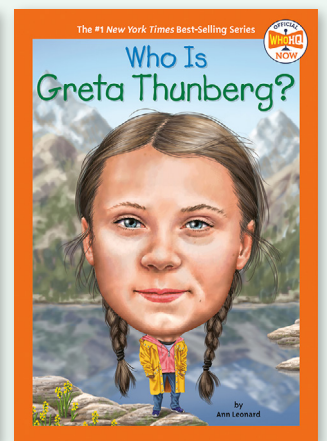
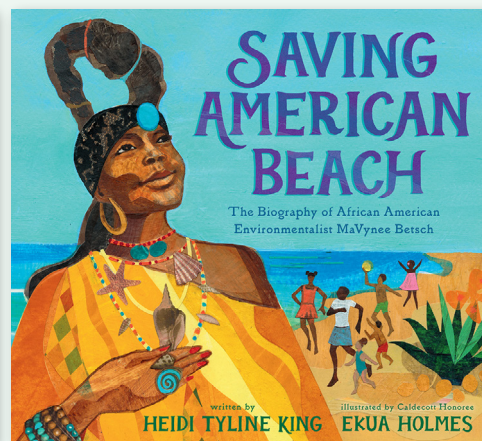
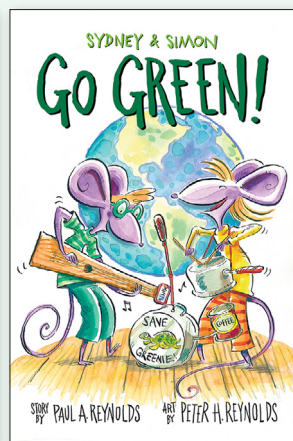
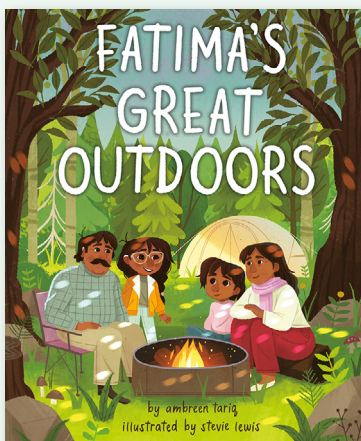
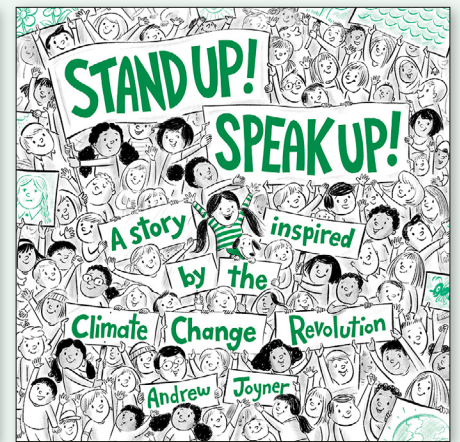
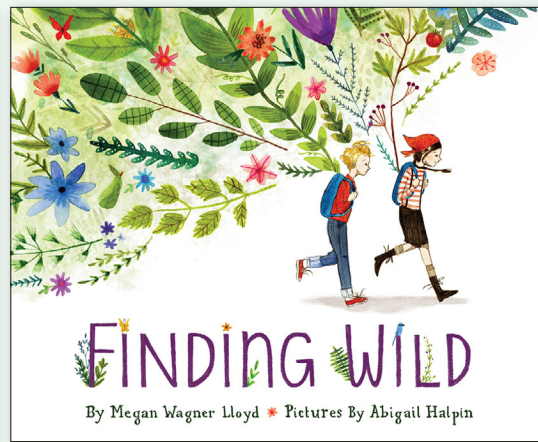
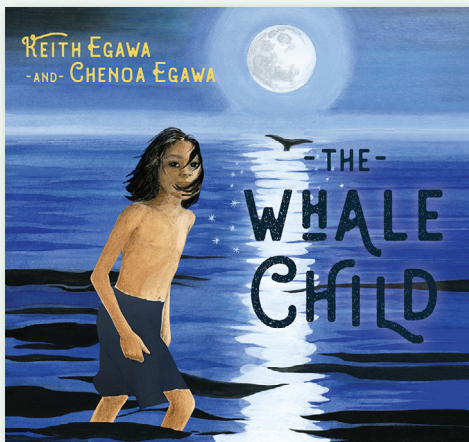


