

BOOK STATS

Grade Level Equivalent: 3–4

Ages: 7+

Lexile Measure: AD870L

Pages: 80

Genre: Science Nonfiction

Subject/Theme: Animal Adaptation, Survival, Habitats

Common Core Standards	Reading	Writing	Listening & Speaking	Language
Grade 2	RI.2.1, RI.2.2, RI.2.4, RI.2.5, RI.2.7	W.2.2	SL.2.1, SL.2.2	L.2.4
Grade 3	RI.3.1, RI.3.2, RI.3.4, RI.3.5, RI.3.6	W.3.2	SL.3.1, SL.3.2	L.3.4

OVERVIEW

Book Summary

Big, beautiful images and amazing facts highlight this thorough, yet compelling, coverage of the world of penguins. All 17 types of penguins are introduced with information about their height, breeding area, population, diet, nests, habitats, and special features.

Interspersed throughout the book are topics that pertain to all penguins: the places they call home, how they travel on land and in the sea, their warm waterproof feathers, their predators and prey, plus how they breed, nest, and care for penguin babies. The book concludes with the extraordinary journey made by emperor penguins to breed in one of the harshest climates on Earth. The last pages focus on polar photography and the importance of protecting endangered penguins that are in danger from human threats.

The photographs and text work together to motivate young readers and enhance their understanding of these wonderful birds that have captured the imagination of the world. A digital companion book, *Amazing Antarctica*, can be downloaded for free with more information about the icy continent and its inhabitants.

Teaching the Book

Students will meet the world’s most popular bird—up close and personal—in this new-generation reference book. *Discover More: Penguins* introduces penguins to confident young readers through eye-catching photographs, fascinating facts, and high-impact design. The book provides an opportunity for class discussions about animal adaptation, main idea and details, and science content-area vocabulary. Activities will engage students in creating penguin fact sheets, penguin graphs, and penguin presentations based on research and creative projects.

Theme Focus: Animal Adaptation

Comprehension Focus: Main Idea and Details

Language Focus: Science Content-Area Vocabulary

ABOUT THE AUTHOR

Penny Arlon is an author who writes children’s non-fiction, taking inspiration from her own children. Her books range from pre-school to family reference, and include the Art Attack books, based on the award-winning CITV children’s television programme, and all 14 titles in Dorling Kindersley’s Eye Know series.

Get Ready to Read

Pre-Reading Activities

Penguin True or False Engage students' interest and prior knowledge with a true or false game about penguin facts. Read each of the following statements and ask students to write them down and mark them with a T for True or an F for False.

1. Penguins are birds.
2. Penguins eat seals.
3. Penguins live on every continent.
4. Penguin babies hatch from eggs.
5. Penguins fly south for the winter.

Tell students that they will find out whether each statement is true or false as they read the book. Ask them to check their answers and correct them, if necessary.

Preview and Predict Spend time with students on pages 2–3, going over the explanation of how the book works. Point out the different types of text and photographs in the book and the kinds of information they provide.

STORIA ENRICHMENTS

This Storia e-book has the following enrichments to enhance students' comprehension of the book.

- Video (3)
- Touch the Page
- Multiple Choice Pictures
- Multiple Choice Text
- Word Match
- Scratch & See
- Jigsaw Puzzle
- Sequencing
- Word Bird



BIG QUESTION

Critical Thinking Ask students to think about this question as they read and be ready to answer it when they've finished the book. Write the question on chart paper or have students write it in their reading journals.

Why should we protect penguins?

Vocabulary

Science Content-Area Vocabulary The book includes many content area words related to animal adaptation as it applies to penguins and their habitats. Encourage students to look for clues in the text and the illustrations to figure out the meaning of unfamiliar words and then have them check the glossary or a dictionary definition.

Use **Resource #1: Vocabulary Cards** on page 7 and distribute copies to students.

camouflage, p. 16

adapt, p. 20

predator, p. 24

prey, p. 24

habitat, p. 28

extinct, p. 44

breed, p. 46

bonding, p. 51



As You Read

Reading the Book

Modeled Reading Read aloud pages 6–7, modeling for students how to approach the different chunks of text on the page. Draw their attention to the call-out lines that show the part of a photo the text is referencing. Also help them distinguish between text that is important and text that they might skim, such as the facts below each kind of penguin.

