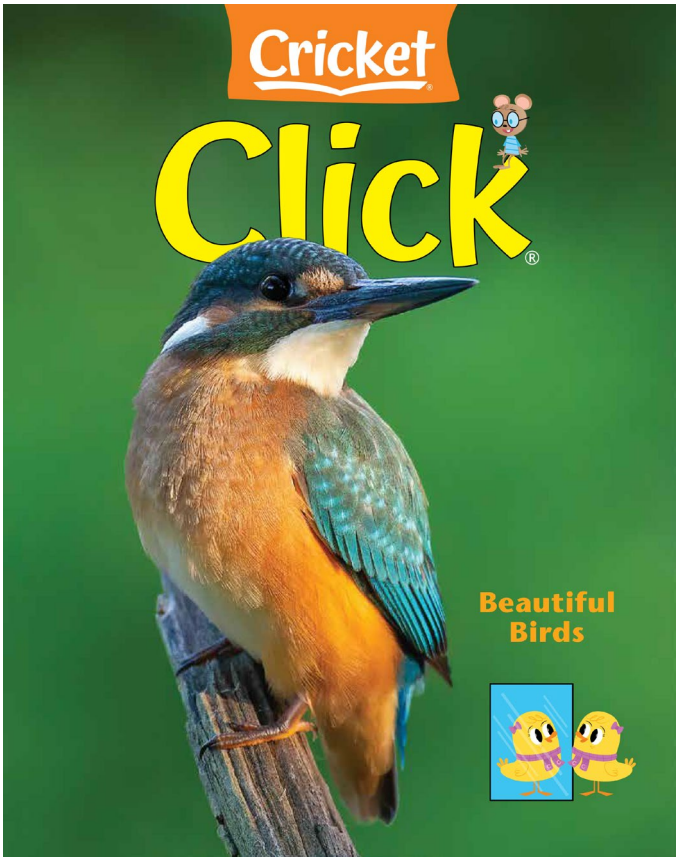
Click® Teacher Guide: May/June 2022

Click®

Beautiful Birds

Grab your binoculars and look towards the sky. This month's issue of CLICK magazine focuses on birds in the wild. Young readers will enjoy the interesting facts and be mesmerized by pages of beautiful feathers. Be prepared to take flight!



CONVERSATION QUESTION

Why are birds such unique animals?

TEACHING OBJECTIVES

- **Students will learn how birds use their feathers.**
- **Students will learn how wings are designed for flight.**
- **Students will learn how a bird's beak has many functions.**
- **Students will construct explanations.**
- **Students will examine the structure-and-function relationship.**
- **Students will obtain and classify information.**
- **Students will create and solve a theme-based mathematical word problem.**
- **Students will conduct a simple science experiment to observe the pattern of airflow.**
- **Students will complete a craft activity.**

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

SELECTIONS

- **Fabulous Feathers**

Expository Nonfiction, ~560L

- **How Do Birds Fly? With Feathers!**

Realistic Fiction, ~910L

- **Beaks Eat**

Expository Nonfiction, ~580L

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Fabulous Feathers

pp. 8–12, Expository Nonfiction

Beyond the awesome aesthetics, a bird's feathers serve many purposes. Colorful photographs enhance this simple text that teaches young readers how feathers provide a variety of protections for birds.

RESOURCES

Construct Explanations: Winged & Wonderful

OBJECTIVES

- Students will learn how birds use their feathers.
- Students will construct explanations.
- Students will create and solve a theme-based mathematical word problem.

KEY VOCABULARY

- ***attract* (p. 10)** to draw attention to
- ***hollow* (p. 12)** having an empty space inside, not solid
- ***waterproof* (p. 12)** able to keep water out

ENGAGE

Conversation Question: Why are birds such unique animals?

Distribute crafting feathers to the students and have the class explore them using their senses. (Provide a magnifying glass if possible.) *Sight:* Describe the feather's shape, structure, and colors. *Touch:* How does it feel when you run your fingers up and down the feather? *Hearing:* Do feathers make a sound when you wave them quickly in the air? Finally, place a container in front of the children and have them blow their feather into the box.

INTRODUCE VOCABULARY

Post and discuss the three vocabulary words and definitions. Have students Think-Pair-Share with a partner. Give them the following brainstorming directives, one at a time:

- Discuss how you could **attract** birds to your yard.
- Name musical instruments that are **hollow.**
- Where and when would you wear a **waterproof** jacket?

Emphasize the key words when they are revealed in the reading.

READ & DISCUSS

Use the following questions for a post-reading discussion:

1. What animals have feathers?
2. Why are female bird feathers often less colorful than male bird feathers?
3. Why can't ice and snow stick to a penguin's feathers?
4. What is the function of the tiny hooks on some feathers?
5. If the hooks on feathers come apart, how does the bird "zip" them back up?