THEMATIC GUIDE

Teaching About Climate Change
ELEMENTARY SCHOOL



Books can provide an entry point to climate change education at all levels. The titles in this collection include fiction and nonfiction texts, both picture books and chapter books, and provide a broad appeal for today's elementary school students.

CONTENTS

INTRODUCTION.	2
HOW TO USE THIS GUIDE.	3
ABOUT THE TITLES IN THIS COLLECTION	3
BUILDING KNOWLEDGE.	7
THEMES	9
POST-READING ACTIVITIES.	10
BOOKS & FILMS OF INTEREST.	11
ABOUT THE AUTHOR OF THIS GUIDE.	11

■ INTRODUCTION

Climate change is an interdisciplinary problem facing all of us. Sometimes, educators shy away from discussing climate change with young students. They are overwhelmed by simplifying the science for their students. They worry about causing anxiety by discussing big issues like rising seas and temperatures. They fear pushback from community members.

But our young students hear about climate change on the news and they want to know more. From droughts to wildfires to extreme weather, our students know the planet is in peril. Young activists like Greta Thunberg are leading the way in the fight against climate change, showing young people that they don't have to wait to reach adulthood to make a difference.

Luckily, we do not need to be experts to address climate change in the classroom. Simply providing opportunities for students to think critically about the issue can help them develop empathy and hope. There is no time better than the present to start the conversation about climate change, because empowered students can change the world.

■ HOW TO USE THIS GUIDE

Books can provide an entry point to climate change education at all levels. The titles in this collection include fiction and nonfiction texts, both picture books and chapter books, and provide a broad appeal for today's elementary school students. The wide variety of texts also allows for teachers to integrate them into multiple subject areas.

Climate literacy crosses genres and subject boundaries; science, English, history, and math classes can all address climate change. Teachers can select individual or multiple texts depending on reading level, thematic consideration, or instructional goals. The texts are divided into picture books and chapter books, and there are conversation starters provided to encourage discussion. Texts can be used as read-alouds, whole-class texts, and independent reading. Activities apply to all titles and can be adapted to whole class or small group settings. All included texts empower students to be optimistic about the future and to be part of the solution.

■ ABOUT THE TITLES IN THIS COLLECTION

Listed below are brief summaries as well as questions providing purpose, context, and framing while students read.

PICTURE BOOKS

Picture books can be a powerful gateway to building hope and empathy in students of all ages. You can design mini-lessons around picture books and simply read them for enjoyment. For ways to use picture books in your classroom see Jillian Heise's #classroombookaday (www.heisereads.com/classroombookaday/).

Celebrate the many ways young people can make a difference in the climate fight with *Stand Up! Speak Up!: A Story Inspired by the Climate Change Revolution* by Andrew Joyner. In this picture book, a young girl is empowered to take a stand in the fight against climate change.

- Why do you think the author wrote this book?
- Do you notice anything interesting about the language? Look at the end of each sentence. Why do you think the author did this?
- Examine the illustrations in the story. What are some of the ways children can make a difference in the climate change fight?



Stand Up! Speak Up!

