

Click®

Pond-tastic!

Ponds are small, still areas of fresh water that are crucial habitats for a great variety of plants and animals. This month's issue of CLICK magazine explores the dynamic environment of the pond ecosystem. Readers will learn who visits the pond and who calls the pond home.

CONVERSATION QUESTION

How do plants and animals depend on each other in a pond ecosystem?

TEACHING OBJECTIVES

- Students will learn about the creatures that call the pond their home.
- Students will learn how ponds change throughout the seasons.
- Students will learn about the animals and insects that rely on ponds.
- Students will examine the dynamics of an ecosystem.
- Students will interpret data and communicate findings.
- Students will classify information from a nonfiction text.
- Students will identify compound words.
- Students will create main characters with alliterative names.
- Students will examine how animals receive different types of information about the pond through their senses.



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

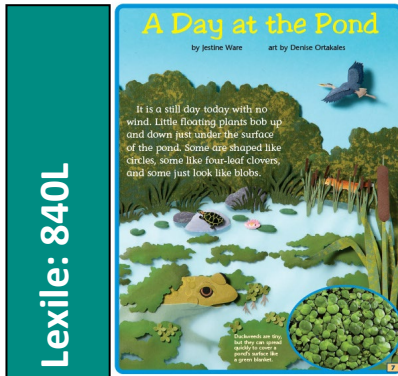
SELECTIONS

- **A Day at the Pond**
Expository Nonfiction, 840L
- **Sally's Special Pond**
First Person Narrative Nonfiction, 680L
- **Who Visits the Pond?**
Expository Nonfiction

A Day at the Pond

pp. 7–11, Narrative Nonfiction

Young readers will imagine a day at the pond as they observe different plants and animals that thrive in such an environment. The text is enhanced by colorful illustrations and photographs that help to demonstrate the food chain.



RESOURCES

Ecosystem Dynamics: Food Chain

OBJECTIVES

- Students will learn about the creatures that call the pond their home.
- Students will examine the dynamics of an ecosystem.
- Students will identify compound words.

KEY VOCABULARY

- **flit** (p. 8) to move swiftly and lightly
- **darts** (p. 8) moves somewhere suddenly or rapidly
- **lunges** (p. 10) displays a sudden forward thrust of the body, usually to attack someone or grab something

ENGAGE

Conversation Question: How do plants and animals depend on each other in a pond ecosystem?

Distribute the article “A Day at the Pond” and have pairs of students do a picture walk through the pages. Encourage them to point to and identify the living things they see in and around the pond. Pose the question: *What are some things that could be living in or around the pond that you don't see in the pictures?* Have students share any real-life connections to ponds.

INTRODUCE VOCABULARY

Post and read aloud the three vocabulary words and definitions. Ask students how all of the words are connected. (All of the words are action words (verbs) that express rapid movements.) Tell students that words that have similar meanings are called *synonyms* and that **flit** and **dart** can be considered synonyms. Challenge students to share words that can describe moving slowly. (Ex: crawling, inching, sneaking, etc.)

READ & DISCUSS

Reinforce comprehension of the concepts presented in the article by using the following questions to direct discussion.

1. According to the article, how big is a grown-up minnow?
2. Why does a diving beetle store air beneath its wings?
3. Why do painted turtles rest on top of logs and rocks?
4. What part of the turtle's body protects it from the heron?
5. The article states on page 7, “It is a still day today with no wind.” A detailed description of the pond follows. How do you think the pond would be different on a windy day?

SKILL FOCUS: Examine Dynamics of an Ecosystem

INSTRUCT: This article presents the reader with detailed information about a basic pond's ecosystem. Define an ecosystem as follows: a community of living things (plants or animals) and their nonliving environment (soil; water; air) interacting together. Review with students how this article presents readers with an example of a food chain—beginning with plants, then animals that eat plants, and then animals that eat animals. The elements of a pond depend on each other for survival and are linked like a chain. Distribute the worksheet.

