



## The Secret Life of Pigeons

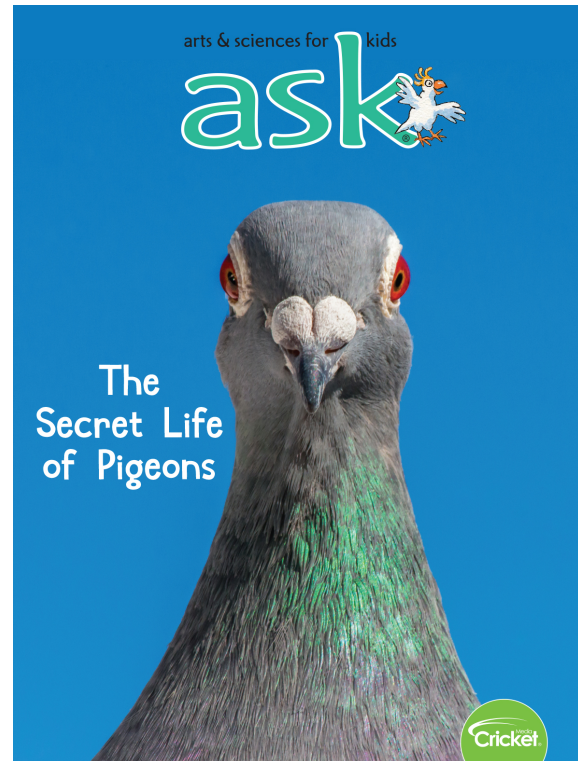
A familiar sight in most cities around the world, pigeons are gentle and social creatures. Students will flock to this issue of ASK and enjoy reading an abundance of information about our feathered friends. Bright, colorful photographs accompany the articles and enhance the text.

### CONVERSATION QUESTION

Why are pigeons such fascinating birds?

### TEACHING OBJECTIVES

- Students will learn about the physical and behavioral traits of pigeons.
- Students will learn about a variety of pigeon species.
- Students will learn how passenger pigeons became extinct.
- Students will study the structure and function of the anatomical features of a pigeon.
- Students will collect and cite evidence from a science-based text.
- Students will examine the cause-and-effect relationship as it pertains to the extinction of a species.
- Students will solve and create mathematical word problems based on information in the text.
- Students will research the theory of evolution and natural selection.
- Students will create shape poetry that communicates scientific information.



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

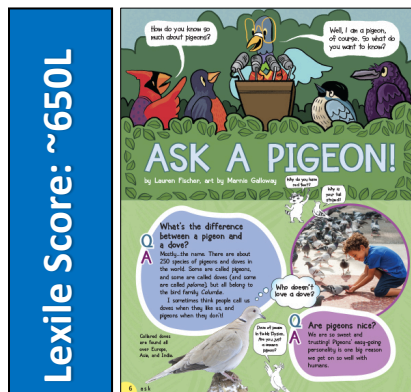
- **Ask a Pigeon**  
Expository Nonfiction, ~650L
- **Pigeons Get Fancy**  
Expository Nonfiction, ~750L
- **Gone But Not Forgotten**  
Expository Nonfiction, ~650L

# Ask® Teacher Guide: January 2020

## Ask a Pigeon

pp. 6–11, Expository Nonfiction

Coooo...cooooo. Students will learn interesting facts about city pigeons. Found all over the world, these friendly birds exhibit distinctive anatomical features, as well as unique behaviors.



## RESOURCES

- Pigeon Power!

## OBJECTIVES

- Students will learn about the physical and behavioral traits of pigeons.
- Students will study the structure and function of the anatomical features of a pigeon.
- Students will solve and create mathematical word problems based on information in the text.

## KEY VOCABULARY

- **anatomy** (p. 10) the branch of science that studies the bodily structure of humans and animals
- **descended** (p. 7) to be a direct blood relative of
- **feral** (p. 7) an animal in a wild state, especially after escape from captivity or domestication
- **squabs** (p. 10) baby pigeons

## ENGAGE

**Conversation Question:** Why are pigeons such fascinating birds?

Distribute the article and direct students to notice that instead of subtitles, the text uses a question/answer format to divide segments of information. Is this an effective way to relay scientific information? Why or why not? Would this be a good format for other disciplines?

