

# Best



# Books



National  
Science  
Teaching  
Association

## Winning Titles

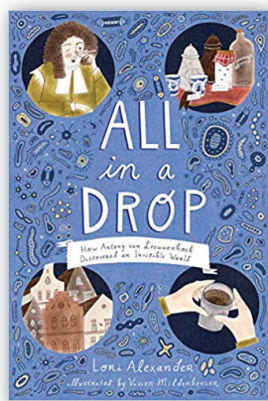
STEM books offer endless opportunities for engaged learning. They invite students to see the world differently and to think in new ways about what they observe.

We have chosen titles that provoke readers to examine the “thinking stance” of characters—not simply to look at actions and results.

Best STEM Books winners explore problems and possible solutions in the scientific world and, where applicable, in the lives of the protagonists. Instead of focusing on specific content, the Best STEM Books emphasize real-world issues that cross disciplinary boundaries.

Teachers can use these books to foster and model “minds-on” work. Parents, grandparents, and other caregivers can involve even the very youngest children in the process of STEM thinking.

How do we prepare 21st-century kids for challenges and jobs that we at present cannot even describe? The Best STEM Books help by celebrating convergent and divergent thinking, analysis and creativity, persistence, and the sheer joy of figuring things out.



### All in a Drop: How Antony van Leeuwenhoek Discovered an Invisible World

Lori Alexander

Illustrated by Vivien Mildenberger  
Houghton Mifflin Harcourt Books for Young Readers

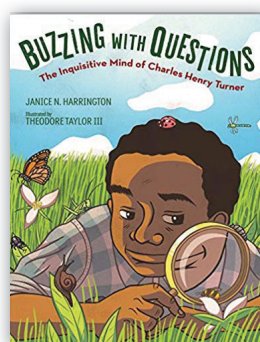
Meet Antony van Leeuwenhoek, the first person to see bacteria, protozoa, and cells “all in a drop” of water with his revolutionary microscopes in the late seventeenth century.



### Born Just Right

Jordan Reeves and Jen Lee Reeves  
Simon & Schuster / Aladdin

The autobiography of a brave, innovative, and inspiring young lady who meets challenges with passion while spreading awareness about limb differences.

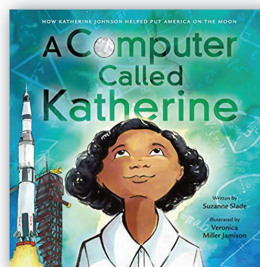


### Buzzing with Questions: The Inquisitive Mind of Charles Henry Turner

Janice N. Harrington

Illustrated by Theodore Taylor III  
Boyd's Mills & Kane / Calkins Creek

Discover the power of questioning and the positive impact Charles Henry Turner had on how we observe our natural world.

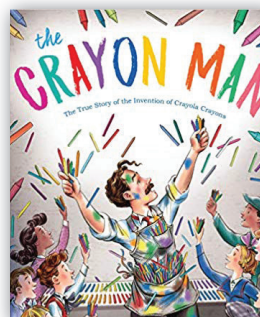


### A Computer Called Katherine: How Katherine Johnson Helped Put America on the Moon

Suzanne Slade

Illustrated by Veronica Miller Jamison  
Little, Brown Books for Young Readers

Katherine Johnson loved counting and math from her earliest years. As an adult, she broke through societal barriers against black women to become an integral part of NASA's successful race to the moon.

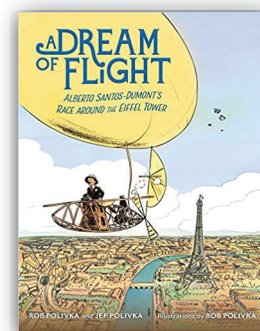


### The Crayon Man: The True Story of the Invention of Crayola Crayons

Natascha Biebow

Illustrated by Steven Salerno  
Houghton Mifflin Harcourt Books for Young Readers

Discover the true story of the creation of Crayola crayons by an inventor who persevered in order to bring vibrant colors to children's fingertips.

