video *Great Migrations—Plankton Light Up Show*, which shows plankton migrating up and down in the ocean. Ask them to watch closely for different kinds of plankton and to listen carefully to hear why the plankton migrate.

5. Have a whole-class discussion about the video.

Ask:

- *Why do plankton migrate?*
- *What do you think the people who produced this video were trying to communicate?*
- *What new things did you learn about plankton and their migration?*
- *Why are these tiny plants and animals so important to life on Earth?*

6. Show the video a second time.

Have the class watch the video a second time to give students a chance to absorb more details. Tell them that they are going to write a poem about ocean plankton, so they should look carefully and jot notes on what they see and what they find most interesting.

7. Have each student write a haiku about ocean plankton.

Tell students that they are going to have a chance to share what they learned and express

what they feel about plankton and plankton migration by writing a haiku poem. Explain that a haiku poem is a form of Japanese poetry that is usually written to describe nature. It has three lines and a total of 17 syllables: five syllables on the first line, seven on the second line, and five on the last line. Write an example of a haiku poem on the board and have students count the syllables in each line. Tell students that before they start to write, they should think about what they want to communicate and how they feel about plankton and the ocean. After students finish writing their poems, have them read over their poems to make sure the poems communicate what students wanted to say and that they contain the correct number of syllables.

8. Ask students to share their poems.

Ask students to share their haiku poems; for example, by reading the poems out loud, displaying them in the classroom, submitting them to the school newspaper, or transcribing them onto a classroom plankton blog.

Modification

Read the book excerpt twice, and write important vocabulary words on the board, to help English language learners absorb the information.

Informal Assessment

Check students' comprehension by asking the following questions:

- *What are plankton?*
- *Why do plankton migrate?*
- *How do plankton migrate?*

Extending the Learning

Have students read *They Swim the Seas* by Seymour Simon. Have each student pick an animal that migrates in the ocean to write a short news article about. Discuss the characteristics of news articles, including the importance of headlines and of conveying *who, what, where, why,* and *when*. If possible, have students use computers to design and lay out their news articles and to find photos to illustrate them. Display the completed articles in the classroom.

OBJECTIVES

Subjects & Disciplines

Earth Science

- [Oceanography](#)
- English Language Arts

Learning Objectives

Students will:

- explain what plankton are
- write and organize information gathered by listening, watching a video, and reading
- describe how and why plankton migrate and how plankton contribute to the food web
- create an original poem about why plankton are important to ocean health

Teaching Approach

- Learning-for-use

Teaching Methods

- Discovery learning
- Discussions
- Guided listening
- Writing

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Information, Media, and Technology Skills
 - [Information Literacy](#)
 - [Media Literacy](#)
 - Learning and Innovation Skills

- Creativity and Innovation
- Critical Thinking Skills
 - Creating
 - Remembering
 - Understanding

National Standards, Principles, and Practices

IRA/NCTE STANDARDS FOR THE ENGLISH LANGUAGE ARTS

- **Standard 12:**

Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

NATIONAL SCIENCE EDUCATION STANDARDS

- **(K-4) Standard C-3:**

Organisms and environments

OCEAN LITERACY ESSENTIAL PRINCIPLES AND FUNDAMENTAL CONCEPTS

- **Principle 5a:**

Ocean life ranges in size from the smallest virus to the largest animal that has lived on Earth, the blue whale.

- **Principle 5b:**

Most life in the ocean exists as microbes. Microbes are the most important primary producers in the ocean. Not only are they the most abundant life form in the ocean, they have extremely fast growth rates and life cycles.

- **Principle 5h:**

Tides, waves and predation cause vertical zonation patterns along the shore, influencing the distribution and diversity of organisms.

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Example of haiku poetry
- Pencils
- They Swim the Seas by Seymour Simon
- Writing paper

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector, Speakers

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction

OTHER NOTES

If possible, introduce students to haiku poetry and provide books or examples of haiku for them to browse through prior to the activity.

BACKGROUND & VOCABULARY

Background Information

Many ocean animals migrate, or move from one place to another, on a regular basis. Among these are plankton—tiny animals and plants that migrate up in the water column during the night, and down during the day. Understanding plankton migration can enhance students' appreciation of the ocean food chain.

Prior Knowledge

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Recommended Prior Activities

- None

Vocabulary

Term	Part of Speech	Definition
animal migration	<i>noun</i>	process where a community of animals leaves a habitat for part of the year or part of their lives, and moves to habitats that are more hospitable.
marine organism	<i>noun</i>	living creature with an ocean habitat.
migrate	<i>verb</i>	to move from one place or activity to another.
ocean	<i>noun</i>	large body of salt water that covers most of the Earth.
plankton	<i>plural noun</i>	(singular: plankton) microscopic aquatic organisms.

For Further Exploration

Websites

- [The Encyclopedia of Earth: Plankton](#)
- [National Geographic News: Plankton Declining in Oceans, Study Finds](#)
- [National Geographic Video: Jelly Plankton](#)