## INTRODUCE VOCABULARY

Introduce this as a *Jeopardy!*-style learning activity. Provide the class with only the definitions of the key vocabulary terms. Have them read and discuss. Inform students that they will revisit these definitions after reading and pose the proper question using words from the article. (Ex: What is anatomy? What is feral?) Have them create six more answers needing questions, for a total of ten, and share with other classes as a post-reading activity.

## READ & DISCUSS

Pose the following questions to students to facilitate meaningful discussion following the reading of the article.

- What is the difference between a pigeon and a dove?
- Why did people build houses for pigeons to live in?
- How do homing pigeons find their way home?
- The article states (p. 9) that the only place in the world without pigeons is Antarctica. Why is this so?
- What animals prey on pigeons?

## CONCEPT/SKILL FOCUS: Structure and Function

**INSTRUCT:** Elicit from students that the main idea of the article is to provide a detailed description of the physical and behavioral characteristics of pigeons. Present the graphic organizer, *Pigeon Power!* and tell students that they will be using information from the article to record the special function of each of the anatomical features listed.

**ASSESS:** Circulate and have mini-conversations with students as they are working. Remind students to include specific details. Collect and review their work to further assess understanding.

## EXTEND

**Mathematics** On page 9, the article states, “Top racing pigeons can fly as fast as a car on the highway, around 60 miles per hour.” How many miles would a racing pigeon travel in two hours? Three and a half hours? Four hours? Instruct students to use the RDW (Read-Draw-Write) process to solve the problems and express their answers. Have them use other mathematical data from the article to create their own word problems for classmates to solve.

# Pigeon Power!

*Refer to the article, "Ask a Pigeon," to study how each body part is a special asset to the pigeon's movement and/or survival.*

<b>Structure</b> (Body Part)	<b>Function</b> (How does it help the pigeon survive?)
<b>bobbing head</b>	
<b>sensitive nose</b>	
<b>short, strong wings</b>	
<b>magnetite in beak</b>	
<b>crop</b> (small pouch in neck)	

*Unscramble the pigeon-related words below. Look back to the article if you need clues!*

soedv: \_\_\_\_\_

iberedsd: \_\_\_\_\_

colkf: \_\_\_\_\_

mersnesge: \_\_\_\_\_

## Pigeons Get Fancy

pp. 14–17, Expository Nonfiction

Footloose and fancy free! Students will enjoy beautiful photographs and scientific text that explains why such a large variety of pigeons exist.



## RESOURCES

- Our Fancy Feathered Friends

## OBJECTIVES

- Students will learn about a variety of pigeon species.
- Students will collect and cite evidence from a science-based text.
- Students will research the theory of evolution and natural selection.

## KEY VOCABULARY

- **evolved** (p. 17) developed gradually
- **inherit** (p. 17) receive a quality, characteristic, or predisposition genetically from one's parents
- **natural selection** (p. 17) the process whereby organisms better adapted to their environment tend to survive and produce more offspring
- **offspring** (p. 17) the reproductive processes of humans or animals; babies

## ENGAGE

**Conversation Question:** Why are pigeons such fascinating birds?

Lead the class in a discussion that examines how different breeds of dogs can have very different appearances. (Ex: Terriers, Labradors, Poodles, etc.) Further discuss “designer dogs”; dogs purposely bred with certain physical characteristics or behavioral traits. Pose the question: “Do the same variations occur across other species?” Ask the students to consider birds, and to provide examples and details.

## INTRODUCE VOCABULARY

Post and discuss the key terms. Be sure that students understand the definitions before reading the article. As a post-reading activity, have students use the four vocabulary words to summarize the article in paragraph form.

## READ & DISCUSS

Read the article aloud, pausing to study the graphic features. Have students reread the article in small groups and answer the questions below.

- What is a “fancy pigeon”?
- How did Earth get so many species of pigeons?
- What did Charles Darwin study?
- Explain the idea of evolution by natural selection and how it pertains to the pigeon population.

## CONCEPT/SKILL FOCUS: Collecting Evidence

**INSTRUCT:** This article presents the reader with an abundance of detailed information regarding a variety of pigeon species. Tell students that they will be collecting and citing evidence on the graphic organizer, *Our Fancy Feathered Friends*, focusing on the main points of the article. They will need to consult the text to gather accurate information. Allow students to work with a partner if assistance is needed.

**ASSESS:** The objective of this lesson is to help students practice the skill of collecting and citing evidence from a science-based text. Create dialogue as the students are working and then collect organizers to evaluate individual understanding.