SKILL FOCUS: Construct Explanations

INSTRUCT: Have students review the article and study the different ways birds utilize their feathers. Instruct them to underline specific uses. Distribute the *Construct Explanations: Winged & Wonderful* worksheet and tell the class they will use information from the article to complete the chart. Students should write and draw their answers.

ASSESS: Review the organizer with the class. Pose this question: Other than what is listed on the chart, how else do birds use their feathers?

EXTEND

Mathematics Facilitate a group discussion about the differences between songbirds (finches, cardinals, etc.) and birds of prey (hawks, eagles, etc.). After the brainstorming session, state the following fact and have students create an equation to solve the problem: *Songbirds have an average of 2,000 feathers, while birds of prey have an average of 7,000 feathers. What is the difference between the amounts of feathers the birds have?* Remind students to use the R-D-W process (Read-Draw-Write) to show their thinking and to calculate the answer.
Challenge Have students use the following fact to create and solve an additional word problem: *Swans have an average of 25,000 feathers.*

Winged & Wonderful

Construct Explanations Use the information you underlined in the article to complete the sentences below. In each box, write and draw the different ways birds use their feathers.

Birds use their feathers _____ _____.	Birds use their feathers _____ _____.
Birds use their feathers _____ _____.	Birds use their feathers _____ _____.

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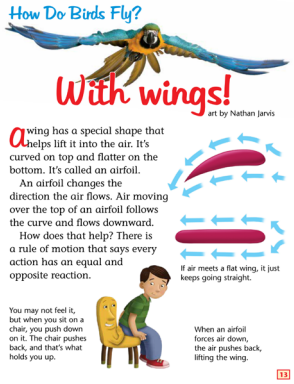
How Do Birds Fly? With Wings!

pp. 13–17, Expository Nonfiction

Up, up, and away! Even young children know that a bird uses its wings to fly; however, there is more involved than just flapping. Readers will learn the science and anatomy responsible for flight.

Lexile Score: ~910L


How Do Birds Fly?

With wings!

art by Nathan Jarvis

A wing has a special shape that helps lift it into the air. It's curved on top and flatter on the bottom. It's called an airfoil.

An airfoil changes the direction the air flows. Air moving over the top of an airfoil follows the curve and flows downward.

How does that help? There is a rule of motion that says every action has an equal and opposite reaction.

If air meets a flat wing, it just keeps going straight.

You may not feel it, but when you sit on a chair, you push down on it. The chair pushes back, and that's what holds you up.

When an airfoil forces air down, the air pushes back, lifting the wing.

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RESOURCES

Structure and Function: Flying High

OBJECTIVES

- Students will learn how wings are designed for flight.
- Students will examine the structure-and-function relationship.
- Students will conduct a simple science experiment to observe the pattern of airflow.

KEY VOCABULARY

- ***airfoil* (p. 13)** the curved shape of a wing that allows it to lift into the air
- ***streamlined* (p. 16)** having a shape that moves easily through air or water

ENGAGE

Conversation Question: Why are birds such unique animals?

Distribute the article and immediately have the children locate the text box at the bottom of page 17 that asks the question, "What's your wingspan?" Read this section aloud, emphasizing how amazing it is that a bald eagle weighing only 15 pounds can have a huge wingspan of 7 feet. Have students work in pairs to measure each other's "wingspan" as directed on page 17. Depending on the ability of your students, they can use standard or metric measurement and convert their answers.

INTRODUCE VOCABULARY

Review compound words with the class by explaining that both of the Key Vocabulary terms consist of two words joined together to make a new word (*air/foil, stream/lined*). Post and discuss the two words and the definitions. Ask volunteers to share compound words that they know. As a post-reading activity, challenge students to identify other compound words located throughout this issue of CLICK magazine.

READ & DISCUSS

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

1. What happens when an airfoil forces air down?
2. How does an airfoil's shape cause air to speed over the top?
3. What happens when a bird flaps its wings downward?
4. How does the author of the article compare the bird's feathers to the slats on a window blind?
5. Why can't you just strap on a pair of wings and fly?

SKILL FOCUS: Structure and Function

INSTRUCT: Elicit from students that the main idea of the article is to provide a detailed description of how a bird's body parts help it to fly through the sky. Present the *Structure and Function: Flying High* graphic organizer and tell students they will be using information from the article to "Show & Tell" how each part of a bird assists it in flight. Have students work in small groups and discuss what they have learned.

ASSESS: Circulate and have mini-conversations with students as they are working. Remedial readers may work with a partner to reread the text. Collect and review students' work to further assess their understanding of the structure/function relationship.

