

“For the lesson plan this month, I want to share some of my favorite STEM-related picture books that are ideal for reading aloud in your elementary classroom. Besides just being fun, these books feature engineering, problem-solving, number sense, imagination and creativity, critical thinking, and trial-and-error. They show the Engineering Design Process in action!” - Tami Daniels, ACE Instructor

Christina Katerina and the Box by Patricia Lee Gauch

Such a creative and delightful story! Christina transforms a giant cardboard box into wonderful and imaginative playthings in her front yard. With delightful illustrations to match the clever engineering ideas, your students will love hearing about Christina’s box. Follow-up with your own “shoebox” STEM challenges as a link to the book.

Sam’s Sandwich by David Pelham

This adorable and GROSS book will have kids laughing with anticipation! As Sam builds the perfect sandwich, he sneaks in a few unpleasant surprises. The book’s rhyming format and lift-the-flap style will appeal to even your youngest students, and its yucky premise will make everyone squirm!

The Marvelous Thing that Came from a Spring by Gilbert Ford

This book tells the story of how one of America’s favorite toys, the Slinky, was created. Just imagine the STEM activities you can link with this book!

After the Fall by Dan Santat

It’s the untold story of “How Humpty Dumpty Got Back Up Again!” After our friend Humpty’s fall from the wall, he realizes what he’s missing by staying down on the ground. With the help of science, and a little bit of courage, Humpty faces danger head-on to overcome his fears.

Rosie Revere, Engineer by Andrea Beaty

A favorite of kids and teachers, alike. The rhyme scheme makes it an easy read, and the can-do spirit of the main character is irresistible ... we are cheering for her success by the end!

(Bonus: Take this book to new heights by sharing the video of Astronaut Kate Rubins reading it aloud while aboard the International Space Station as part of NASA’s “Storytime from Space!” <http://storytimefromspace.com/rosie-revere-engineer-2/>

(Extra Bonus: Make sure you also check out [Iggy Peck, Architect](#) and [Ada Twist, Scientist](#) by Beaty.)

[What Do You Do With an Idea?](#) By Kobi Yamada

A beautiful story that is beautifully illustrated! The reader will make an instant connection with the “idea,” and there is great satisfaction in the end when the idea is shared with the world.

[Cloudy With a Chance of Meatballs](#) by Judi Barrett

You’ve seen the movie, now read the book! Your students’ imaginations will soar with this outlandish tale as grandpa shares a bedtime story from the town of Chewandswallow.

[Plants Can’t Sit Still](#) by Rebecca Hirsch

Students will be drawn in by the beautiful images, and you will love how it teaches the science of growing things. With colorful vocabulary to match the colorful pictures, this book can be the perfect introduction to your plant life studies. Add on your STEM activities about how seeds are transferred for a complete unit.

[Tyrannosaurus Math](#) by Michelle Markel

Everyone loves dinosaurs, and your students are sure to love this book! From the time T-Math is born, he has a love of counting! Starting with simple math problems, he first tries addition and grouping. Then as our tyrannosaurus buddy grows, so do his math skills. The number sentences move into multiplication and fractions, all in a fun and funny way.

[My Little Sister Ate One Hare](#) by Bill Grossman

Here’s another super-gross book for your math shelf! Reminiscent of “The Old Woman Who Swallowed a Fly,” this tells the progressive story of a little girl who ate anything and everything, including lizards, worms, and snakes! Imagine how awful in the end when she is forced to eat PEAS! “Oh, my goodness! What a mess!”

[The Wondrous Whirligig](#) by Andrew Glass

A story about grit, perseverance, and imagination. It’s the story of the Wright Brothers and their wonderful flying machine. They start with an idea, then a plan, and then a test. Even when everyone tells them their invention will never work, the boys stick with it, and their invention changes the world!

There are so many other delightful picture books that fit well in your elementary STEM classroom. What are some of your favorites?

Tami Daniels, ACE Instructor

National STEM Academy, Museum of Aviation Foundation