# **Click® Teacher Guide: July/August 2018**



#### **Boats Ahoy**

This issue will make a big splash with young learners interested in a wide variety of watercraft. Providing articles about exciting adventures at sea, as well as water rescue missions, this publication of CLICK will be sure to make waves in your classroom.

#### CONVERSATION QUESTION

How do people use boats for different purposes?

#### **TEACHING OBJECTIVES**

- Students will learn about the attributes that cause an object to sink or to float
- Students will learn about the different components of a cruise ship and the personnel that help it run smoothly
- Students will learn about the various people and watercraft that keep our waterways safe
- Students will conduct an experiment and make predictions
- Students will collect information and identify the parts of a ship
- Students will determine the structure and function of rescue boats and emergency workers
- Students will write a poem that relates to a scientific concept
- Students will use graphics and text to create a brochure
- Students will create a visual aid that teaches a water safety concept



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and crosscurricular activities.

### SELECTIONS

- Sink or Float
- Expository Text with Graphics, ~550L
- Cruise Ship
- Expository Nonfiction, ~650L
- Boats to the Rescue! Expository Nonfiction, ~650L

# **Click® Teacher Guide: Month Year**

#### Sink or Float

#### pp. 8–13, Expository Text with Graphics

The article will help students understand the scientific concepts that allow an object to sink or to float. Uncover the mystery of buoyancy using simple graphics and text.



#### RESOURCES

"Wonderful Water"

### OBJECTIVES

- Students will learn about the attributes that cause an object to sink or to float
- Students will conduct an experiment and make predictions
- Students will write a poem that relates to a scientific concept

### KEY VOCABULARY

- *dense* (p. 10) having parts that are close together
- object (p. 11) a physical item
- *level* (p. 12) horizontal to the surface of an object such as a table or a floor

#### ENGAGE

**Conversation Question:** How do people use boats for different purposes?

Distribute the article, "Sink or Float," and instruct students to explore the text and study the graphics to activate prior knowledge. Create a Know, Want to Know, Learned (K-W-L) chart on the board and list student responses. At the conclusion of the reading and the provided activity, refer back to the chart and add statements to the last column.

### INTRODUCE VOCABULARY

Post the vocabulary words and their definitions on the board, purposely matched incorrectly. Challenge students to make the correct connections. Draw attention to the words as they are revealed in the text.

# READ & DISCUSS

Reinforce comprehension of the concept in this article by using the following prompts to direct discussion.

- Why do big objects sometimes float, while small objects sink?
- What factors could you alter to affect whether or not an object sinks or floats?
- How can you predict whether certain objects will sink or float?

## CONCEPT/SKILL FOCUS: Structure and Function

**INSTRUCT:** Announce to the class that they will conduct their own sink/float experiments. Emphasize that they must make their predictions about each object's buoyancy *before* beginning their trials. Distribute the graphic organizer, *"Wonderful Water,"* and have them independently fill the prediction column. Assign small groups and guide them through conducting their experiments. They will record results and complete the worksheet.

**ASSESS:** Visit each group as they are conducting their trials and facilitate conversation. Reinforce key vocabulary terms in your discussions. Collect the *"Wonderful Water"* worksheet and evaluate their level of understanding by focusing on their answer to the final question.

#### EXTEND

Language Arts Read aloud poems that contain science concepts. These can be published poems or teacher-created. Discuss with the students that their task will be to write a poem that focuses on the scientific concept of buoyancy. These poems can be humorous or serious, but they must relate to the topic. Invite students to share their poetry aloud.

### **Wonderful Water**

Make your prediction and then place the object in the water. Record the results.

Object	Prediction	Actual
crayon		
scissors		
apple		
aluminum foil ball		
wooden block		

Question: What did you learn from this article that explains why some objects floated while other objects sank?

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#### Cruise Ship

#### pp. 14–17, Expository Nonfiction

All aboard! This article allows students to experience the excitement of traveling by sea. They will gain information regarding the ship's layout, acquire new vocabulary and procure an appreciation for the workers responsible for creating an enjoyable day on the water.



### RESOURCES

• "Sea" for Yourself!

### OBJECTIVES

- Students will learn about the different components of a cruise ship and the workers that help it run smoothly
- Students will collect information and identify the parts of a ship
- Students will use graphics and text to create a brochure

### KEY VOCABULARY

- cargo (p. 14) goods or products carried from one place to another by boat
- engineers (p. 16) scientists trained to design and build complicated structures
- propeller (p. 14) a device with two or more blades that turn quickly and help a boat move

#### ENGAGE

**Conversation Question:** How do people use boats for different purposes?

Pose the following question: *What forms of transportation could you use to get from one location to another?* Discuss which modes are most suitable for daily life and which types of transportation are more suited for leisure/vacation. Introduce the title of the article and elicit which category cruise ships belong to and why. Distribute article and read.

