



A TEACHER'S GUIDE TO THE BOOKS OF KATHERINE ROY

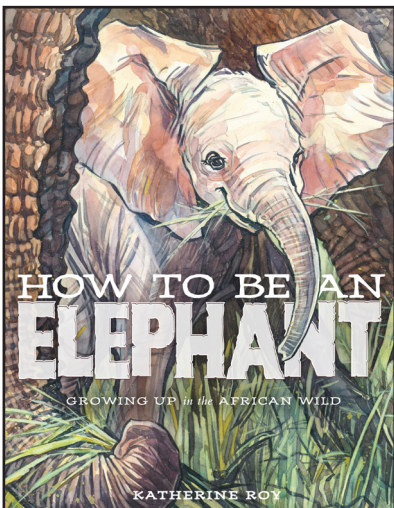
FOR USE WITH COMMON CORE STATE STANDARDS



KATHERINE ROY is the award-winning author and illustrator of *Neighborhood Sharks: Hunting with the Great Whites of California's Farallon Islands* and *How to Be an Elephant: Growing Up in the African Wild*. She is also the illustrator for the Expeditioners series by S. S. Taylor and of *Buried Beneath Us* by Anthony Aveni. She loves science, history, and big adventures, and is endlessly fascinated by the way things live. A native of the San Francisco Bay Area, she currently lives with her husband and young son in Oregon, where she's still learning how to be a human. You can visit her website to learn more about her work, her research, and African elephants.

ABOUT THE GUIDE

This Common Core teaching guide presents a variety of Common Core activities to engage your students in meeting standards in Reading Informational Text and Writing. They will have opportunities to develop skills in identifying main ideas and supporting details, to learn new science concepts and vocabulary, to appreciate the interaction of text and illustration and the role of each in an informational text, and to argue convincingly in writing about a point of view once they have established it.



ABOUT THE BOOK

The savanna is not an easy place to live, even for African elephants, the largest land animals on earth. If it's a challenge for these 7,000-pound giants, what's it like for their newborn babies?

An infant elephant has precious little time to learn the incredible array of skills that are necessary to keep up, from projecting her voice across a 10-octave range to using the 100,000 muscles in her trunk to stay hydrated. But this giant-to-be has the perfect classroom—a family herd made up of her mother, sisters, cousins, and aunts. With their help and protection, she'll learn how to survive, how to thrive, and how to be an elephant.

Ages 7–11 • 9781626721784

Award-winning author-illustrator Katherine Roy's *How to Be an Elephant* delves into the intricate family dynamics at play in a typical African herd. Drawing upon the latest scientific research and Roy's own expedition to Kenya, and brimming with lush watercolor illustrations and detailed diagrams, this book vividly portrays the life and development of an elephant from an uncertain newborn into a majestic adult. As informative as it is beautiful, Roy's unique portrait of an elephant's life will captivate young explorers and animal lovers alike.

PRE-READING ACTIVITIES

❖ Before reading the full text of *How to Be an Elephant* to your students, begin with a more general introduction to the book. Ask: *What age/life stage do you think the elephant pictured on the front cover is?* Next introduce the full dust jacket and verify what students have already determined—that the elephant on the front cover is a baby. Ask: *As we look at the full jacket illustration, what do you see that allows you to infer the age of the elephant on the front?* Finally, spend time discussing the large illustrations in the book. Gather as much information and meaning as possible without reading the accompanying text. List all details students notice and their interpretation of these details.

❖ Build student background knowledge of the African savanna before introducing *How to Be an Elephant*. You might want to share one of the following books:

- *African Savanna* (Community Connections: Getting to Know Our Planet series) by Josh Gregory
- *African Savanna* by Donald M. Silver

or information from these website links:

- “World Biomes: Savanna.” *Kids Do Ecology*. kids.nceas.ucsb.edu/biomes/savanna.html
- “Savanna Biome.” BioExpedition. bioexpedition.com/savanna-biome/

If you are able to access YouTube in your school, an excellent short film is:

- “Life on the African Savanna.” *You Tube*. youtube.com/watch?v=9bQNRVyI4I0

DISCUSSION QUESTIONS

1. How many months does it take for a baby elephant to grow before he/she is born?
2. How are African elephant families different from most other species?
3. What physical adaptations make it easy for a baby elephant to walk immediately after birth and for juveniles and adults to walk for many miles?
4. How are elephant bodies adapted for an extraordinary sense of smell?
5. How do elephants communicate with other elephants—near and far?
6. How does an elephant control its body temperature?
7. What do elephants eat at each life stage?
8. In what ways do elephants contribute to the African savanna ecosystem?

