CHANGEMAKERS
Nonfiction Picture Book Biography Kit

Includes discussion questions, classroom activities, and tips for leading a nonfiction unit
WHY TEACH A PICTURE BOOK BIOGRAPHY UNIT?

Young children love learning about their world. They make discoveries through their experiences, explorations, interactions with others, and through literature. Nonfiction literature provides children with knowledge that becomes a foundation for their experiential learning. Nonfiction literature encourages children to wonder, to ask questions, and to seek answers. It inspires children by expanding their world and introducing them to new people, places, and ideas.

Recently, biographies have become more accessible to younger readers. Picture book biographies are engaging and informative. They educate children about famous people in history, as well as lesser-known heroes from around the world.

Biographies are inspiring, because readers learn about how real people who faced real challenges in the real world managed to overcome their difficulties. Biographies teach children to dream big, think deeply, and navigate challenges.

Tips For Planning & Organizing Your Unit

For young children, the books in the biography unit will be read aloud to them, while older students can read the books independently, in pairs, or in small groups. Reading these books as a unit is powerful, because students are given the opportunity to compare biographies, identifying themes from world history and making connections between the people featured in the books and events that occurred during their lifetime.

Introduce the biography unit by first capturing the students’ attention. For example, present images of the people featured in the biographies and then ask students if they know who these people are. You can offer clues, making it a guessing game. Or, do a picture walk with one of the books. As you turn the pages, pause to ask students to infer from the illustrations what is happening in the book. Or, project the names on an interactive whiteboard and ask students to discuss the biography and infer from the illustrations what is happening in the book.

After introducing the unit, choose one book and create a 3-column KWL chart for the person whose biography is featured in the book. Before reading the book, ask students what they Know about the person and record their thoughts in the first column. Then, ask the students what they Wonder or Want to know about him/her, and record their ideas in the middle column. Finally, after reading the book, ask the students what they Learned. Record their new knowledge in the final column of the chart. Refer to the middle column to see if the students can answer some of the wonderings.

After introducing the first book, share the other biographies with the students and then have them select a biography of most interest. Students should create an individual KWL chart (filling in the first two columns) before reading the book; after reading, they should capture their new knowledge in the last column.

Another way to activate the students’ prior knowledge is to create a schema map. Before reading the biography, have students record facts they think they know about the featured person on an index card or sticky note. Display their ideas on a bulletin board. As you read and discuss the biography, highlight the correct facts, edit or remove the incorrect facts, and add new facts as the students learn more.

Students should then create a culminating project to share their new learning with their classmates. This allows students to learn not only about the person they have read about, but also those that their peers have studied. Culminating projects might include oral reports, written projects, or digital presentations. You could also host a “Biography Hero Day” in your classroom and invite the students to come to school dressed up as their favorite biography subject.

The following books offer a great variety of biographies:

Gino Bartali was a renowned cyclist and a resistance hero; Williamina Stevens Fleming, an inquisitive, inspiring astronomer; Maryam Mirzakhani was a brilliant mathematician, and Thurgood Marshall, a ground-breaking attorney and the first Black Supreme Court Justice. Finally, The Last Straw celebrates many individuals, including children, who have boldly taken action to protect our planet.

- Bartali's Bicycle: The True Story of Gino Bartali, Italy's Secret Hero by Megan Hoyt; illustrated by Iacopo Bruno
- She Caught the Light: Williamina Stevens Fleming: Astronomer by Kathryn Lasky; illustrated by Julianna Swaney
- Maryam's Magic: The Story of Mathematician Maryam Mirzakhani by Megan Reid; illustrated by Aaliya Jaleel
- The Highest Tribute: Thurgood Marshall's Life, Leadership, and Legacy by Kekla Magoon; illustrated by Laura Freeman
- The Last Straw: Kids vs. Plastics by Susan Hood; illustrated by Christiane Engel

Teaching Materials in this kit were prepared by Sue Ornstein, a first-grade teacher in the Byram Hills School District in Armonk, New York.
BARTALI’S BICYCLE: THE TRUE STORY OF GINO BARTALI, ITALY’S SECRET HERO

By Megan Hoyt Illustrated by Iacopo Bruno

About the Book
Award-winning bicyclist Gino Bartali twice won the Tour de France, but his true heroism occurred during World War II, when he helped more than 800 Jewish people survive. Gino’s bravery and compassion saved hundreds of lives, yet he never wanted to receive credit for his dangerous and courageous acts. This story honors Gino’s courage, athleticism, humanity, and humility.

