

Animal Adaptations: Migration

A Teacher's Guide to Paired Texts and Animal Adaptations: Migration for Grade 3



<https://pixabay.com/photos/birds-flock-flying-nature-4261965/>

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Pre-Reading Warm Up Activity

To get students ready for this unit, begin by watching this brief video:

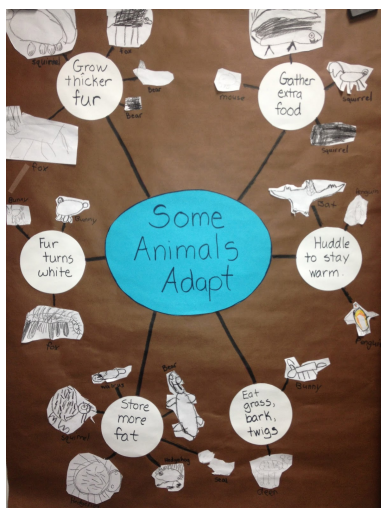
[Animal Adaptations](#)

This short video by *DK Find Out!* will give students an overview of some animal adaptations and how they use these adaptations to survive. At the conclusion of the video, ask the students the following questions:

- Why is the camel more suited to live in the desert than a penguin?
- What adaptations does a camel have that helps it survive in the desert?
- What are some other animal adaptations that you can think of that help them survive in their environment?
- What does it mean for an animal to migrate?

Bulletin Board

After initial adaptation discussion with class, create a student directed bulletin board about animal adaptations. Ask students to brainstorm different ways that animals adapt to their environment. Some examples are: camouflage, migration, hibernation, etc. The teacher will write down their ideas in the form of a web-map. Children will then draw different animals that belong in each category. An example from *Mrs. Meyers' BlogSpot* (Mrs. Meyers' BlogSpot, 2014) is here:



<http://mrsmyerskindergarten.blogspot.com/2014/10/how-i-plan-and-implement-projectinquiry.html?m=1>

Fiction Book: Wild Robot by Peter Brown

Brown, Peter. (2016). *Wild robot*. Illus. by the author. Little Brown and Company.



<https://www.goodreads.com/book/show/26030734-the-wild-robot>

Wild Robot Synopsis

In this middle grade science fiction novel, a manufactured robot named Roz finds herself dropped on an island and activated by some pesky otters. All of the island's natural creatures are leary of the newcomer until Roz learns their language and helps the animals in different ways. Roz discovers that she needs to adapt in order to survive the dangers of the island, which include bears, fires and storms. During one such disaster, Roz finds herself responsible for an orphaned goose that she adopts named Brightbill. In the end, Roz and her new friends realize the need to protect one another when trouble arrives and Roz is forced to return to her Makers. Through her peaceful demeanor and helpful spirit, readers are left hoping for the best for Roz and pining for the sequel, *The Wild Robot Returns*.

Wild Robot Review

"A sophisticated robot—with the capacity to use senses of sight, hearing, and smell—is washed to shore on an island, the only robot survivor of a cargo of 500. When otters play with her protective packaging, the robot is accidentally activated. Roz, though without emotions, is intelligent and versatile. She can observe and learn in service of both her survival and her principle function: to help. Brown links these basic functions to the kind of evolution Roz undergoes as she figures out how to stay dry and intact in her wild environment—not easy, with pine cones and poop dropping from above, stormy weather, and a family of cranky bears. She learns to understand and eventually speak the language of the

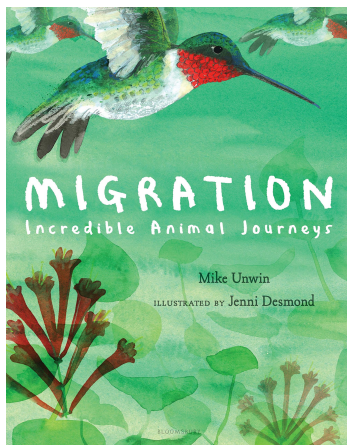
wild creatures (each species with its different “accent”). An accident leaves her the sole protector of a baby goose, and Roz must ask other creatures for help to shelter and feed the gosling. Roz’s growing connection with her environment is sweetly funny, reminiscent of Randall Jarrell’s *The Animal Family*. At every moment Roz’s actions seem plausible and logical yet surprisingly full of something like feeling. Robot hunters with guns figure into the climax of the story as the outside world intrudes. While the end to Roz’s benign and wildlife is startling and violent, Brown leaves Roz and her companions—and readers—with hope.