COMMON CORE ACTIVITIES

Learning to Be an Elephant

Grades Two, Three, Four, and Five: After reading and discussing *How to Be an Elephant*, ask students to recall some of the important sections of the book. Under each section, invite them to list as many details as they can remember. Then revisit the text of the book to flesh out the details in the eleven sections. Distribute a copy of the text of each section to groups of two or three students. Ask them to identify the main topic (Grade Two) and key details of the section explaining how the key details support the topic of the section as well as the main idea of the book (Grades Three, Four, and Five). Ask each group to add to the list of details you originally brainstormed and then, as a group, summarize the text (Grades Four and Five).

CCSS.RI.2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.

CCSS.RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.

CCSS.RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.

CCSS.RI.5.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

Elephant Adaptations

Grades Two, Three, Four, and Five: Introduce or review the concept of adaptation with your students before reading *How to Be an Elephant* aloud. Ask them, as they listen, to think about how elephant bodies and behavior reveal adaptations to the African savanna environment. Next assign each student to one of the following six groups: Walking Adaptations, Smelling Adaptations, Trunk Adaptations, Communication Adaptations, Eating Adaptations. Ask each group to explain how elephants exhibit adapted bodies and/or behavior in their assigned category, making it possible for them to thrive in their ecosystem.

CCSS.RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

CCSS.RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

CCSS.RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

CCSS.RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

Elephant Vocabulary

Grades Two, Three, Four, and Five: Instruct students to use a classroom dictionary or an online children's dictionary such as the *Merriam-Webster Learner's Dictionary* learnersdictionary.com/ to define all of the following words found in the text of *How to Be an Elephant* with which they are not familiar:

herd	repertoire	fission
species	octave	fusion
matriarch	generalist	dynamic
survival	efficiency	uproot
predator	cuisine	dramatically
aroma	radiate	dynamic
nasal	parasite	agent
receptor	evaporative	gut
olfactory	convective	germination
perceptive	boisterous	dung
appendage	formidable	fractured
precision	frequency	patchwork
sinus	vibration	spar
amplification	drought	
resonance	whereabouts	

CCSS.RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

CCSS.RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.

CCSS.RI.4.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 4 topic or subject area.

CCSS.RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.

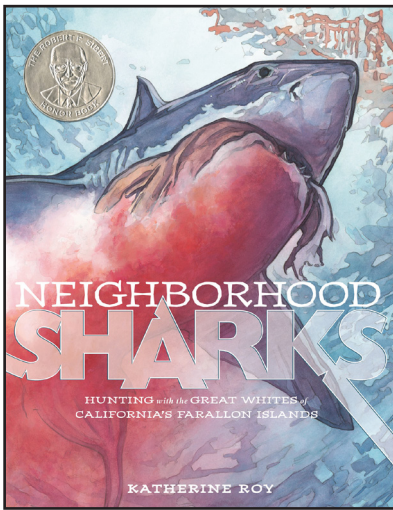
Picturing Elephants

Grades Two, Three, and Four: Ask students to revisit the illustrations in the text if you examined them as a pre-reading activity or to study them first before reading *How to Be an Elephant* aloud. Invite them to reflect on the information presented in the paintings and the diagrams alone, without the help of words. Once students have listed all of the information they can gather from illustrations, return to the text and ask them to discuss how the text and illustrations work together to transmit information in a way neither can do alone.

CCSS.RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

CCSS.RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g. where, when, why, and how key events occur).

CCSS.RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.