Discussion Questions
• Where and how did Gino train for the Tour de France?
• Gino became famous after he won the biggest bike race in the world. How did he respond when he became an international hero?
• How did the world begin to change? What was happening across Italy and all of Europe?
• How did Gino feel when soldiers came to Florence to separate Jewish families?
• What does “the resistance” mean?
• What did Archbishop Elia Dalla Costa ask Gino to do? Why was this dangerous? What did Gino decide?
• Gino said, “Some medals are pinned to your soul, not your jacket.” What does he mean by this?
• What is a courier? Why was Gino an excellent courier? Where did he store the secret papers?
• How else did Gino help resistance workers save Jewish families?
• How did Gino help his friend Giacomo and his family?
• How did Gino help the resistance when he was forced to join the Italian militia?
• After the war, Gino did not discuss his heroic acts to save Jewish families. He said, “Good is something you do, not something you talk about.” Do you agree? Why or why not?

Extension Activities
Marvelous Medals. Gino received a medal when he won the Tour de France, but many would argue that he truly deserved a medal for his heroic acts during the war. Ask students to think about someone they know who deserves a medal, perhaps because that person helped someone, did an act of kindness, or acted bravely in a difficult situation. Have students design a badge or medal for him/her, describe what the person did to earn it, and then deliver the medal to the individual to express their gratitude and appreciation.

What a Character! Create a list of character traits to describe Gino’s personality. Introduce the students to new vocabulary as they brainstorm traits such as brave/courageous, athletic, altruistic, humble, kind, and compassionate. Then ask them to think of another character in a book they have read that shares some of these same traits or ask them to recall a character who is quite different from Gino. Give the students a Venn diagram and have them compare and contrast Gino with a character from a different book. This character can be a real person from a biography or a fictionalized character.

The Time of My Life. Show students the timeline of Gino’s life at the end of the book. Discuss what a timeline is and how it focuses on the most important events in a person’s lifetime. Then ask the students to create a timeline of their own life by including milestones such as when they were born, when they learned to walk and talk, when they started school, when they got their first pet, and when their siblings were born.

Resist! Define and discuss the word “resistance.” Ask the students to consider moments in time when resistance brought about major change in the United States. Students’ discussion and research might include the American Revolution, the Civil War, the fight for Women’s Suffrage, the Civil Rights movement, and the Black Lives Matter movement, as well as other historic resistance movements.
SHE CAUGHT THE LIGHT: WILLIAMINA STEVENS FLEMING: ASTRONOMER

By Kathryn Lasky  Illustrated by Julianna Swaney

About the Book

Williamina was born in Dundee, Scotland, and grew up watching her father develop photographs in his darkroom. Intelligent and inquisitive, Mina became fascinated with how her father captured light on silver plates, and later, how the light of stars can be revealed. Despite living in a time period when it was unacceptable for women to become scientists and astronomers, Mina pursued her love of light and the unknown. She made extraordinary discoveries about the stars which would aid astronomers for years to come.

Discussion Questions

• Where and when was Mina born? When she was very young, how did her parents know she was intelligent?

• Mina’s life had many unexpected turns. When her father died, how did her life change? What happened when she and her husband sailed from Scotland to America?

• When Mina started working for Professor Pickering, what did she learn?

• Why were women discouraged from using a telescope? What did they use instead to study the stars?

• After giving birth to her son in Scotland, why did Mina return to Boston?

• What did Mina discover as she studied the glass plates that recorded the light of stars? Why was this a significant discovery?

• What were the women who came to work at the Harvard observatory known as? Why were they compensated unfairly?

• How did Harvard University recognize Mina’s accomplishments?

• Read the Author’s Note. How does Isaac Newton’s quote apply to Mina?

Extension Activities

What Is the Meaning of This? Assign pairs of students a word from the glossary near the end of the book. Have the students define their word and present it to the rest of the class.

Star Light, Star Bright. Discuss with the students how groups of stars are called constellations. Explore star-gazing tips by visiting the American Museum of Natural History’s website: https://www.amnh.org/explore/ology/astronomy/a-kid-s-guide-to-stargazing

You can have older students make a Sky Journal as described on the website. Younger students can create simple constellations (e.g., the Little Dipper) by drawing dots on black paper to show the stars and joining the dots with a gold or silver pen.