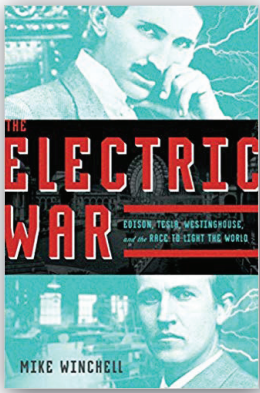


### A Dream of Flight: Alberto Santos-Dumont's Race Around the Eiffel Tower

Rob Polioka and Jef Polioka

Macmillan Children's Publishing Group / Farrar, Straus and Giroux (BYR)

Take flight atop *Airship No. 6* with Alberto Santos-Dumont around the Eiffel Tower. Through a series of attempts, failures and lessons, young Alberto conquered the skies and opened the door for aviation.



## The Electric War: Edison, Tesla, Westinghouse and the Race to Light the World

Mike Winchell

Macmillan Children's Publishing Group / Henry Holt and Co. (BYR)

Edison, Tesla, Westinghouse, and a world in need of electricity. Go into the mind of three geniuses and the progressive thinking that changed the way we view the world.

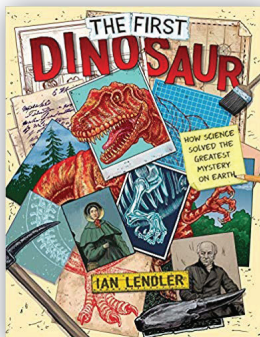


## Elon Musk: A Mission to Save the World

Anna Crowley Redding

Macmillan Children's Publishing Group / Feiwel & Friends

From electric cars to space exploration, this book describes how the inventor Elon Musk is tackling some of humankind's most challenging problems.

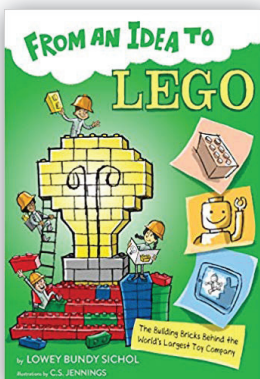


## The First Dinosaur: How Science Solved the Greatest Mystery on Earth

Ian Lendler

Illustrated by C. M. Butzer  
Simon & Schuster / Margaret K. McElderry Books

Read about the time before people discovered dinosaurs. Medical doctors, curiosity collectors, and quarrymen pieced together the puzzle of unfamiliar animal bones to discover the existence of dinosaurs.

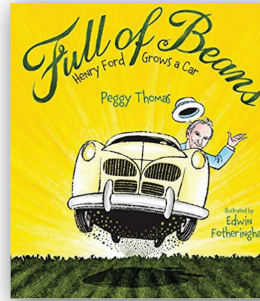


## From an Idea to LEGO: The Building Bricks Behind the World's Largest Toy Company

Lowey Bundy Sichol

Illustrated by C. S. Jennings  
Houghton Mifflin Harcourt Books for Young Readers

A unique sneak peek into the creative business path of LEGO foundations, where the theory of play meets engineering and design problem-solving.



## Full of Beans: Henry Ford Grows a Car

Peggy Thomas

Illustrated by Edwin Fotheringham  
Boyd's Mills & Kane / Calkins Creek

Encouraged by his mother to "do something useful," Henry Ford discovers many ways to innovate using the under-appreciated, but highly adaptable, soybean.



## Guitar Genius: How Les Paul Engineered the Solid Body Electric Guitar and Rocked the World

Kim Tomsic

Illustrated by Brett Helquist  
Chronicle Books

Music will never be the same because of Les Paul's out of the box thinking. Through transformative and inspired modifications, young Paul thinks up great inventions that revolutionized music forever.

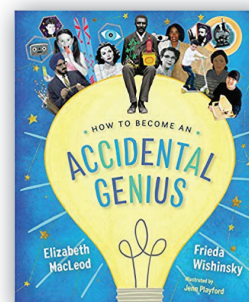


## The House That Cleaned Itself: The True Story of Frances Gabe's (Mostly) Marvelous Invention

Laura Dershewitz and Susan Romberg

Illustrated by Meghann Rader  
The Innovation Press

A delightful story about the clever inventions of Frances Gabe as she worked to create a house that could clean itself.



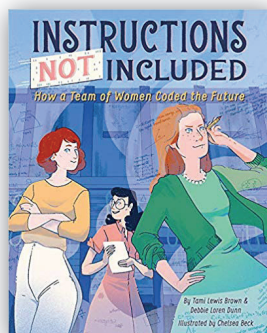
## How to Become an Accidental Genius

Elizabeth MacLeod and Frieda Wishinsky

Illustrated by Jenn Playford  
Orca Book Publishers

This book highlights the thinking and problem solving strategies of ordinary people that have led to well-known inventions such as popsicles, microwaves, and teflon.