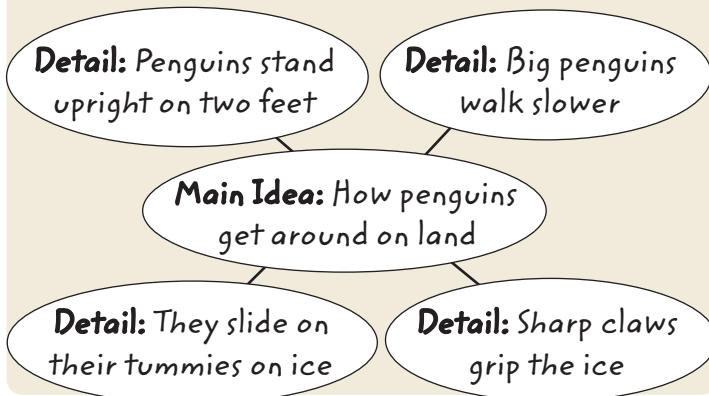
Paired Reading Encourage students to read the book independently but to share questions and reactions with a partner. Suggest that partners confer with each other after every four to six pages.

Comprehension Focus

Identify Main Idea and Details Explain that the book is organized into important ideas called main ideas. The main ideas are supported by smaller ideas called details. Explain that the details tell more about the main ideas and support understanding of how penguins live in their environments.

Display the spread on pages 14–15 titled “Penguins on land.” Read the text on both pages aloud. Then model how to identify the main idea and details in the text, using a graphic organizer like the one below.

Model: First, I’ll ask: what is the most important idea? Is it that penguins look very funny when they are on land? No, that’s not important enough and doesn’t include all the information on the page. The important big idea that everything is about is: how penguins get around on land. I’ll write that in the center circle. What details support this main idea? I’ll write those around the main idea.



Use **Resource #2: Identify Main Idea and Details** for students to practice identifying main ideas and details. Pass out copies of the page and guide students to reread pages 20–21 and pages 52–53 and fill out the graphic organizers to identify main ideas and details.

After You Read

Questions to Discuss

Lead students in a discussion of these focus story elements.

1. Animal Adaptation Describe how penguins’ feathers have adapted to help them survive. (*Sample answers: The feathers are packed closely together to trap heat. The feathers are oiled to make them waterproof. New feathers grow in each year.*)

2. Main Idea and Details What is a detail that tells more about this main idea: Penguins lay eggs that hatch into fluffy chicks? (*Sample answers: Parents sit on the eggs for 30 to 60 days; most penguins lay two eggs, but only one will hatch; penguin eggs are thicker and tougher than those of other birds.*)

WORDS TO KNOW

Science Content-Area Vocabulary

Discuss each vocabulary word in relation to the science theme of animal adaptation. Use the following questions as discussion prompts.

1. How does a penguin’s coloring help **camouflage** it when swimming?
2. How have penguins **adapted** to cold environments?
3. How do penguins avoid being killed by their **predators**?
4. Where do penguins find most of their prey?
5. What penguin **habitat** has the harshest climate on earth?
6. Why do you think the giant penguin became **extinct**?
7. Where do penguins go to **breed**?
8. How does **bonding** help a penguin chick survive?

3. Science Content-Area Vocabulary Use the text and the photograph on pages 46–47 to figure out the meaning of the word **colony** (*large group of animals that live together*).

Questions to Share

Encourage students to share their responses with a partner or small group.

1. Text to Self What is the most amazing fact in the book? How does the book change your ideas about penguins?

2. Text to World How can the actions of humans harm penguins?

3. Text to Text Do you like the way the text and photographs are arranged in this book? Do you like reading it more or less than other books that have the text all together in one place? How do the photographs help you understand the information about penguins?

Content Area Connections

Math Penguin Graph On pages 7–11, the book shows the relative heights of the 17 different kinds of penguins. Guide students to create a bar graph that shows the heights of five different penguins that they select. Draw a sample graph with inches on the vertical axis and penguin names on the horizontal axis.

Social Studies North Versus South Extend the study of the earth’s hemispheres and poles on pages 7 and 13. Encourage students to research the differences between the northern and southern hemispheres and differences between the North and South Poles. Suggest that they report on their findings to the class using Google Earth on the white board.