A Story Inspired by the Climate
Change Revolution
ANDREW JOYNER

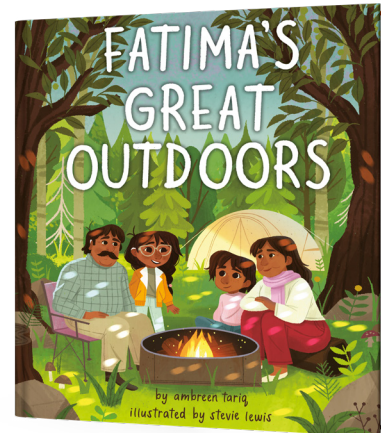
978-0-593-30158-6

Hardcover | Random House Children's Books
40 pages | \$17.99 | Lexile: BR30L

Also available: E-Book

In *Fatima's Great Outdoors*, written by Ambreen Tariq and illustrated by Stevie Lewis, an immigrant family goes on their first camping trip. Ambreen Tariq is an outdoors activist and founder of @BrownPeopleCamping.

- Do you enjoy spending time outside? What is your favorite part of nature?
- What are Fatima's favorite parts of camping?
- Have you ever been camping? What was it like? If you have not been camping, would you like to try it? Why or why not?



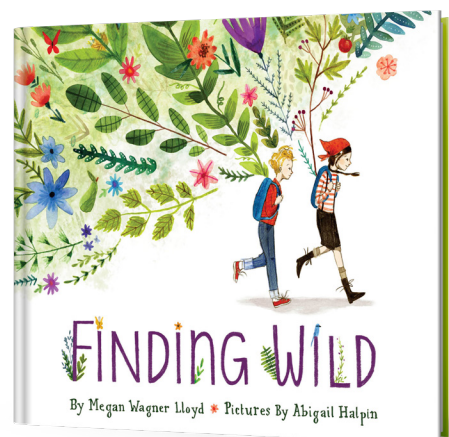
Fatima's Great Outdoors
AMBREEN TARIQ
 Illustrated by STEVIE LEWIS

978-1-9848-1695-5
 Hardcover | Penguin Young Readers
 40 pages | \$17.99 | Lexile: N/A

Also available: Audio Download, E-Book

Finding Wild, written by Megan Wagner Lloyd and illustrated by Abigail Halpin, emphasizes the many ways nature is present in our lives, whether we live in the country or the city.

- According to the author's descriptions and the illustrations, what does "wild" mean?
- What happens if everything in nature is "paved, ordered, and tidy"?
- What is "wild" around your school? Your home? Your neighborhood?



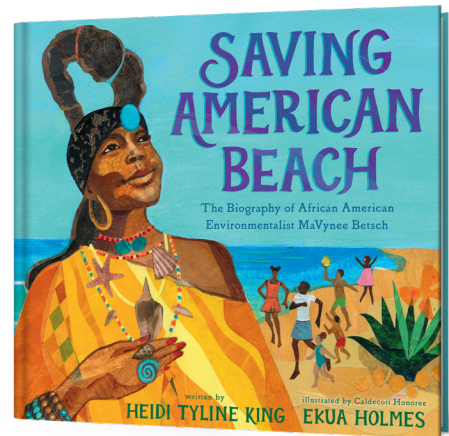
Finding Wild
MEGAN WAGNER LLOYD
 Illustrated by ABIGAIL HALPIN

978-1-101-93281-0
 Hardcover | Random House Children's Books
 32 pages | \$16.99 | Lexile: AD580L

Also available: E-Book

Saving American Beach: The Biography of African American Environmentalist MaVynne Betsch, written by Heidi Tyline King and illustrated by Ekua Holmes, tells the story of MaVynne Betsch, an African American environmentalist who fought to preserve American Beach. Betsch's grandfather bought American Beach when most beaches were for "whites only."

- Why was there a dividing rope in the ocean?
How does this make you feel?
- Why didn't MaVynne Betsch want developers to build homes on American Beach?
- How do you feel about beaches, forests, fields, and other parts of nature being sold for homes and shopping centers?



