Books about Innovation and Inventions For Grades K-5

Picture Books:

Beaty, Andrea. **Rosie Revere, Engineer,** 2013. JE BEATY Rosie, available in other formats, too. A young aspiring engineer must first conquer her fear of failure.

Compestine, Ying Chang. **The Story of Kites**, 2003. JE COMPESTINE Story Long ago in China, three brothers become tired of chasing birds from their family's rice fields and experiment with ways to make the job easier.

Howe, Katey, Illus. Elizabet Vuković. Be a Maker, 2019. JE HOWES Be How many things can you make in a day? A tower, a friend, a change? Straightforward questions engage readers in a discussion about the things we make and the ways we can make a difference in the world.

Jones, Pip. Illus by Sara Ogilvie. Izzy Gizmo, 2017. JE JONES Izzy

Izzy Gizmo loves to invent but gets frustrated when her inventions fail to work properly, so when she finds a crow with a broken wing her grandfather urges her to persist until she finds a way to help.

Reynolds, Peter H. Going Places, 2014. JE REYNOLDS Going

Rafael has looked forward to the Going Places contest and builds his go-cart from a kit in record time, but his neighbor, Maya, has a more interesting and creative idea for her entry and Rafael decides to help.

Rossell, Judith. Oliver, 2012 JE ROSSELL Oliver

Oliver likes finding things out, so when his mother cannot explain the gurgling in the bathtub he builds a submarine, goes down the drain, and meets a group of vacationing penguins.

Shannon, George. Turkey Tot, 2013 JE SHANNON Turkey

When Turkey Tot and his friends spot some fat, juicy blackberries hanging high above their heads, Turkey Tot tries hard to figure out a way to reach them.

Spires, Ashley. The Most Magnificent Thing, 2014. JE SPIRES Most

A little girl has a wonderful idea. With the help of her canine assistant, she is going to make the most magnificent thing! She knows just how it will look. She knows just how it will work. But making the most magnificent thing turns out to be harder than she thinks.

Spiro, Ruth, Illus. by Holly Hatam. Made by Maxine, 2018. JE SPIRO Made

Maxine loves making new things from old things and tinkering until she has solved a problem. She is determined to create something to allow her goldfish to march in the school pet parade – can she do it?

Wong, Janet S. The Dumpster Diver, 2007. JE WONG Dumpster

Once a month--every week in the summer--Steve the electrician dons special gear and, with the help of youngsters who live in his building, dives into a dumpster seeking useful objects that they can transform into imaginative new ones.

Juvenile Fiction/Chapter Books and Graphic Novels:

Calandrelli, Emily. **Ada Lace on the Case**, 2017. JFIC CALANDRELLI Ada Eight-year-old Ada, who has a knack for science, math, and solving mysteries, teams up with her best friend, Nina, to find a missing dog. Look for others in the series.

Patterson, James, Chris Grabenstein. **Max Einstein: The Genius Experiment**, 2018. JFIC PATTERSON Max Max is recruited by a mysterious organization to solve some of the world's toughest problems using science. She's helped by a diverse group of young geniuses from around the globe as they invent new ways to power the farthest reaches of the planet. But that's only if the sinister outfit known only as The Corporation doesn't get to her first.

Reynolds, Paul. Sydney & Simon: Full Steam Ahead, 2014. JFIC REYNOLDS Full

Twins Sydney and Simon learn about the water cycle and use science, technology, engineering, arts, and math to solve the problem of their stuck window and thirsty flowers. Look for others in the series.

Selznick, Brian. The Invention of Hugo Cabret, 2007. JFIC/JCALD SELZNICK Invention

When twelve-year-old Hugo, an orphan living and repairing clocks within the walls of a Paris train station in 1931, meets a mysterious toy seller and his goddaughter, his undercover life and his biggest secret are jeopardized. A Caldecott Medal winner.

Sharpe, Luke. Billy Sure, Kid Entrepreneur, 2019. JFIC Sharpe Billy (#1 in a series)

Twelve-year-old genius inventor and budding businessman Billy Sure hosts an online contest for fellow kid innovators to share their own inventions and the winning submission will be produced by his company, Sure Things, Inc., but with so many fascinating entries, Billy wonders how he will ever choose a winner while helping other kids achieve their dreams at the same time. Look for others in the series.

Sosna-Spear, Quinn. The remarkable inventions of Walter Mortinson, 2019. JFIC SOSNA-SPEAR Remarkable

Walter Mortinson's *unusual* inventions cause nothing but trouble. Far off on Flaster Isle, famed inventor Horace Flasterborn plans to take Walter under his wing. When a letter arrives by unusual means offering Walter an apprenticeship, it isn't long before Walter decides to flee Moormouth to meet his destiny.