Thought-provoking and charming. (Science fiction/fantasy. 7-11)”

<https://www.kirkusreviews.com/book-reviews/peter-brown/the-wild-robot/>

Nonfiction Book: Migration-Incredible Animal Journeys by Mike Unwin

Unwin, Mike. (2019). *Migration: incredible animal journeys*. Illus. by Jenni Desmond. Bloomsbury Publishing. 47 p.



https://www.google.com/search?q=migration+incredible+animal+journeys+cover&rlz=1C1GCEFA_enUS950US950&source=lnms&tbn=isch&sa=X&ved=2ahUKEwiN54y_upTxAhVXWs0KHco5Bz8Q_AUoAXoECAEQAw&biw=1280&bih=578&dpr=1.5#imgsrc=0dS4qS3yqljv1M

Migration-Incredible Animal Journeys Synopsis

In this nonfiction book for elementary school readers, Mike Unwin provides a glimpse into the migrations of animals all over the world. Paired with full page watercolor illustrations from Jenni Desmond, readers will not only learn about the migrations of animals such as: emperor penguins, caribou, monarch butterflies and bar-headed geese; they will also feel as though they are migrating with them. Told to make the reader feel part of the story, the author helps readers understand what migration looks like, feels like and even sounds like. It concludes with a map of the migration journeys in the book and fun facts to entice the reader to find out more about this incredible animal adaptation.

Migration-Incredible Animal Journeys Review

"From humpback whales to green turtles, 20 examples of seasonal migration illustrate remarkable animal journeys.

Spread by spread, Unwin, who writes regularly about wildlife, provides a brief description of these animals' journeys. His informal and engaging exposition is set directly on gentle paintings of these creatures in a customary environment.

Desmond's art, created with watercolor, acrylic, ink, pencil, and pencil crayon, incorporates a paragraph of additional information about each species. It is her images that make this oversize album stand out. Caribou swim across an Arctic river; monarch butterflies fill a forest of evergreens in Mexico; red crabs swarm across a road on Christmas Island in the Indian Ocean. There are both familiar and unfamiliar bird migrations: emperor penguin, Arctic tern, wandering albatross, ruby-throated hummingbird, bar-headed goose, and whooping crane. There are bats; pilchards and salmon; African elephants and wildebeest. This is a U.K. import, and American readers may be surprised by the European examples of animals that also migrate in the Western Hemisphere: great white sharks, barn swallows, and osprey. A different point of view is refreshing, but North American teachers and librarians will want to make sure that they also have books that show these animals closer to home. Since publication in Great Britain in 2018, at least one fact has already become outdated. The use of ultralights to aid whooping crane migration was discontinued in 2016.

An attractive addition to units on migration in the primary or middle grades.

(map) (Informational picture book. 6-10)"

<https://www.kirkusreviews.com/book-reviews/mike-unwin/migration/>

Discussion Questions for Wild Robot

1. How does Roz's adoption of Brightbill change the outcome of the story? What might have been different if Roz never encountered him?
2. The author, Peter Brown, provides illustrations throughout the story. How does this help the reader understand the events?
3. How did the names of the animals help you to visualize what those characters looked like?
4. What are some of the animal adaptations that the author mentions? How did Roz also adapt to her environment?
5. Why is it important for Roz to remain non-violent and kind? How does this ultimately help her in the story?
6. How do Roz and Brightbill spend their winters differently? Why is this important for both of them?

Discussion Questions for Migration-Incredible Animal Journeys

1. How do the illustrations in this book add to your understanding of the animal's migrations?
2. By using the map in the back of the book, compare the migration of the Arctic tern and the Wandering albatross.
3. Why does the author include captions with each of the illustrations? How does this help the reader understand what is happening in each picture?
4. What are the different reasons that each animal migrates?
5. Can you find a common theme between the migration of the animals in this book? What is similar about their journeys?

Discussion Questions across Both Texts

1. How does learning about the migration of the bar-headed goose in *Migration: Incredible Animal Journeys* help you understand the migration of Brightbill in *Wild Robot*?
2. Using the map in *Migration: Incredible Animal Journeys*, which animal's journey looks similar to how Brightbill's is described?
3. What is Brightbill's reason for his migration? How does this compare with the animals in *Migration: Incredible Animal Journeys*?
4. On page 46 in *Migration: Incredible Animal Journeys*, the author describes dangers that some animals face during their migration. What are some dangers that Brightbill encounters?
5. On page 30 in *Migration: Incredible Animal Journeys*, the author talks about the V formation of the geese. How does this coincide with what we learned about the geese in *Wild Robot* and how they flew during their migration?