Ages 7–11 • 9781596438743

ABOUT THE BOOK

Up close with the ocean's most fearsome and famous predator and the scientists who study them—just twenty-six miles from the Golden Gate Bridge!

A few miles from San Francisco lives a population of the ocean's largest and most famous predators. Each fall, while the city's inhabitants dine on steaks, salads, and sandwiches, the great white sharks return to California's Farallon Islands to dine on their favorite meal: the seals that live on the island's rocky coasts. Massive, fast, and perfectly adapted to hunting after 11 million years of evolution, the great whites are among the planet's most fearsome, fascinating, and least understood animals.

In the fall of 2012, Katherine Roy visited the Farallons with the scientists who study the islands' shark population. She witnessed seal attacks, observed sharks being tagged in the wild, and got an up close look at the dramatic Farallons—a wildlife refuge that is strictly off-limits to all but the scientists who work there. *Neighborhood Sharks* is an intimate portrait of the life cycle, biology, and habitat of the great white shark, based on the latest research and an up-close visit with these amazing animals.

PRE-READING ACTIVITIES

- ❖ The illustrations in *Neighborhood Sharks* by author/illustrator Katherine Roy are a rich source of information for students even before they have read or heard any of the text. Before reading, take a picture walk with your students, beginning with the full cover/dust jacket illustration, which will allow them to identify the topic of the book. Next proceed to the many full page, double-page, and diagram illustrations in the book. Ask students to list each detail they see in the paintings and to deduce information from each painting about great white sharks. List these details for all students to see.
- ❖ Prior to sharing the text of *Neighborhood Sharks*, ask students to list things they know, or think they may know, about great white sharks. Wherever possible, ask students to identify the source of their information (often their information will have come from the media, though it may often be inaccurate). List these “facts” without comment. When the list is complete, return to circle those items that students find suspect. Then invite students to listen for the proof, or disproving, of these “facts” as you finally read the book aloud.

DISCUSSION QUESTIONS

1. Where are the Farallon Islands located?
2. What draws the great white sharks to the Farallon Islands?
3. How is the body of the great white shark adapted to successfully hunt?
4. How does a great white shark function as a warm-blooded fish?
5. What is special about a great white shark's vision?
6. What are the many special features of great white teeth?
7. How do humans study great white sharks?

COMMON CORE ACTIVITIES

An Argument for Protection

Grades Two, Three, Four, and Five: Author/Illustrator Katherine Roy makes a strong argument for protecting the “apex predator,” the great white shark. Reread the final pages of *Neighborhood Sharks* aloud with students, asking them to listen for facts about the food chain and the ecosystem off the coast of central California. Then ask students to answer the following questions:

- What does Katherine Roy mean when she refers to “Farallon Soup” in the last titled section of the book?
- What is the meaning of the term “apex predator?”
- Describe the food chain Katherine Roy illustrates in the “Farallon Soup” section of the book.
- How do both great whites and pinnipeds keep the ecosystem fit?
- What role does the relatively small number of great whites, the large migration range, and the long gestation (pregnancy) of the great white shark play in the vulnerability of this shark?
- Explain how Katherine Roy uses all of this evidence to lead to her closing argument that “The ocean is an ecosystem, and understanding it and keeping it healthy is vital for both the sharks and for us.”

CCSS.RI.2.8 Describe how reasons support specific points the author makes in a text.

CCSS.RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).

CCSS.RI.4.8 Explain how an author uses reasons and evidence to support particular points in a text.

CCSS.RI.5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).

A Bad Rap

Grades Two, Three, Four, and Five: Great white sharks are among the most feared creatures in the sea, often the focus of media attention and negatively characterized in the *Jaws* movie franchise. However, author/illustrator Katherine Roy works hard to provide students with facts rather than myths and to clearly show the place of the great white in the Farallon Islands ecosystem. After reading and discussing *Neighborhood Sharks* with your students, invite them to participate in a shared research and writing project. Consider sharing the following sources with students, as well as others recommended by your school librarian, inviting students to conduct research in small groups:

- “Great White Shark.” *Animal Fact Guide*. animalfactguide.com/animal-facts/great-white-shark/
- *The Great White Shark Scientist* (Scientists in the Field series) by Sy Montgomery and Keith Ellenbogen
- *Great White Sharks* (Animal Predator series) by Sandra Markle
- “10 Facts about Great White Sharks.” *National Geographic Kids*. natgeokids.com/uk/discover/animals/sea-life/great-white-sharks/

CCSS.W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).