Saving American Beach

The Biography of African American Environmentalist MaVynne Betsch

HEIDI TYLINE KING
Illustrated by **EKUA HOLMES**

978-1-101-99629-4
Hardcover | Penguin Young Readers
40 pages | \$17.99 | Lexile: N/A

Also available: Audio Download, E-Book

CHAPTER BOOKS

Chapter books can help young readers begin to grapple with big questions in their world. Like picture books, they can be a powerful gateway to building hope and empathy in students. Students can read chapter books independently, in book clubs, or listen to them as part of a read-aloud.

TIME's Most Influential Person of the Year in 2019, Greta Thunberg, was only fifteen years old when she began to change the world. *Who Is Greta Thunberg?*, part of Who HQ Now by Jill Leonard and illustrated by Manuel Gutierrez, introduces students to this inspirational teenager taking a stand in the climate fight.

- What happened when Greta Thunberg's teacher showed her class a film about global warming?
How does global warming make you feel?
- Have you ever felt so passionate about something that you couldn't think about anything else?
- What is Greta Thunberg's message to adults?
What is she asking them to do?



Who Is Greta Thunberg?

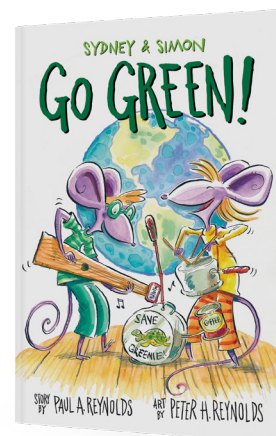
JILL LEONARD
Illustrated by **MANUEL GUTIERREZ**

978-0-593-22567-7
Paperback | Penguin Young Readers
56 pages | \$4.99 | Lexile: 910L

Also available: E-Book

Sydney & Simon: Go Green!, written by Paul A. Reynolds and illustrated by Peter H. Reynolds, is part of the Sydney and Simon STEAM-focused series. In this story, Sydney and Simon learn how harmful litter is for the animals in the ocean. When they gather data on the trash collected in their home and at school, they realize they are part of the problem and decide to come up with a way to be part of the solution.

- Why is Sydney upset when she learns, during a class trip to the aquarium, that a sea turtle has been harmed by pollution in the ocean? Have you ever seen litter in your neighborhood? How did it make you feel?
- Sydney and Simon collect data on the trash thrown out by their family, friends, and school and it quickly becomes clear that we are all part of the problem. Think about the trash thrown out in your school, or home. What items are often thrown away? Are there similarities between the trash in your home and/or school and the trash Sydney and Simon see being thrown away?
- How do Sydney and Simon use art to teach their community about the dangers of trash?



Sydney & Simon: Go Green!

PAUL A. REYNOLDS

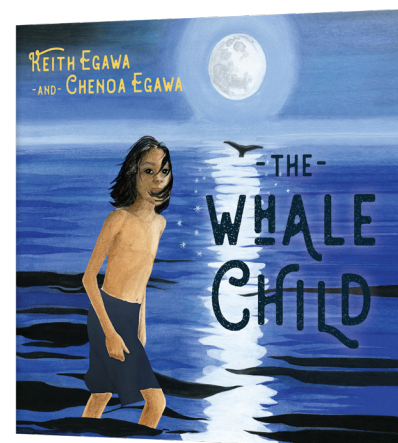
978-1-58089-677-1

Hardcover | Charlesbridge
48 pages | \$12.95 | Lexile: 750L

Also available: E-Book

The Whale Child by Keith Egawa and Chenoa Egawa tells the story of Shiny, “a young whale turned boy tasked with teaching a young girl named Alex about the perils facing the ocean due to climate change.”

- According to Shiny, what is happening to the oceans? How are humans to blame?
- Think about the role water plays in your life. What is its significance? What role does it play in Shiny’s life?
- Alex’s family believes that humans should “take only what you need from nature, waste nothing, and give thanks for what you take.” What does this mean to you?