Arts Animal Photography Pages 70–73 feature an interview with polar photographer Cherry Alexander plus her award-winning photo of penguins. Guide students to the book prompt on wildlife photography. Challenge them to snap photos of animals in their community and share a slideshow with the class.

Language Arts Penguin Films Several outstanding films have been made about penguins, ranging from the animated *Happy Feet* to the award-winning documentary

Extension Activities

Reading/Writing Connection

Penguin Adaptation Assign students to write an explanatory paragraph about penguins that live on and around Antarctica and how they have adapted to their cold environment. Instruct students to write a strong introductory sentence that presents the main idea. Then guide them to find four to five details that support their main idea. These might include details about how penguins’ bodies adapt to cold weather or how their behaviors help them survive in Antarctica.

Don't forget the



BIG QUESTION

Critical Thinking Give each student an opportunity to answer the big question. Encourage students to support their answers with details and evidence from the text. Tell them there is no one right answer.

Why should we protect penguins?

March of the Penguins. Consider showing a penguin film in class or suggest that interested students watch one at home. After viewing, discuss with students how the film presented penguins differently compared to the book and what they learned from both.

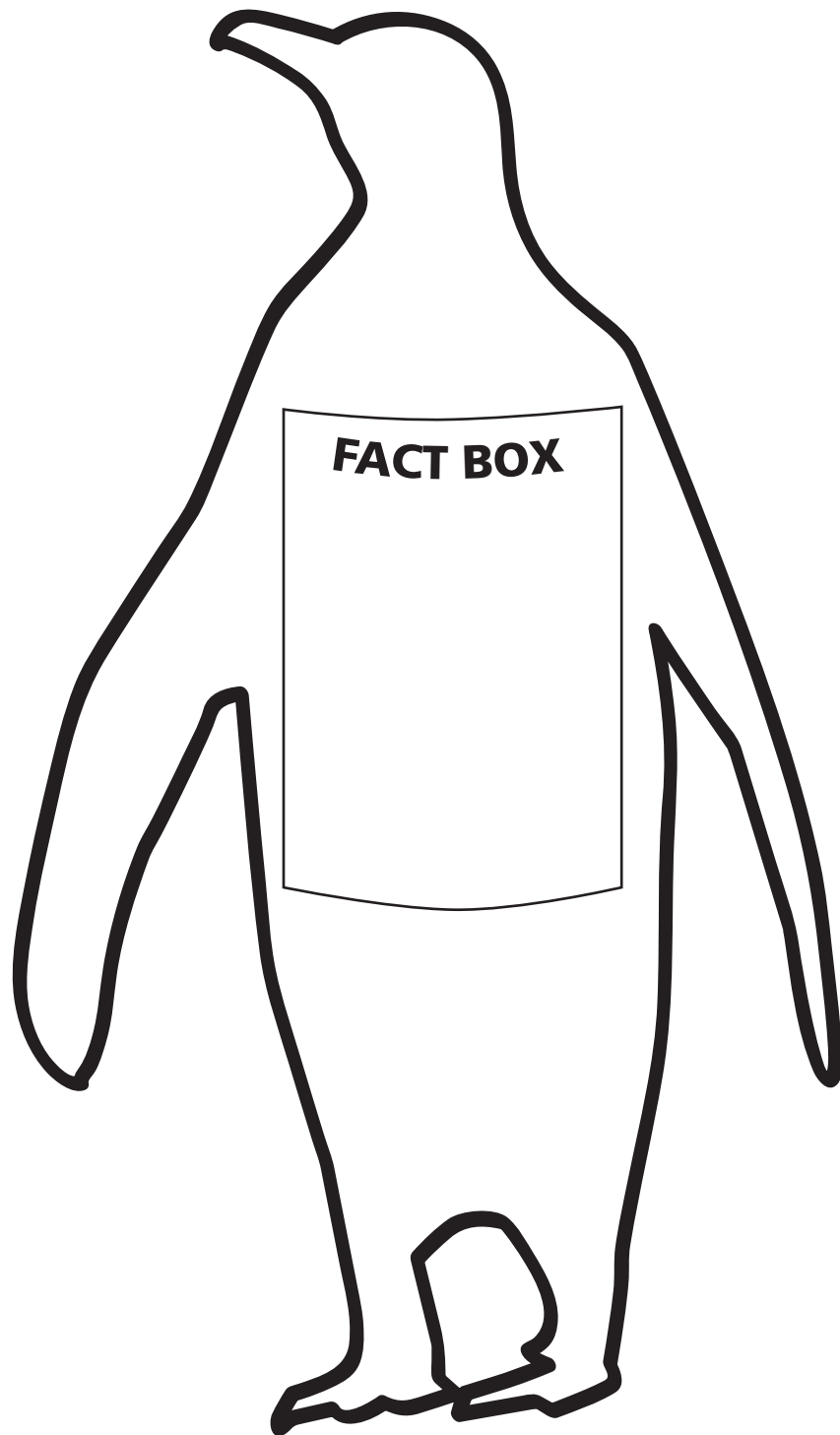
BIG ACTIVITY

A Penguin Field Guide Tell students to create a page for a field guide about penguins. Guide students to choose their favorite penguin to write about. Make copies of the printable, **Big Activity: Penguin Field Guide** on page 5 and distribute to students. Explain how to add specific markings and other features to their penguin outline. Guide students to add the penguin’s features to the five call-outs and write three facts in the Fact Box.

Name: _____ Date: _____

BIG ACTIVITY: Penguin Field Guide

Create a field guide page for your favorite penguin. Draw in markings and features on the penguin body outline. Add five call-out descriptions with lines to the picture. Then write three facts about the penguin in the Fact Box.



READ MORE AND LEARN MORE

