Black History Month STEM Book Collection



Mid-Valley STEM-CTE HUB

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Black History Month Collection

This book collection kit celebrates the inspiring achievements of Black scientists, mathematicians, and inventors who broke barriers and changed the world. From the brilliant women of Hidden Figures who helped launch NASA's space missions, to trailblazing figures like Katherine Johnson and Mae Jemison, each book highlights perseverance, intelligence, and innovation in the face of adversity. Featuring engaging biographies and beautifully illustrated stories, this kit introduces young readers to influential Black voices in STEM and encourages them to dream big, think boldly, and reach for the stars.

Grade Level

2nd - 8th

Reading Level

A mix of beginner and intermediate

Contents of Kit

- Hidden Figures: The True Story of Four Black Women and the Space Race by Margot Lee Shetterly, illustrated by Laura Freeman - Based on the New York Times bestselling book and the Academy Award-nominated movie, the incredibly inspiring true story of four black women who helped NASA launch men into space to picture book readers! In this beautifully illustrated picture book edition, we explore the story of four female African American mathematicians at NASA, known as "colored computers," and how they overcame gender and racial barriers to succeed in a highly challenging STEM-based career.
- Ready To Read: You Should Meet Mae Jemison by Laurie Calkhoven, illustrated by Monique Dong - Meet Mae Jemison, the first African-American female astronaut!



Contents of Kit (cont.)

- Reaching for the Moon: The Autobiography of NASA Mathematician Katherine Johnson by Katherine Johnson - As a young girl, Katherine Johnson showed an exceptional aptitude for math. In school, she quickly skipped ahead several grades and was soon studying complex equations with the support of a professor who saw great promise in her. But ability and opportunity did not always go hand in hand. As an African American and a girl growing up in an era of brutal racism and sexism, Katherine faced daily challenges. Still, she lived her life with her father's words in mind: "You are no better than anyone else, and nobody else is better than you."
- Black Pioneers of Science and Invention by Louis Haber A readable, perceptive account of the lives of fourteen gifted innovators who have played important roles in scientific and industrial progress. The achievements of Benjamin Banneker, Granville T. Woods, George Washington Carver, and others have made jobs easier, saved countless lives, and in many cases, altered the course of history.
- Black Inventors: 15 Inventions That Changed the World by Kathy Trusty -Throughout history, Black inventors have achieved some of the world's greatest advancements in science, technology, engineering, and math. This book highlights 15 men and women who made a big impact with their inventions—from Marie Van Brittan Brown, who created the first home security system, to Mark Dean, who invented the personal computer. Learn all about each inventor's creative process, their invention, and the way it's benefited our world.
- Black Women in Science by Kimberly Brown Pellum, PhD Throughout history, Black women have blazed trails across the fields of science, technology, engineering, and mathematics. Black Women in Science brings something special to black history books for kids, celebrating incredible Black women in STEM who have used their brains, bravery, and ambition to beat the odds. Discover 15 science stories for kids that explore the lives of bold female scientists. Learn how each of them advanced their STEM fields and fought to build a legacy. Through the triumphs of these amazing women, you'll find remarkable role models.

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Learning Extensions

STEAM Connections: Engineering - Math - Science

Learning Objectives:

- Explore the contributions of African American women in STEM, with a focus on trailblazers like Katherine Johnson and Mae Jemison, highlighting their groundbreaking achievements.
- Understand the challenges faced by Black women in science and technology and how they overcame barriers to make lasting contributions.
- Appreciate the intersection of history, science, and gender by examining the personal and professional experiences of Black women in STEM fields.
- Engage with biographies to enhance reading comprehension and critical thinking while learning about the real-life experiences of historical figures.
- Inspire future STEM leaders by showcasing role models who exemplify perseverance, innovation, and excellence despite adversity.

Career Connections:

- Aerospace and Space Exploration Insight into various aerospace careers, including NASA.
- **Mathematics and Engineering -** Focus on careers in math and engineering, particularly through the work of women in space missions and technology.
- Inventing and Innovation Highlighting careers in product development and entrepreneurship, showing how innovations shape industries.
- Science and Research Understanding careers in scientific research and analysis, especially through the achievements of Black women in STEM.
- **STEM Education and Mentorship** Inspiring careers in education, mentorship, and advocacy, encouraging future generations in underrepresented STEM fields.



Resources and Accessibility

Safety Guidelines

- Avoid Food and Drinks Near Books -Encourage clean, dry reading areas to prevent spills, stains, or water damage.
- Handle Books Gently Model how to turn pages carefully, avoid bending spines, and store books upright or flat.
- Use Clean Hands Have students wash or sanitize hands before handling shared books to keep materials in good condition.
- Designate a Safe Storage Spot Store books in a sturdy, dry, and clearly labeled bin or tote to protect them from wear and tear between uses.

<u>Accessibility</u>

- Use Book Stands or Holders Provide angled book holders or clipboards to support independent reading for students with mobility or motor challenges.
- Pair Audio with Print Use audiobooks or teacher-read recordings when available to support students with reading disabilities or visual impairments.
- Incorporate Read-Alouds and Peer Reading - Offer opportunities for shared or buddy reading to help students who benefit from auditory learning or support with decoding.
- Offer Visual Aids and Discussion Prompts - Supplement books with images, models, or key vocabulary cards to reinforce understanding and engagement.

Library Catalog



Library Resources



Feedback

QR to feedback survey