EXTEND

Science Instruct students to revisit page 15 of the article and reread the first paragraph. Give each student a thin strip of paper and have them follow the directions, blowing air across the paper. Guide students to notice how fast-moving air above the paper pulls it up, much like a bird's wing. Challenge them to try to use the vocabulary terms (*airfoil, streamlined*) to discuss this phenomenon.

Flying High

Structure and Function Gather information from the photographs and words in the article to explain how each body part helps a bird to fly.

Body Part	What does it look like? Draw pictures.	What does it do? Write words.
Wings/ Feathers		
Body		
Beak		
Chest Muscles		

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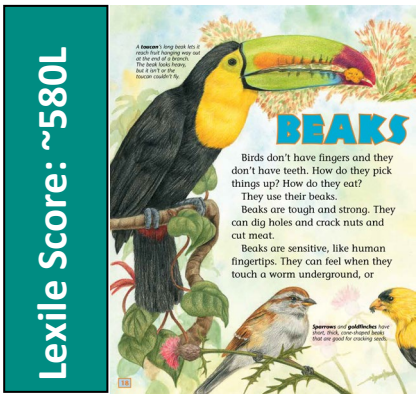
Beaks Eat

pp. 18–21, Expository Nonfiction

Birds don't have fingers or teeth, but they do have useful beaks. Young readers will learn how a bird uses its beak to perform many different functions in the wild.



RESOURCES

Obtain and Classify: Busy Beaks

OBJECTIVES

- Students will learn how a bird's beak has many functions.
- Students will obtain and classify information.
- Students will complete a craft activity.

KEY VOCABULARY

- ***prying* (p. 19)** lifting, moving, or opening something with a tool
- ***snatch* (p. 20)** to take something quickly
- ***tweezers* (p. 20)** a small tool made of two pieces of metal that is used for picking up or plucking out small objects

ENGAGE

Conversation Question: Why are birds such unique animals?

Activate prior knowledge and get students motivated to learn about the topic by having them observe birds in the school yard. Guide them to notice the sounds, colors, flight patterns, and behaviors of the birds they see. Facilitate a group conversation about the sightings. If going outside or viewing from a window is not possible, provide an array of bird books for students to peruse.

INTRODUCE VOCABULARY

Display the following statements and underline the key vocabulary terms. Demonstrate how to infer the meanings of new words by using context clues and background knowledge. Then have partners work together to determine the meaning of each word. Reveal definitions.

1. A screwdriver is helpful in prying open the top of a paint can.
2. Watch the squirrels snatch peanuts from a hand and run away.
3. My mom used tweezers to pull the splinter out of my finger.

READ & DISCUSS

Post and discuss questions prior to reading. Read the article aloud, pausing when answers to the questions are revealed.

1. How do birds use their beaks for eating?
2. How does a bird use its beak to prepare for and care for its babies?
3. Why are beaks compared to human fingertips on page 18?
4. Why do different birds have different beaks?
5. What words (adjectives) could you use to describe a beak?

SKILL FOCUS: Obtain and Classify

INSTRUCT: Guide students to obtain information from the text, captions, and photos in the article. Remind them that the article was written to teach readers that a bird's beak functions in a variety of ways. Introduce the *Obtain and Classify: Busy Beaks* worksheet and instruct students to correctly match the descriptions listed on the right with the bird species listed on the left.

ASSESS: Review the matching activity with the class and discuss. Allow students to do an "art walk" around the classroom to view their classmates' bird drawings.

EXTEND

Arts & Crafts Students will strengthen fine motor skills while using paper, yarn, glue, and scissors to create a bird nest. Distribute a paper plate to each child to use as the base and demonstrate how to keep layering yarn and small strips of paper around the edge to create a nest. As is the case in nature, all kinds of scraps can be used to create the nest. Have egg-shaped templates available for students to trace and cut out eggs for their nests.

Busy Beaks

Obtain and Classify Information Match the description of the bird on the left with the correct bird species on the right. Refer to the article for accuracy.

1. It's the only bird whose bottom bill is longer than the top.
2. Its long beak lets it reach fruit hanging at the end of a branch.
3. It wades in shallow water and uses its long, straight beak to snatch fish.
4. It sticks its long beak into flowers to sip nectar from a blossom.
5. It uses its sharp, hooked top bill to cut up fruit.
6. It uses its pointed beak like tweezers to pluck bugs out of the mud.
7. It has a sharp, hooked beak to tear fish and meat.

A. _____ osprey

B. _____ cockatoo

C. _____ curlew

D. _____ herons

E. _____ skimmer

F. _____ toucan

G. _____ hummingbird

Draw and Write In the box below, draw your favorite bird from the article. Then complete the sentence:

I drew a _____.