Virginia Standards of Learning and Lesson Ideas

SCI.3.3.1 Distinguish between and explain the purposes of physical and behavioral adaptations of animals. (SOL 3.3)

1. The students will compare and contrast the different animal adaptations: migration, hibernation, camouflage, mimicry, etc. They will create a [Venn diagram](#) to compare and contrast 2 of these adaptations.
2. The students will analyze photographs of several different animals. They will use these photographs to determine the different physical adaptations and behavioral adaptations of each of the animals.

They will use sticky notes to label each adaptation.

3. Students will choose one adaptation that they have learned about: migration, mimicry, learned behavior, etc. They will create a Google Slides presentation to explain their adaptation and present to their peers. They will use photographs, labels and text to show knowledge of their adaptation.

ELA.3.5 The student will read and demonstrate comprehension of fictional texts, literary nonfiction and poetry. (SOL 3.5)

1. Students will reflect on how Roz adapted to her environment several times in *Wild Robot*. Students will write a journal entry about how Roz's adaptations helped her survive in the wild. How did her survival skills help her character develop throughout the story?
2. Students will fill out a [Shape Go Map](#) graphic organizer at the conclusion of *Wild Robot* to show understanding of this fiction novel. Students will include an illustration of their favorite event of the story.
3. Students will compare and contrast Roz at the beginning of the story and at the end of the story using a [Venn Diagram](#). Students will use character traits to show understanding of how Roz changed in the story.

COMPSCI 3.13 The student will create an artifact using computing systems to model the attributes and behaviors associated with a concept (e.g., day and night, animal life cycles, plant life cycles).

1. The students will create a Google Slides presentation on 2 behavioral adaptations and 2 physical adaptations. They will use images, labels and captions to show understanding of each concept.
2. The students will create a non-fiction book using Book Creator. They will choose one animal to research and report on. In their online book, they will include facts such as: habitat, food, body, adaptations and fun facts.
3. The students will create an audio presentation about an animal of their choice using Voki. <https://www.voki.com/site/create> They will include the animals habitats, food, body and adaptations.

Library Connection

1. The students will research an animal of their choice on Pebble Go using this [Graphic Organizer](#). The students will use the research tool in the library and learn how to cite this specific reference source correctly.
2. The students will learn how to responsibly and effectively use images that they search in an animal presentation. The students will learn how to use images responsibly that they find in the Creative Commons to use in their presentations. The students will cite these images properly.

3. The students will create an animal using materials in a maker space. Materials can include, but are not limited to: pipe cleaners, cotton balls, twist ties, Legos, etc.

Websites for Further Exploration

Adaptation Facts for Kids

Learn more about animal adaptations on this kid friendly website. Students will read about the functions of adaptations and how they can develop over time. Links within the text will help students who want to explore further.

Visit Here: <https://kids.kiddle.co/Adaptation>

Generation Genius--Animal and Plant Adaptations: Science Lessons for Kids

Students can watch a short video and read more about animal adaptations. Vocabulary cards and discussion questions will allow students to further their understanding and provide ways to talk about these adaptations with their classmates.

Check it out here:

<https://www.generationgenius.com/animal-and-plant-adaptations-video-lesson-for-kids/>

Kids Discover: Amazing Migrations

In this website directed towards parents/teachers, all ages learn more about the migration of gray whales, hummingbirds and monarch butterflies. Author, Jacquie Fisher provides links to map out migrations routes, make your own nectar and more.

Discovery awaits:

<https://kidsdiscover.com/parentresources/amazing-migrations-for-kids/>

Ducksters: Animal Migrations

This kid friendly website will help students delve deeper into animal migrations and how those animals find their way. They will learn about animals that migrate on land, water and in the air. Further links provided will aid those students who want to learn more about the animals listed.

Go explore: https://www.ducksters.com/animals/animal_migrations.php

Author: Peter Brown

Students will be able to read all about the author of *Wild Robot*. They will be directed to discover his other books and read all about the process that he went through to write his first novel, *Wild Robot*, on his linked blog.

Dig in here: <https://www.peterbrownstudio.com/>

Author: Mike Unwin

Although not a traditional author website, readers can discover more about the author of *Migration: Incredible Animal Journeys* and other books that he has written. Students can also discover the many awards that Mike Unwin has received.

Find out more here: <https://myriadeditions.com/creator/mike-unwin/>

About the Authors

Peter Brown-*Wild Robot*



<https://www.peterbrownstudio.com/>

Peter Brown is both an author and illustrator. His first book, *Wild Robot*, was a *New York Times* bestseller. He won the Caldecott Honors award for his book, *Creepy Carrots!*.