## EXTEND

**Biology** Take this opportunity to further study Darwin’s theory of evolution and natural selection. Review how this theory pertains to pigeons and acknowledge that there are many other examples in nature that support this principle. Have students research this topic and write a mini-report (on a chosen animal) that validates Darwin’s theory. Bind reports together into a class book to be kept in your Science center.

## Our Fancy Feathered Friends

Collect information from the text, "Pigeons Get Fancy," to decide which word is missing from the sentence. Write the word that completes the sentence on the line and cite where the evidence is located in the article by listing the page number in the parentheses.

<b>Fantail pigeons</b>	<b>Tumbler pigeons</b>	<b>King pigeons</b>	<b>Polish helmet pigeons</b>
<b>Racing pigeons</b>	<b>Owl-faced pigeons</b>	<b>Modena pigeons</b>	<b>English pouters</b>

- \_\_\_\_\_ are bred for speed and skill at finding their way home. (p. \_\_\_\_ )
- \_\_\_\_\_ have smooth black heads. (p. \_\_\_\_ )
- \_\_\_\_\_ are extra big and raised for their meat. (p. \_\_\_\_ )
- \_\_\_\_\_ have very short beaks. (p. \_\_\_\_ )
- \_\_\_\_\_ stand like soldiers. (p. \_\_\_\_ )
- \_\_\_\_\_ have extra tail feathers that stick out like a fan. (p. \_\_\_\_ )
- \_\_\_\_\_ do somersaults when they fly. (p. \_\_\_\_ )
- \_\_\_\_\_ have a big chest, a crop, and feathery feet. (p. \_\_\_\_ )

**\*\*Choose one of the pigeons from the article to draw on the back of your paper.**

**Have a classmate name the species of "fancy pigeon" that you drew. Be sure that you have represented their identifying features in your illustration.**



## Gone But Not Forgotten

pp. 26–28, Expository Nonfiction

Here today, but gone tomorrow.

Unfortunately, we have seen a rapid extinction of many animals, the passenger pigeon being a leading example.



## RESOURCES

- Never Again

## OBJECTIVES

- Students will learn how passenger pigeons became extinct.
- Students will examine the cause-and-effect relationship as it pertains to the extinction of a species.
- Students will create shape poetry that communicates scientific information.

## KEY VOCABULARY

- **adapt** (p. 28) to become adjusted to new conditions
- **captive** (p. 28) confined
- **catastrophe** (p. 28) an event causing great and often sudden damage; disaster
- **conserving** (p. 28) protecting

## ENGAGE

**Conversation Question:** Why are pigeons such fascinating birds?

Activate prior knowledge by drawing a word web on the board with the word “extinction” in the center. Have students contribute ideas and facts to the web. Introduce the article, “Gone But Not Forgotten,” and ask for volunteers to read aloud as their classmates track the sentences and underline important information regarding the topic.

## INTRODUCE VOCABULARY

Post key words and definitions on the board. Have students highlight the sentences where these words appear in the article. Upon completion of reading, instruct the class to rewrite the sentences substituting a valid synonym for each vocabulary term.

## READ & DISCUSS

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

- Explain what it was like when a flock of passenger pigeons passed overhead.
- When and where did the last passenger pigeon die?
- Why were passenger pigeons easy to hunt?
- What is the Endangered Species Act?
- How many animals are currently on the North American endangered species list? What conservation efforts are being made?

## CONCEPT/SKILL FOCUS: Cause and Effect

**INSTRUCT:** Elicit from the class that the main idea of this article is to teach readers how extinction is the result of a combination of factors that culminate in the endangerment, and ultimately the death of a species. Introduce the graphic organizer, *Never Again*, and tell students that they will be recording the cause-and-effect relationship that is detailed in the text.

**ASSESS:** Circulate as the children are working and provide clarification if necessary. Evaluate the students’ work on the organizer.

## EXTEND

**Language Arts** Students should use information from this article, as well as other articles in this issue of ASK, to create shape poems. Explain to students that shape poetry adds meaning to their words because it takes the form of the topic they are writing about. (In this case, pigeons.) First, have them write a poem about pigeons, using the article as a reference for facts. They will then sketch the shape of a pigeon and write the words of their poem around their picture, outlining the bird. Share completed images and poetry.

# Never Again

Use information from the article, "Gone But Not Forgotten," to record the events that contributed to the extinction of the passenger pigeon.