ASSESS: Review, then ask: *What saved the turtle from being eaten by the heron?*

EXTEND

Word Work: Have students locate and underline the words “duckweed” and “sunlight” on page 8. Ask them if they notice anything special about these words. Guide students to notice that these words are larger words that are made up of smaller words. Demonstrate on the board: duckweed = duck + weed; sunlight = sun + light. Challenge students to use a quiet time to search through this issue of CLICK magazine to locate other compound words.

Food Chain

Examine Dynamics of an Ecosystem Use the article to help put the elements of the pond's food chain in the correct order. Complete the sentences and draw a picture to match the words in the spaces provided below.

The duckweed is food for the

_____ minnow _____.



The minnow is food for the

_____.



The beetle is food for the

_____.



The turtle was ALMOST food for

the _____.

Sally's Special Pond

pp. 12–15, Narrative Nonfiction

Students will join Sally the salamander for a tour of her special pond. Seasonal changes in and around the pond are discussed, in addition to exploring the restorative nature of the pond environment.



RESOURCES

Interpret Data and Communicate Findings: Pond Players

OBJECTIVES

- Students will learn how ponds change throughout the seasons.
- Students will interpret data and communicate findings.
- Students will create main characters with alliterative names.

KEY VOCABULARY

- **vernal** (p. 13) related to, or happening in the spring season
- **frilly** (p. 14) having wavy edges
- **gills** (p. 14) the body part that helps an animal breathe underwater

ENGAGE

Conversation Question: How do plants and animals depend on each other in a pond ecosystem?

Have students name the seasons of the year and post them on the board. Distribute the article “Sally’s Special Pond” and have students look through the photographs to find pictures that are likely connected to each season. Ask: *How do you think the pond changes during each of the seasons? What do you think happens to Sally the spotted salamander?* Record students’ predictions and revisit the list upon completion of the reading and activities in this guide.

INTRODUCE VOCABULARY

Post and discuss the vocabulary terms with the class. Be sure that they understand what each word looks like or means by showing them the drawings throughout the article or using the internet. Then, have them fold a piece of paper into quarters and label three of the boxes with the key words (**vernal**; **frilly**; **gills**) and make a visual representation of each. After reading the article, they will use the remaining box to illustrate an additional theme-related word of their choosing from the text.

READ & DISCUSS

Read the article aloud for students’ enjoyment. Then post the following questions and have students provide answers as you read through the story a second time.

1. How does Sally’s pond disappear and reappear?
2. Where does Sally the salamander spend the winter months?
3. Where do frogs and salamanders lay eggs?
4. Why aren’t there any fish in Sally’s pond?
5. By the end of the summer, what organs replace Verna’s gills?

SKILL FOCUS: Interpret and Communicate

INSTRUCT: Maps and charts are important tools in science education because they provide visual representations of data and their connections. Students will use the *Pond Players* grid map to spot pond animals and communicate their locations using coordinates. Review the example with the class, showing students how to use their fingers to name a location.





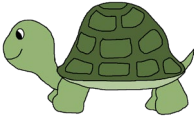
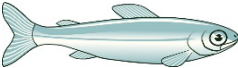
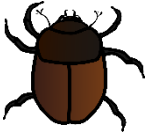
ASSESS: Have students add a pond animal to the grid and cite the location.


EXTEND

Language Arts: Write the title, “Sally the Salamander” on the board and read aloud the words emphasizing the “s” sounds. (Define alliteration as: *the use of several words close together that all start with the same letter sound.*) Tell students that authors often like to use alliteration because it adds interest and causes the reader to tune in and listen more closely. Provide an additional example, such as, Benjamin the Bear. Then have students create and illustrate their own alliterative main character.