The Whale Child

KEITH EGAWA and CHENOA EGAWA
Supplement by JESSICA HERNANDEZ

978-1-62317-486-6

Paperback | North Atlantic Books
136 pages | \$19.95 | Lexile: N/A

Also available: E-Book

■ BUILDING KNOWLEDGE

The books in this collection all center around nature. While climate change is a dire issue, it is important to show students the hope that exists. Multiple studies have found that hope plays a vital role in encouraging individuals to take action to prevent further damage to the Earth. By focusing on the potential to make significant changes, teachers can ensure that even the youngest students feel empowered to change the world.

Below you will find activities to help students build knowledge and reflect on the importance of nature in their lives. These activities can be used as pre-reading activities or follow-up activities.

CENTERS ROTATION

Create a “centers” learning experience to build awareness of issues that have led to the climate crisis. Begin by sharing a simple climate change video with students. “Climate Change for Kids” by Clarendon Learning (www.youtube.com/watch?v=WkvPdUtYhX8) is a good introduction for elementary school students. After students watch the video, explain that they will be moving through centers to learn more about different aspects of climate change. Topics might include:

- Greenhouse effect
- Great Pacific Garbage Patch
- Burning of fossil fuels
- Farming
- Deforestation
- Extreme weather
- Rising temperatures
- Rising sea levels

Split students into small groups at various stations around the room. Each station should be set up with an image, audio clip, video, infographic, or short text about a different aspect of climate change. You can use printed information or a computer. Place a large sheet of chart paper or set up a Google slide at each center. Groups will complete the activity at each station by reading or viewing the resource provided. They will add two or three important facts or things they learned to the chart paper or slide at each center. When groups have had sufficient time at a station, they will move to the next center to examine the resources and add to what has already been noted.

Students will eventually return to their original station, read their classmates’ notes, and participate in a class discussion about what they learned. For example, students might share what surprised them, what they had questions about, and how they feel after learning about different aspects of climate change.

THE VOICE OF NATURE

Many of the books in this collection personify nature. Ask students, “Do you think you could tell a story from the perspective of something in nature?” Allow students to turn and talk with a partner. After students share their thoughts, challenge them to tell a story in the voice of a plant, animal, or natural place that is important to them. What would it say? What questions would it ask? What would it want people to know?

If possible, take students outside to complete this activity. Once outside, have students select a place to sit. They might sit in the grass, under a tree, or near the playground. They might even sit on the cement! Allow students time to write, draw, or just think.

Have students share their stories orally or in writing, depending on their ability level. They might create an illustration or write a short story. Create a gallery walk of students’ finished products and allow students to learn about the natural elements important to their classmates.

WHO GETS TO SPEND TIME IN NATURE?

A recent analysis by Conservation Science Partners (CSP), commissioned by Hispanic Access Foundation (HAF) and the Center for American Progress, found that people of color and low-income families are less likely to have access to nature and outdoor experiences (americanprogress.org/issues/green/reports/2020/07/21/487787/the-nature-gap). One way to close this gap is to introduce students to outdoor advocates of color. Resources like @brownpeoplecamping, #BlackBirdersWeek, Outdoors Empowered Network, Outdoor Afro, Latino Outdoors, Native Womens Wilderness, Diversify Outdoors, and many others can help connect classrooms with outdoor activists of color. A class might follow outdoor activists on a class social media account, read articles or watch videos about outdoor activists, or even participate in a Q&A.

Conservationist Baba Dioum once said, “In the end, we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught.” To ensure that our young students feel that stopping climate change is necessary, we must help them connect with nature. To do that, we must make sure they feel welcome and comfortable outdoors.

■ THEMES

The following themes appear throughout the titles in this set. Essential questions are designed to be broad so as to capture readers' attention, invite multiple perspectives, and apply to big ideas across subject areas and units of learning. Conversation starters promote connection and relevance before and after students read.

SOCIAL JUSTICE

Essential Question:

What role can I play in protecting the environment?