### INTRODUCE VOCABULARY

Present visual representations of the three key vocabulary terms. Challenge students to identify what they see in each picture and create a simple definition. Discuss answers and then present actual definitions. Have children amend their own definitions if necessary.

# READ & DISCUSS

Express to students that this article uses text and diagrams to help you comprehend the information. Use the following prompts to explore further.

- How do cruise ships differ from cargo ships?
- What is the purpose of lifeboats on big ships?
- o What different jobs can people have aboard a cruise ship?
- What types of special areas are included on cruise ships to provide a fun experience for the passenger?

# CONCEPT/SKILL FOCUS: Collect and Identify

**INSTRUCT:** Review the parts and personnel of a cruise ship as discussed in the article. Distribute the *"Sea" for Yourself!* graphic organizer and note how informational words are listed at the top of the page. Direct them to provide a simple definition for each word and create a detailed drawing of a cruise ship, labeling each part.

**ASSESS:** As a class, review student definitions before they begin their drawing projects. Upon completion, evaluate students' drawings to assess understanding of the key parts and personnel of a cruise ship.

#### EXTEND

Language Arts Organize students into small groups and announce that they will be creating a brochure for their own cruise line. Tell them their brochure must advertise one type of adventure people can participate in aboard their ship. Instruct the class to use key terms from their *"Sea"* for Yourself! project page. Display the brochures and invite other classes to come in and "sign up" for the cruise they wish to take. Tally the preferences and determine what factors contributed to the most popular choice.

# "Sea" for Yourself!

Briefly describe the words below and include them in your illustration.

stern: the back of the ship	cabin:
bow:	galley:
bridge:	dining hall:
smoke stack:	top deck:
lifeboat:	engine room:

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# Boats to the Rescue!

**pp. 18–20, Expository Nonfiction** Rescue efforts on our waterways can pose unique challenges. Use this article to teach students how specialized equipment and well-trained responders allow us to enjoy the water safely.



## RESOURCES

• "Rescue Me!"

### OBJECTIVES

- Students will learn about the various personnel and watercraft that keep our waterways safe
- Students will determine the structure and function of rescue boats and emergency workers
- Students will create a visual aid that teaches a water safety concept

### KEY VOCABULARY

- *investigate* (p. 18) to gather information to try to find out the facts of a situation
- nozzle (p. 19) short tube put on the end of a hose to control the way water flows out
- *patrol* (p. 18) to keep watch over an area by regularly traveling through it

#### ENGAGE

**Conversation Question:** How do people use boats for different purposes?

Display the title "Boats to the Rescue!" and have students predict what they may read about in the text. Distribute the article and allow the students to take a picture walk through the pages and add to their predictions.

## INTRODUCE VOCABULARY

Post the vocabulary words where they are visible to the class. Instruct students to do a word hunt through the article to locate these words. Have them underline the sentences in which they appear. Challenge students to use context clues to determine meanings. Discuss actual meanings and add definitions to the terms posted on the board.

# READ & DISCUSS

Have the students read the description of each type of emergency watercraft mentioned in this article. Use the prompts below to initiate further conversation.

- o Under what circumstances would a rescue boat be needed?
- What is the job of the "water police"?
- How do fire boats put out fires in open waters?
- Why do tugboats need to help bigger boats?
- How do FLOs clear a path through frozen waters?

# CONCEPT/SKILL FOCUS: Structure and Function

**INSTRUCT:** Review how each different rescue boat mentioned in the article has an important job. Emphasize that the people employed on these boats are responsible for keeping our waterways safe. Present the graphic organizer *"Rescue Me!"* and tell the class that they will be using information from the article to record these important functions. They will also provide a brief sentence stating what they learned.

**ASSESS:** Circulate and have mini-conversations with the students as they are working on their graphic organizer. Collect their organizers to further assess their understanding.

#### EXTEND

Language Arts Use this article as an opportunity to discuss water safety. Brainstorm with the class to elicit the many ways that we can keep ourselves safe while enjoying the water. Divide the students into small groups and assign each group a different facet of water safety to illustrate on paper or poster-board. Display their illustrations throughout the school . . . and possibly save a life!

#### **Rescue Me**

Describe the function of each type of boat in the top part of the organizer. Next, explain how the different types of emergency workers help people. Last, write a short summary of what you learned.

BOATS	FUNCTION
Water Police Boats	patrol city waterways
Fire Boats	
Tugboats	
FLOs	
EMERGENCY WORKER	HOW THEY HELP
Lifeguards	can swim short distances to save a swimmer or surfer
Coast Guard	
Water Police Officers	
Water Firefighters	

Summarize: What did you learn? \_\_\_\_\_