Stilton, Thea, Illus. by Barbara Pellizzari. **The Secret Invention**, 2014. JS THEA STILTON MOUSEFORD 5 The students of Mouseford Academy are participating in an enormouse science fair! Mice from schools around the world are all hoping to take the top prize. The Thea Sisters would love to win, but so would

Ruby Flashyfur - and she's willing to do whatever it takes! Can these mice play nice, or will the science fair be a total flop?

Yang, Gene Luen and Mike Holmes. Secret Coders, 2015. JGN SECRET CODERS

Welcome to Stately Academy, a school which is just crawling with mysteries to be solved! The founder of the school left many clues and puzzles to challenge his enterprising students. Using their wits and their growing prowess with coding, Hopper and her friend Eni are going to solve the mystery of Stately Academy no matter what it takes! Graphic Novel series

Nonfiction and Biographies:

Barton, Chris. Whoosh! Lonnie Johnson's Super-Soaking Stream of Inventions, 2016. JBIO Johnson, L B293w

Chronicles the life and achievements of the NASA engineer and inventor, from his childhood to his accidental invention of the Super Soaker water gun.

Becker, Helaine, Illus. by Dow Phumiruk. **Counting on Katherine: How Katherine Johnson Saved Apollo 13**, 2018. JBIO JOHNSON,K B395c

From Katherine's early beginnings as a gifted student to her heroic accomplishments as a prominent mathematician at NASA, *Counting on Katherine* is the story of a groundbreaking American woman who not only calculated the course of moon landings but, in turn, saved lives and made enormous contributions to history.

Cuban, Mark. **Kid Start up: How You Can Become an Entrepreneur**, 2018. JNF 658.11 C962k The stars of ABC's Shark Tank explain how a kid can discover a great business idea and get it off the ground.

DiCicco, Joan. The Unstoppable Garrett Morgan: Inventor, Entrepreneur, Hero, 2019. JBIO MORGAN, G D54u

The biography of Garrett A. Morgan, an African American entrepreneur and prolific inventor, whose bravery saved lives at the Cleveland Waterworks Disaster in 1916.

Edwards, Roberta. **Who Was Leonardo da Vinci?** 2005. JBIO LEONARD, V Ed26w Presents the life and accomplishments of the famous artist, scientist, engineer, and inventor.

Fontichiaro, Kristin. Design Thinking, 2015. JNF 620.0042 F684d

Readers will learn to analyze the efficiency of their plans, while still feeling encouraged to push forward with new ideas. Photos, sidebars, and callouts help readers draw connections between new concepts in this book and other makers-related concepts they may already know.

Fontichiaro, Kristin. Prototyping Your Invention, 2018. JNF 620.0042 F684p

Makers and inventors rely on prototypes to test out and refine their projects. Through simple text written to foster creativity and problem solving, students will the art of innovation. Large, colorful images show students how to complete activities.

Jones, Charlotte Foltz. Mistakes that Worked: The World's Familiar Inventions and How They Came to Be, 2016. JNF 609 J71m

Do you know how many things in your daily life were invented by accident? Their unusual tales, along with hilarious cartoons and weird, amazing facts, make up this fun-filled book about everyday items that had surprisingly haphazard beginnings.

Kahan, Alex. Entrepreneurship: Create your Own Business with 25 Projects, 2014. JNF 658.11 K12e Introduces the concept of entrepreneurship, covering how to develop ideas into business plans, marketing strategies, and money management.

Macaulay, David. The Way Things Work Now, 2016. JNF 600 M117w 2016

Text and numerous detailed illustrations introduce and explain the scientific principles and workings of hundreds of machines.

Mosca, Julia Finley. **The Girl Who Thought in Pictures: The Story of Dr. Temple Grandin**, 2017 JBIO GRANDIN, T M894g

Describes the life and accomplishments of the animal scientist and designer of cruelty-free livestock facilities, from her early life and autism diagnosis through her journey to become a livestock expert.

Provensen, Alice. The Glorious Flight: Across the Channel with Louis Bleriot., 1983. JNF/JCALD 629.13 P948g

A biography of the man whose fascination with flying machines produced the Bleriot XI, which crossed the English Channel in thirty-seven minutes in the early 1900's. A Caldecott Medal winner.

Wallmark, Laurie. Hedy Lamarr's Double Life: Hollywood Legend and Brilliant Inventor, 2019. JBIO LAMARR, H W214h

Hedy Lamarr became a movie legend, but her true loves were always science and engineering. During World War II, Hedy collaborated with another inventor on an innovative technology called frequency hopping. It was designed to prevent the enemy from jamming torpedo radio signals and commanding weapons to go off course.

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