Use these books and other resources to expand your students' study of the book or theme.

Genre Connections



National Geographic Reader: Deadliest Animals Level 3

Melissa Stewart

Ages: 6–8 **Grades:** 1–3 **Pages:** 48

The animals in these pages are cool to look at, but you wouldn't want to meet them in person. Some use fangs, claws, or venom to take down their dinner; others use deadly defenses to stop predators in their tracks. What's the deadliest animal of all? Discover the surprising answer in this bright science reader, full of astonishing facts and up-close photos of the most fatal species on the planet. **Available as a Storia e-book**



Smart Words Science Reader #11: Weather and Climate

Ages: 6–9 **Grades:** 1–3

Lexile Level: 870L **Pages:** 32

Guided Reading Level: R

Why are some places warm all year, while others are cold? What causes the seasons to change? Get answers to these questions and more in this informative book that explains in simple terms how different kinds of weather form—from clouds to winds to storms—and how they are predicted by meteorologists. This vocabulary-boosting reader highlights 20 “smart words” that are essential for grasping science concepts. **Available as a Storia e-book**



Who Would Win?: Killer Whale vs. Great White Shark

Jerry Pallotta

Ages: 6–9 **Grades:** 1–3

Lexile Level: 620L **Pages:** 32

The killer whale has a huge jaw with about fifty teeth, but if the killer whale loses a tooth, it will never grow back. The great white shark, on the other hand, has several rows of razor-sharp teeth, and it can grow back more than 3,000 teeth in its lifetime!. But teeth aren't everything . . . as readers will soon realize. This easy-to-read book lets kids guess which ocean predator really rules under the waves!

Available as a Storia e-book



Nic Bishop Butterflies and Moths

Nic Bishop

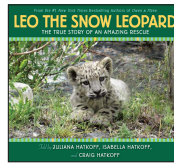
Ages: 7–11 **Grades:** 2–5

Lexile Level: 890L **Pages:** 40

The award-winning author and photographer introduce young readers to the beauty and diversity of these amazing insects, from the shockingly bright blue morpho butterfly to the nearly transparent glasswing moth. The simple, engaging text presents both basic information and fun, quirky facts about the insects' appearances, habits, and life cycles.