Other books by this author:

The Wild Robot Escapes

Creepy Carrots! (Illustrator)

Mr. Tiger Goes Wild

Mike Unwin-*Migration: Incredible Animal Journeys*



<https://myriadeditions.com/creator/mike-unwin/>

Mike Unwin is an author, illustrator and photographer. He has written both adult and children's books. He has won many awards including Travel Writer of the Year (2014).

Other books by this author:

Climate Change

The RSPB Children's Guide to Birdwatching

Books for Further Reading

Come on the migration journey with Belle, an osprey making her first trip to Brazil from Martha's Vineyard:

Bierregaard, Rob. (2018). *Belle's journey: an osprey takes flight*. Illus. By Kate Garchinsky. Charlesbridge. 112 p.

Follow Roz on her next adventure at a farm:

Brown, Peter. (2018). *The wild robot escapes*. Illus. by the author. Little, Brown Books for Young Readers. 288 p.

A story of a family from North Carolina who migrates to Washington D.C. in hopes of a better life:

Greenfield, Eloise. (2011). *The great migration: journey to the north*. Illus. by Jan Spivey Gilchrist. HarperCollins. 32 p.

This child-friendly book gives readers a look into the migration of monarch butterflies. It is also available in Spanish:

Gundersheimer (Mister G), Ben. (2019). *Señorita Mariposa*. Illus. by Marcos Almada Rivero. Penguin Young Readers Group. 32 p.

This informative non-fiction book will give young readers a glimpse into the migration of many animals such as zebras and red crabs:

Marsh, Laura. (2012). *National Geographic readers: great migrations, amazing animal journeys*. National Geographic Society. 48 p.

A National Geographic Kids reader, this book has many non-fiction elements that will help young readers learn about the migration of butterflies:

Marsh, Laura. (2012). *National Geographic readers: great migrations butterflies*. National Geographic Society. 48 p.

Sammy, a warbler, finds himself all alone to make the trek to Panama for the cold winter. Will he find his way?:

Thornhill, Jan. (2021). *Is this Panama? a migration story*. Illus. by Soyeon Kim. Owlkids Books Incorporated. 40 p.

Other Books on this Topic

Athaide, Tina. (2019). *Orange for the sunsets*. Katherine Tegen Books. 336 p.

Meadows, Michelle. (2011). *Hibernation station*. Illus by Kurt Cyrus. Simon & Schuster Books for Young Readers. 40 p.

References

Brown, Peter. (2013). *Mr. Tiger goes wild*. Illus. by the author. Little, Brown Books for Young Readers. 48 p.

Chandler, David, and Unwin, Mike. (2007) *RSPB Children's guide to birdwatching*. A & C Black. 128 p.

DK Find Out!. (n.d.). *Animal adaptation video*. [Video File]. Retrieved from <https://www.dkfindout.com/us/video/animals-and-nature/animal-adaptation-video/>

Ducksters. (2021). Animals for Kids: Animal Migrations. *Ducksters*. Retrieved from https://www.ducksters.com/animals/animal_migrations.php

Fisher, Jacquie. (2012). Amazing Migrations. *Kids discover*. Retrieved from <https://kidsdiscover.com/parentresources/amazing-migrations-for-kids/>

Generation Genius. (2021). Intro to Adaptations. *Generation Genius*. Retrieved from <https://www.generationgenius.com/animal-and-plant-adaptations-video-lesson-for-kids/>

Kiddle Encyclopedia. (2021). Adaptation facts for kids. *Kids.kiddle.co* Retrieved from <https://kids.kiddle.co/Adaptation>

Migration: incredible animal journeys. (2019, April 28). [Review of the book *Migration: incredible animal journeys* by Mike Unwin]. *Kirkus Reviews*. Retrieved from <https://www.kirkusreviews.com/book-reviews/mike-unwin/migration/>

Myriad Editions. (n.d.). Mike Unwin. *Myriad: publishers of literary fiction, non-fiction and graphic novels*. Retrieved from <https://myriadeditions.com/creator/mike-unwin/>

Outbox Online. (n.d.). Peter Brown studio/children's book author and illustrator. *Peter Brown studio*. Retrieved from <https://www.peterbrownstudio.com/>

Reynolds, Aaron. (2012) *Creepy carrots!*. Illus. by Peter Brown. Simon & Schuster Books for Young Readers. 40 p.

The wild robot. (2016, January 20). [Review of the book *The Wild Robot* by Peter Brown]. *Kirkus Reviews*. Retrieved from <https://www.kirkusreviews.com/book-reviews/peter-brown/the-wild-robot/>

Unwin, Mike. (2006). *Climate change*. Heinemann Library. 48 p.



<https://pixabay.com/vectors/birds-silhouette-animals-flying-4806876/>