With Flying Colors. The astronomers in this book used a spectroscope to separate light into colors while studying the stars. Give pairs of students a prism to explore how light is refracted. Have them use the prism with natural light (by the window) and a flashlight (with the shades closed). What do they notice? Ask the students to record their observations. What do they see? Why? How does a prism work?

See the Stars. If possible, bring students to a local planetarium or observatory to learn more about the moon, the stars, and the universe. This will engage students of all ages. If a field trip is not possible, virtual planetarium field trips are available to share with students.
MARYAM’S MAGIC: THE STORY OF
MATHEMATICIAN MARYAM MIRZAKHANI

By Megan Reid  Illustrated by Aaliya Jaleel

About the Book
When Maryam Mirzakhani was young, she loved to draw and tell stories, but she did not enjoy mathematics at all. Until one day she started learning geometry and realized that math tells stories of its own. Maryam became fascinated with number stories and excelled at mathematics. She shared her ideas with people from around the world and became the first woman and the first Iranian to receive the Fields Medal, the most prestigious math award. Although Maryam died at the young age of 40 from cancer, her innovative mathematical discoveries have endured.

Discussion Questions
• Maryam loved being a storyteller. What kinds of stories did she tell her little sister?
• What did Maryam want to be when she grew up?
• How did things change for Maryam and other Iranian girls after the war ended?
• How did Maryam first feel about math? Why did her feelings change?
• What was special about Maryam and Roya entering the International Mathematical Olympiad?
• Where did Maryam attend graduate school? What language did she speak there? How did she use her native language?
• What did Maryam do when she had to solve an especially difficult equation?
• What is “infinity”?
• When confronted with a mathematical problem, Maryam said, “It’s not only the question, but the way you try to solve it.” What did she mean?
• Why was one of Maryam’s discoveries called “the magic wand theorem”? How did it help people all over the world?
• When Maryam won the Fields Medal, the greatest achievement in mathematics, how did she reflect on her childhood?

Extension Activities
When I Grow Up. When Maryam grew up, she combined her love of math, art, and storytelling to become a mathematician and a professor. Ask the students to reflect on this. Then, in pairs or small groups, have the students share their own interests and passions. After the small group discussions, ask the students to write about how they might integrate all of their own passions into a future career. What could they choose to do? How would their skills and interests help them?

Shape Up. When Maryam studied geometry, she developed a love for shapes. Present students with stencils, outlines, or plastic models of many different shapes and ask students to identify them. Then give the students a large piece of paper and have them draw shapes to create a picture. What happens when they combine shapes? What happens when they draw the same shape repeatedly? What happens when they overlap shapes? Are there different kinds of each shape, such as a triangle, or do all triangles look the same? Encourage the students to explore shapes in many ways and then add color to their drawings. Display these in the classroom.

Math Medal. In high school, Maryam entered the International Mathematical Olympiad, a math competition for students. She achieved a perfect score and won a medal. In your classroom, design a Math Olympiad event for your students. Divide the class into teams and present the teams with appropriate math questions for their grade level. Keep score, and ultimately present the winning team members with a Math Medal!
THE HIGHEST TRIBUTE: THURGOOD MARSHALL’S LIFE, LEADERSHIP, AND LEGACY

By Kekla Magoon Illustrated by Laura Freeman

About the Book
When Thurgood Marshall was young, he wanted to change the world. When he saw injustice, his parents encouraged him to break the boundaries set by the country’s laws. Thurgood began using his words and ideas to persuade others to see things differently. He fought for equality and civil rights through his school and college debate teams. He continued to effect change as a prominent lawyer, as a judge, and ultimately, as a Supreme Court Justice. Thurgood’s presence on the Supreme Court helped to change laws and bring equality to all citizens of the United States.

Discussion Questions
• Thurgood decided at a young age to change things he didn’t like about the world. What did he change in second grade?
• What did he notice about Baltimore, the city in which he grew up? What did he want to change? Why?
• What is segregation?
• How did Thurgood’s parents support and encourage him?
• When Thurgood misbehaved at school, his teacher punished him by making him read the United States Constitution. What happened?
• Why did Thurgood enjoy the debate club? How did he win arguments?
• How did Thurgood change the debate team at Lincoln University?
• When Thurgood attended Howard University Law School, he met Professor Houston. What did they have in common?
• What was Thurgood’s most famous case? How did this case, Brown vs. Board of Education of Topeka, change the country?
• What was Thurgood’s nickname? Why?
• In 1961, what did President Kennedy ask Thurgood to do? How did this job differ from being a lawyer?
• For what important job did President Johnson nominate Thurgood in 1967? Why was this groundbreaking?
• What unusual action did Thurgood take when he retired from the Supreme Court? Why?