Conversation Starters:

- What is an activist? Have you ever been an activist? If so, when? If not, is there an issue you want to speak up about?
- What role should young people like Greta Thunberg play in the fight against climate change? How can young people make a difference?
- In many of the stories, people of color have to carve out or even fight for space in nature. Why do you think that is?

TAKING A STAND

Essential Question:

What role(s) can I play in defining the future of the Earth?

Conversation Starters:

- What can I do to help save the Earth?
- What power do I have to convince my family to help protect the Earth?
- What problems do I see in my community? How can I help?

NATURE

Essential Question:

What does nature mean to me?

Conversation Starters:

- What does nature look like? Can it be found outside our school?
In our neighborhood? Our town?
- Is nature important to you?
- How does nature connect us with others?

PEOPLE AND THE ENVIRONMENT

Essential Question:

How am I connected to nature and people around the world?

Conversation Starters:

- What kinds of environmental challenges do you see in our community?
- Can you think of ways peoples' lives might be changing because of climate change?
- Is the environment part of our community?

RESPONSIBILITY

Essential Question:

What responsibilities come from being a member of our community? Our state?
Our country? Our world?

Conversation Starters:

- How do my choices affect others? The world?
- Is it better to work alone or with others?
- How can a local action have a global effect?

■ **POST-READING ACTIVITIES**

SHARING WHAT I KNOW

Share the Kids Against Climate Change website (kidsagainstclimatechange.co) with students. Show them the “What Do Kids Know” tab and spend a few minutes viewing the submitted artwork and reading some of the submitted comments. “What Do Kids Know” is a place where students or classes can share their comments, concerns, and ideas about climate change. Everything on the page is created by kids! Next, as a class, review the instructions for posting comments and replies. (As of this writing, all comments are moderated.) As individuals, pairs, groups, or a whole class, compose a comment to submit. Students should review what they’ve learned in the unit and compose a written summary. They might include questions they have or ideas they have come up with. Have students share with a partner. Then, submit individual comments or compose a class comment based on student submissions.

TAKING ACTION

As a class, brainstorm ways to take action to help stop climate change. Start by having students list the needs in your school or community in its fight to stop climate change. After students create their list, select one issue to focus on. Students might vote on the issue or it can be determined by the teacher.

Once the issue has been selected, ask students to think about what is already being done in the community to help. What is causing the issue? Who is already helping? Students may need to do more research, so encourage them to think about what else they need to know and where they can find the answers. This could be a great opportunity to bring in community members as guest speakers.

Once students know enough, they can begin to come up with solutions. What will they do to help the community? What actions will need to be taken? Who will need to help them? At this point, students can think about the project in theory, but it can be very powerful to have students create a service-learning project.

■ BOOKS & FILMS OF INTEREST

FURTHER READING

Visit our website, www.prhelementaryeducation.com, to browse additional fiction and nonfiction titles about climate change.

FILMS & DOCUMENTARIES

I Am Greta (Hulu)

Arctic Tale (Paramount+)

Earth's Ekko - Together We Can Make A World of Difference (YouTube)

FernGully: The Last Rainforest (Rent from iTunes, Google Play, etc)

Wall-E (Disney+)

■ ABOUT THE AUTHOR OF THIS GUIDE

Sarah Mulhern Gross is a high school English teacher and National Board Certified Teacher in Lincroft, New Jersey. She has a MAT degree in teaching biology from Project Dragonfly and Miami University. She is a contributor to *The New York Times* Learning Network and her writing has appeared in *Scientific American*, *ASCD*, *the New Jersey English Journal*, and *The Washington Post's* Answer Sheet. Sarah has presented for NCTE, NJCTE, NJCEL, NJEA, *The New York Times* Learning Network, Fordham University's Summer Literacy Institute, the Center for Teaching Excellence, and the New Jersey Science Teachers Association. She is the cofounder of #nerdcampNJ, NJCTE past vice president, and past faculty board member for curiousSCIENCEwriters, which provides a platform for publishing student science writing.