CCSS.W.3.7 Conduct short research projects that build knowledge about a topic.

CCSS.W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.

CCSS.W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

The Truth about Great Whites

Grades Two, Three, Four, and Five: As students research great white sharks in groups during the “A Bad Rap” activity, invite them to record their findings in the form of brief notes under one of the following categories:

- Physical adaptations of great white sharks
- Behavioral adaptations of great white sharks
- How great white sharks play a role in the ocean ecosystem
- How scientists learn more about great whites

Then invite students, either individually or in small groups, to write an essay about the adaptive features and behaviors of great white sharks and the reasons they should be protected and studied. Ask Grade Four and Five students to provide a list of sources.

CCSS.W.2.8 Recall information from experiences or gather information from provided sources to answer a question.

CCSS.W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

CCSS.W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

CCSS.W.5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.

JOINT COMMON CORE ACTIVITIES

African Elephants and Great White Sharks: Compare and Contrast

Grades Two, Three, Four, and Five: Read aloud and discuss both *How to Be an Elephant* and *Neighborhood Sharks* with your students. Then initiate a discussion of the similarities and differences between the two animals. Consider the topics of: physical adaptations, behavioral adaptations, sensory advantages (vision or smell), and biome advantages. Record student responses and revisit the texts for additional points of intersection and divergence. Once students have a long list of these points, invite them to write a paragraph (Grades Two and Three) or short essay (Grades Four and Five) incorporating these points and adding any additional points of their own. Invite Grade Five students to consult one or more additional sources for each animal in order to further enhance their essays.

CCSS.RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.

CCSS.RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.

CCSS.RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

CCSS.RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

I Prefer . . .

Grades Two, Three, Four, and Five: After reading both *How to Be an Elephant* and *Neighborhood Sharks*, ask students to determine which animal is their favorite of the two, using the “I Prefer . . .” graphic organizer to list each reason for their preference. When the organizer is complete, instruct students to write a persuasive essay in which they state their opinion in a well-structured topic sentence, supply linking words to connect their opinion to their reasons (drawn from the graphic organizer), and provide a concluding sentence.

I PREFER . . .

Between African elephants and great white sharks, I prefer . . .

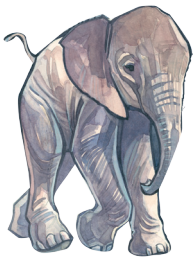
[circle one]

AFRICAN ELEPHANT

GREAT WHITE SHARK

My primary reason for preferring a _____ is:







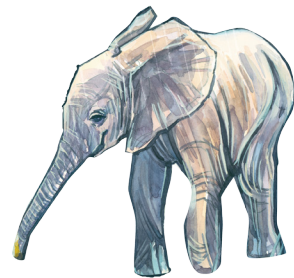
My other reasons for preferring a _____ are:

1 _____



2 _____

3 _____



CCSS.W.2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.

CCSS.W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.

CCSS.W.3.1.A Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.

CCSS.W.3.1.B Provide reasons that support the opinion.

CCSS.W.3.1.C Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.

CCSS.W.3.1.D Provide a concluding statement or section.

CCSS.W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

CCSS.W.4.1.A Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.

CCSS.W.4.1.B Provide reasons that are supported by facts and details.

CCSS.W.4.1.C Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).

CCSS.W.4.1.D Provide a concluding statement or section related to the opinion presented.

CCSS.W.5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

CCSS.W.5.1.A Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

CCSS.W.5.1. B Provide logically ordered reasons that are supported by facts and details.

CCSS.W.5.1.C Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).

CCSS.W.5.1.D Provide a concluding statement or section related to the opinion presented.

This guide was prepared by Toni Buzzeo, M.A., M.L.I.S., children's author, educational consultant, and school librarian.
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