Extension Activities
Time for a Change. Thurgood believed that if there was something wrong in the world, he should try to change it. Ask students to think about what they believe should change in their town, their state, their country, or the world. Why do they believe this? How could they help bring about change? Have students write an opinion piece, including their argument, reasons for their opinion, and actions they could take to effect this change.

Hold Court! Thurgood’s major court cases are described at the end of the book. Assign pairs or small groups of students one of these court cases. Ask the students to research further details about the case and discuss the implications of the decision. Have the students present their findings to the rest of the class.

That’s Debatable. Thurgood learned to use words and ideas to sway people’s opinions. He loved the debate club because he believed it was a great way to ask questions and discuss solutions. Plan to have students participate in a debate in the classroom. Choose an appropriate issue or question for the students to explore and divide them into teams. Have the students prepare their thoughts and solutions, practice articulating them, and then actually express them in a debate. After the event, ask the students to reflect upon and discuss the power of words and ideas to change opinions and perspectives.
About the Book

In this eye-opening book, the author asks: "How do we use—and reuse—the plastic we need, refuse the plastic we don’t, and avoid abusing the earth?" This book is filled with astonishing facts and figures that make it impossible for readers to ignore the catastrophic consequences of using plastic the way we do. Fortunately, the author also shares ways that we can turn the tide, and many of those ideas have been created and led by children! Readers will be inspired to learn more and join in to protect our planet.

Discussion Questions

• Read aloud the introduction written by Milo Cress. Was Milo asking people to make a big change in their lives or a small one? Can a small change make a difference in the world? How?
• Do we need to use plastic? Why or why not? Why do we use so much plastic?
• What are some surprising things that contain plastic?
• What effects does plastic have in our oceans? How does it affect people, animals, and the environment?
• Plastic bags in our oceans are particularly dangerous. What are alternatives to using plastic bags?
• Describe what can happen when a plastic utensil is thrown in the trash.
• How might jellyfish and wax moth caterpillars help to solve the plastic problem?
• Why is it important for children to speak up regarding this problem? Do you think children can make a difference?
• What did you notice about the way the author wrote this book? Did you notice that she used many different forms of poetry?

See the Signs. Review the road signs on pages 20-21. Discuss why road signs are important and how they direct people or alert them to possible hazards or changes along the roadways. Tell the students they will be creating a road sign which could inform people about the hazards of using plastic. Discuss what the sign might look like. For example, it might encourage less use of plastic (“Save our oceans, don’t use plastic”), or it might suggest an alternative to using plastic (students can refer to page 40, ‘Use This, Not Plastic,’ for ideas). Display the signs around the school to inform others about the plastic problem.

Power to the Children. Have students write an informational report about a child/young adult who became an activist to fight the global use of plastic. Students can write about one of the children included in the book (Milo Cress, Fionn Ferreira, Sammy Vance, Justin Sather, Xóchitl Guadalupe Cruz López) or research another young person. Students should include what this person did as an activist and why he or she decided to get involved. Students should write a structured report which includes a topic sentence, facts, and a closing sentence.

Bottle It. There are lots of ways to reuse a plastic water bottle. The best way is to turn it into something new! Have the students bring in empty water bottles and brainstorm ideas about how to reuse the bottles. Try some of the students’ ideas or choose one of the following water bottle craft ideas. Directions for these simple crafts can be easily found on the internet.

• Make a vase
• Create a supply organizer
• Design a hanging planter
• Build a stress relief bottle
• Make a bottle bird feeder
• Concoct an oil and water discovery bottle
• Create a plastic bottle shaker

Extension Activities

Pollution Solution. Read about “Mr. Trash Wheel” on pages 18-19. Visit the website https://www.mrtrashwheel.com to watch videos and learn more about Mr. Trash Wheel. Discuss how this machine helps the city of Baltimore with their river pollution. Then ask students to think of their own invention that could help with the plastic problem. What would it look like? What would it do? Students should draw it, name it, and write about how it would work. (Younger students can describe it orally.) Then provide students with materials such as cardboard tubes, colored paper, pipe cleaner stems, and index cards to “build” their invention. Who knows, maybe one of their ideas might actually work!