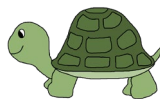
Pond Players

Interpret Data and Communicate Findings Teachers will show students how to find and properly list the location coordinates of the mud splat. Then, students will locate each pond animal and list the correct coordinates. (salamander; frog; beetle; turtle; minnow; bird)

5					
4					
3					
2					
1					
	A	B	C	D	E

Example:  (C, 3)









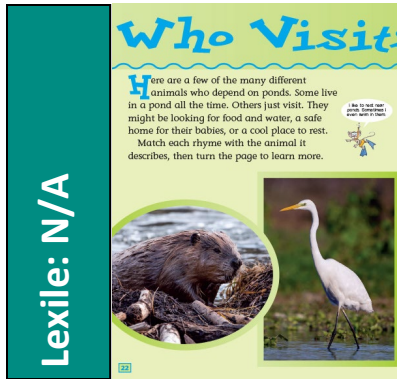




Who Visits the Pond?

pp. 22–25, Expository Nonfiction

Many different animals rely on the pond environment to survive and thrive. This article highlights some of the wildlife that visit and reside within the pond ecosystem.



RESOURCES

Classify Information: Pond Life

OBJECTIVES

- Students will learn about animals and insects that rely on ponds.
- Students will classify information from a nonfiction text.
- Students will examine how animals receive different types of information about the pond through their senses.

KEY VOCABULARY

- **stride** (p. 23) to walk purposefully with long steps in a particular direction
- **wade** (p. 24) to walk with effort through water or mud
- **shed** (p. 25) to lose hair, skin, or feathers as part of the normal process of life

ENGAGE

Conversation Question: How do plants and animals depend on each other in a pond ecosystem?

Draw a word web on the board with the topic “POND” in the center. Invite students to provide pond-related words and add them to the web. Upon completion of the reading and activities, revisit the web and add new words.

INTRODUCE VOCABULARY

Post and discuss the key vocabulary words and definitions. Give students the following directives, one at a time:

- Discuss how striding differs from simply walking. Assemble students at the front of the room. Instruct them to **stride** to the back of the classroom, jump three times, and then **stride** back to the front of the room.
- Direct students to pretend that they are **wading** through water.
- Have students name animals/insects that **shed**, hair, skin, and feathers.

READ & DISCUSS

Lead a discussion based on the following questions.

1. What animals depend on ponds?
2. How does a pond help the animals/insects that live there, as well as the ones that visit?
3. Why does the beaver call himself “the founder and keeper of the pond”?
4. Which animals/insects from the article can fly?
5. Why do you think that the moose likes to wade in beaver ponds in the warm weather?

SKILL FOCUS: Examine Dynamics of an Ecosystem

INSTRUCT: Elicit from students that the main idea of the article is to provide readers with information regarding a variety of animals and insects that rely on a pond environment. Present the *Pond Life* graphic organizer. Tell students that they will use text from the article and the color code key to correctly classify the statements describing a specific pond dweller.

ASSESS: As students are working independently, circulate and discuss the information in the article. The color code key makes it easy to assess correctness. Review the critical thinking activity in the THINK TANK.

EXTEND

Science: Animals receive different types of information through their senses, process it in their brains, and react to it accordingly. Have pairs of students choose an animal/insect from the article and create a five-column chart with the headings: **see; smell; hear; touch; taste**. Students will complete the chart from the viewpoint of the chosen animal/insect, listing what it sees, smells, hears, touches, and tastes at the pond.

Pond Life

Classify Information Use the words and pictures in the article to connect each statement with the correct pond inhabitant. The color key below tells you which color to shade the boxes. Colors will be used more than once.

GREAT EGRET (blue)	MOOSE (red)	WOOD FROG (green)	BEAVER (yellow)	DRAGONFLY (purple)
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Their babies are born without wings and are called nymphs.	They cut down trees with their strong teeth.	Their long bird legs are super for walking in shallow water.	They mostly eat fish but also like frogs, snakes, bugs, and other pond animals.
They spend most of their time in woody areas but visit ponds to lay eggs.	They stab their food with their long, sharp beak and gulp it down.	In warm weather they like to wade in beaver ponds and eat water plants.	They create the pond that keeps their family safe from enemies.
They drag branches to a stream and pile them up to make a dam.	Only the male of the species has antlers.	When their babies grow big enough, they climb out of the water, shed their skin, and fly away.	They hatch babies that are called tadpoles or pollywogs.

THINK TANK: List two other animals or insects that visit or live in a pond:

1. _____ 2. _____