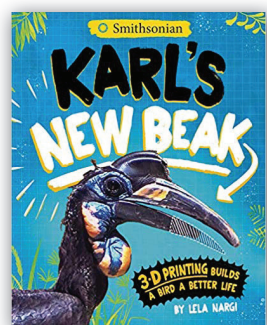
## Winning Titles



### Instructions Not Included: How a Team of Women Coded the Future

*Tami Lewis Brown and Debbie Loren Dunn*  
Illustrated by *Chelsea Beck*  
Disney-Hyperion

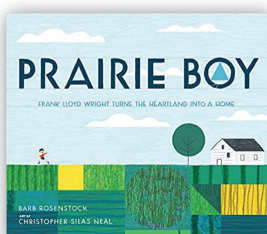
This is the true story of three WWII era women who, without any guidance or instructions, managed to command a computer and, in the process, change the modern world.



### Karl's New Beak: 3-D Printing Builds a Bird a Better Life

*Lela Nargi*  
Illustrated by *Harriet Popham*  
Capstone Editions

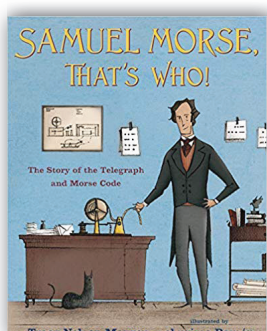
Tells the true story of Karl, a bird with a broken beak, and the team of people who used problem solving and 3-D printing to help him live a better life.



### Prairie Boy: Frank Lloyd Wright Turns the Heartland into a Home

*Barb Rosenstock*  
Illustrated by *Christopher Silas Neal*  
Boyd's Mills & Kane / Calkins Creek

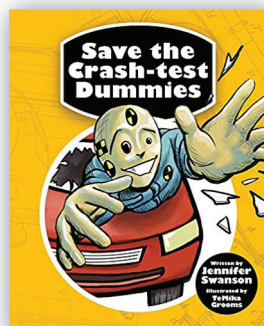
Find out how Frank Lloyd Wright's childhood on the Wisconsin prairie impacted his architectural designs which celebrate the shapes of the natural world.



### Samuel Morse, That's Who! The Story of the Telegraph and Morse Code

*Tracy Nelson Maurer*  
Illustrated by *El Primo Ramón*  
Macmillan Children's Publishing Group / Henry Holt and Co. (BYR)

Through failures and revisions, Samuel Morse's persistence resulted in changing communications forever – an inspiring story of a great inventor.



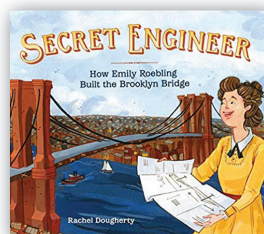
### Save the Crash-test Dummies

*Jennifer Swanson*  
Illustrated by *TeMika Grooms*  
Peachtree Publishing Company Inc.  
From bumpers to brakes, and seat belts to airbags, this engaging book explores the science and history of automobile safety design through the eyes of crash-test dummies.



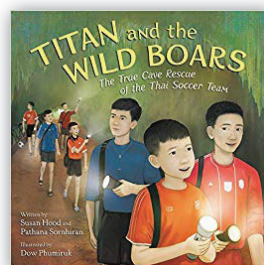
### Saving the Tasmanian Devil: How Science is Helping the World's Largest Marsupial Carnivore Survive

*Dorothy Hinshaw Patent*  
Houghton Mifflin Harcourt Books for Young Readers  
Follow the author as she travels to see how scientists are working with a variety of technology to save Tasmania's icon, the Tasmanian Devil, from being wiped out by disease.



### Secret Engineer: How Emily Roebling Built the Brooklyn Bridge

Written and illustrated by *Rachel Dougherty*  
Macmillan Children's Publishing Group / Roaring Brook Press  
An incredibly inspiring true story of the young woman who supervised the building of the Brooklyn Bridge after her husband, the chief engineer, became ill during the bridge's construction.



### Titan and the Wild Boars: The True Cave Rescue of the Thai Soccer Team

*Susan Hood and Pathana Sornhiran*  
Illustrated by *Dow Phumiruk*  
HarperCollins  
Harrowing details about saving a boys soccer team and their coach. They had become trapped after an afternoon of cave exploration during the monsoon season.