Best STEM Books
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.

Winning Titles

**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*

Boyds 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 Polivka and Jef Polivka*

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
Boyds 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.

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.
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
Boyds 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.