

# Tech Savvy for Girls

## STEM Booklist

### **Fiction:**

***Catalyst*** by Laurie Halse Anderson

Straight-A student Kate Malone is waiting to hear from MIT when her perfectly organized world starts to spiral out of control. Then, something happens that truly blows it apart.

***Find Me*** by Romily Bernard

Wick Tate is a superb computer hacker--skills she'll need to use when Tessa Waye's diary shows up at her house with a simple request.

***Into the Parallel*** series by Robin Brande

High school senior and amateur physicist Audie Masters has discovered what no other physicist has been able to prove: that parallel universes do exist, and there is a way to journey into them. She also discovers something else: a parallel version of herself, living the kind of life Audie never could have imagined for herself. Now Audie is living that life, too, full of adventure, romance, and reality-bending science. It's all more than she could have hoped for--until something goes wrong.

***The Testing*** series by Joelle Charbonneau

Sixteen-year-old Malencia (Cia) Vale is chosen to participate in The Testing to attend the University; however, Cia is fearful when she figures out her friends who do not pass The Testing are disappearing.

***Bad Taste in Boys*** by Carrie Harris

Future physician Kate Grable is horrified when her high school's football coach gives team members steroids, but the drugs turn players into zombies and Kate must find an antidote before the flesh-eating monsters get to her or her friends.

***The Opposite of Hallelujah*** by Anna Jarzad

When Caro's older sister Hannah returns, she is having a hard time adjusting. Hannah is the spiritual sister while Caro uses science to help her understand the world around her. But secrets about Hannah's past lead Caro to better understand the both of them.

***The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope*** by William Kamkwamba

An enterprising teenager in Malawi builds a windmill from scraps he finds around his village and brings electricity, and a future, to his family.

***Adaptation*** by Malinda Lo

While on her way back from an academic competition, Reese is in an accident and wakes up in a secret government lab really quite different. Can she find out what happened to her and what it means?

***3:59*** by Gretchen McNeil

Two girls who are incredibly intelligent in physics use that knowledge to save two parallel worlds.

***Cinder*** by Marissa Meyer

As plague ravages the overcrowded Earth, observed by a ruthless lunar people, Cinder, a gifted mechanic and cyborg, becomes involved with handsome Prince Kai and must uncover secrets about her past in order to protect the world in this futuristic take on the Cinderella story.

***A Girl Named Digit*** by Annabel Monaghan

After identifying a terrorist plot, a brilliant seventeen-year-old girl from Santa Monica, California, gets involved with the young FBI agent who is trying to ensure her safety.

***The Rithmatist*** by Brandon Sanderson

As Wild Chalklings threaten the American Isles and Rithmatists are humanity's only defense, Joel can only watch as Rithmatist students learn the magical art that he would do anything to practice.

**Non-Fiction:**

***100 Essential Things You Didn't Know You Didn't Know*** by John D. Barrow

Mathematics can tell you things about the world that can't be learned in any other way. From winning the lottery, placing bets at the races and escaping from bears to sports, Shakespeare, Google, game theory, drunks, divorce settlements and dodgy accounting; from chaos to infinity and everything in between, this book has all the answers!

***The Book of Potentially Catastrophic Science: 50 Experiments for Daring Young Scientists*** by Sean Connolly

Presents an introduction to thirty-four scientific breakthroughs, discussing the history of their discovery and providing instructions for conducting experiments which demonstrate their principles.

***The Elements: A Visual Exploration of Every Known Atom in the Universe*** by Theodore Gray and Nick Mann

An eye-opening, original collection of gorgeous, never-before-seen photographic representations of the 118 elements in the periodic table.

***The Story of Science Series*** by Joy Hakim

Narrates the evolution of scientific thought from ancient times to the present. With lively, character-driven narrative, Hakim spotlights the achievements of some of the world's greatest scientists and encourages a similar spirit of inquiry in readers.

***Science: The Definitive Visual Guide*** by Adam Hart-Davis, Douglas Paler, and Jeremy Cherfas

This is the complete illustrated science encyclopedia covering the history, key discoveries, invention and people.

***101 Things You Wish You'd Invented and Some you Wish No One Had*** by Richard Horne and Tracery Turner

Filled with fascinating details about everything from the most common everyday object to inventions which changed society, this title also distinguishes the strokes of genius from discoveries of sheer chance, or millennia of evolution - and reveals the real reason why Alfred Nobel had to establish a peace prize.

***Pythagoras: Pioneering Mathematician and Musical Theorist of Ancient Greece***, by Dimitra Karamanides

Pythagoras, known to us primarily for the Pythagorean theorem that bears his name, was a Greek mathematician and philosopher. He was interested not only in math but made advances in astronomy, music, physical science, medicine, and many other areas as well. This authoritative volume shows that Pythagoras still has the power to inform and inspire a life lived for the love of knowledge.

***Women of Steel and Stone: 22 Inspirational Architects, Engineers, and Landscape Designers*** by Anna M. Lewis

An inspiration for young people who love to design, build, and work with their hands, *Women of Steel and Stone* tells the stories of 22 female architects, engineers, and landscape designers from the 1800s to today. Engaging profiles based on historical research and firsthand interviews stress how childhood passions, perseverance, and creativity led these women to overcome challenges and break barriers to achieve great success in their professions.

***The Way Toys Work: The Science Behind the Magic 8 Ball, Etch-A-Sketch, Boomerang, and More*** by Ed Sobey and Woody Sobey

Profiling 50 of the world's most popular playthings—including their history, trivia, and the technology involved—this guide uncovers the hidden science of toys.

***Team Moon: How 400,000 People Landed Apollo 11 on the Moon*** by Catherine Thimmesh

Culled from direct quotes from the people behind the scenes, NASA transcripts, national archives and NASA photos, the whole story of Apollo 11 and the first moon landing emerges.

***Mr. Lincoln's High-Tech War*** by Allen Thomas

Demonstrates why Lincoln's appreciation of the importance of technology, his understanding of the art of war, and his mastery of military strategy were key elements in the winning of the American Civil War.



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