Available as a Storia e-book

Theme Connections



Leo the Snow Leopard

Craig Hatkoff

Ages: 7–9 **Grades:** 2–4

Lexile Level: 1050L **Pages:** 40

In 2006, a shepherd in Pakistan came upon a beautiful baby snow leopard that had been separated from its mother. The shepherd brought the cub home and cared for the tiny animal. When the little leopard, now called Leo, grew big, it was sent all the way to the Bronx Zoo in New York City. This exciting tale is filled with photographs of Leo, as well as lots of fascinating facts about snow leopards. **Available as a Storia e-book**



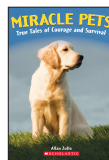
Ready Freddy! #19: The Penguin Problem

Abby Klein

Ages: 7–10 **Grades:** 2–4

Lexile Level: 540L **Pages:** 96

Freddy's first-grade class is learning all about penguins—including the fact that some species are endangered. When Freddy suggests a penny drive to help save the penguins, everyone loves the idea. But now Freddy can't find his own penny jar! Will he still be able to save the penguins? How? **Available as a Storia e-book**



Miracle Pets

Alan Zullo

Ages: 8–12 **Grades:** 3–6

Lexile Level: 1050L **Pages:** 128

Guided Reading Level: S

Ever heard about the dachshund that was snatched up by an eagle, but fought back in midair? How about the two pigs that escaped from a sausage factory, leaped into an icy river, and swam to safety? Inside this riveting book, readers will find these and more incredible true tales of brave animals who overcame life-threatening situations.

Available as a Storia e-book

Go to <http://teacher.scholastic.com/ereading-resources/> to find PDF versions of the Storia teacher guides and links to purchase the related books.

camouflage

habitat

adapt

extinct

predator

prey

breed

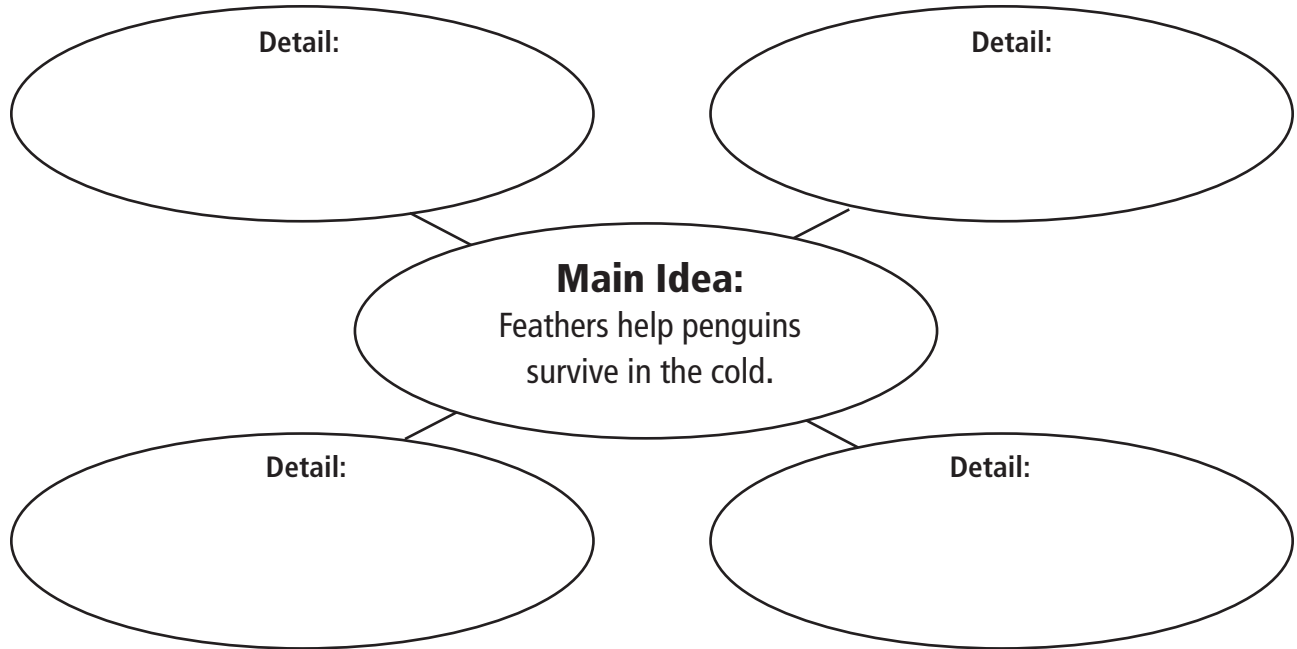
bonding

Name: _____ Date: _____

Discover More: Penguins

Fill in the main idea or details in each graphic organizer.

1. Reread "Penguin Feathers" on pages 20–21. Fill in the details that support the main idea.



2. Reread "Growing Chicks" on pages 52–53. Fill in the main idea and four supporting details.

