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Books about Science and Scientists

509.22 / DEN Guinea Pig Scientists: Bold Self-Experimenters in Science and Medicine. 2005. 213 p.

From Booklist

Grade 5 & up From hundreds of examples gathered during a decade of research, the authors offer 10 enthralling case studies of scientists from the past several centuries who became their own test subjects--with occasionally fatal results. The accounts are lively, compelling, and not always for the squeamish: Peruvian medical student Daniel Carrion and American Dr. Jesse Lazear inoculated themselves with deadly tropical diseases; Werner Forssman inserted a catheter into his arm and then pushed it up to his heart; John Paul Stapp rode a rocket car that went from more than 600 mph to a standstill in 1.4 seconds to test jet pilot safety gear; Lazzaro Spallanzani, who studied digestion, swallowed numerous things that you probably wouldn't. Aside from the Curies, most of the subjects will be new, even to a well-read audience, and though some of their achievements may seem guirky (to say the least), the authors cogently discuss each experiment's significance in advancing our understanding of science and medicine. Illustrated with a mix of period black-and-white photos and Mordan's nineteenth-century-style portraits, and with commentary on changing attitudes toward experimenting on animals threaded throughout, the episodes make riveting reading as well as vintage booktalk material. Resource lists, a time line, and endnotes are appended.

Q523.4 / FRA

The Planet Hunters: The Search for Other Worlds by Dennis Brindell Fradin. 1997. 148 p.

Grade 5 and up Provides historical information on astronomy, the discovery of the planets, and the people who have made such discoveries.

J502.82 / BIO / Kunkel

Hidden Worlds: Looking Through a Scientist's Microscope by Stephen Kramer. 2001. 57 p.

From School Library Journal

Grades 4-8 An illuminating look at the work of a microscopist. Kunkel works with microscopes to explore science, both on his own and with specialists from related fields. This book contains many of his photos, most taken with electron microscopes. It's fascinating to see the magnified pictures of jellyfish, dust mites, and other creatures, neatly tinted to accentuate body features. Several opening pages, along with the front and back endpapers, are visually dazzling...The story of how he worked within the blast zone of Mount St. Helens in 1980 in order to study the effect of volcanic ash on algae is a vivid example of how exciting science can be...This title offers a wealth of scientific information along with an insightful look at the world of an individual scientist. <u>A Sampling of Picture Book and Photo Biographies of Scientists, Naturalists</u> <u>& Inventors</u>

J629.45 / BIO / ALD Reaching for the Moon by Buzz Aldrin. 2005.

J598 / BIO / Audubon

Audubon: Painter of Birds in the Wild Frontier by Jennifer Armstrong. 2003.

J508 / BIO / Andrews Dragon Bones and Dinosaur Eggs: A Photobiography of Explorer Roy Chapman Andrews by Ann Bausum. 2000. 64 p.

J520 / BIO / Banneker Benjamin Banneker by Melissa Maupin. 2000. 40 p.

J621.385 / BIO / Bell Always Inventing: A Photobiography of Alexander Graham Bell by Tom L. Matthews. 1999. 64 p.

973.73 / ARM

Photo by Brady: A Picture of the Civil War. 2005. 147 p.

From School Library Journal

Grade 6 Up–Armstrong chronicles the Civil War from Lincoln's election to his death with both a storylike narrative of events and a photo-essay. Unlike the war images we see today, Brady's pictures were either posed or they were of still objects. Since exposure in the brightest daylight in the 1860s took up to 10 seconds, even the slightest movement resulted in blurred images. Readers see soldiers, military camps, civilians, farms, battlefields: these same pictures were the first visual representations of war for America's nonmilitary folks. This book is also a look at early photographic techniques and offers a description of Brady's rare collection. (See also the award winning **Snowflake Bentley by Jacqueline Briggs Martin, 1998**, a picture book biography of a self-taught scientist who photographed thousands of individual snowflakes in order to study their unique formations.)

J574.5 / BIO / Carson

Rachel: The Story of Rachel Carson by Amy Ehrlich. 2003.

J540 / BIO / Curie Marie Curie by Leonard Everett Fisher. 1994.

J 576.8 / BIO / Darwin

The Tree of Life: A Book Depicting the Life of Charles Darwin, Naturalist, Geologist & Thinker by Peter Sis. 2003.

From School Library Journal

Grade 4 and up Sis offers an impressive homage to the life and ideas of Darwin through a fully illustrated, multilayered narrative augmented with copious charts, maps, and sketches.

J609 / BIO / Edison

Inventing the Future: A Photobiography of Thomas Alva Edison by Marfe Ferguson Delano. 2002. 63 p.

J530 / BIO / Einstein Odd Boy Out: Young Albert Einstein. 2004.

J599.884 / BIO / Fossey

Light Shing Through the Mist: A Photobiography of Dian Fossey by Tom L. Matthews. 1998. 64 p.

J520 / BIO / Galileo

Starry Messenger: A Book Depicting the Life of a Famous Scientist, Mathematician, Astronomer, Philosopher, Physicist Galileo Galilei created and illustrated by Peter Sis. 1996.

From Publishers Weekly

All ages - Extraordinary pictures light up this tribute to Galileo, telling the story of his discoveries, rise to prominence and excoriation by the Church. Sis (Follow the Dream), an experienced and sophisticated chronicler of history's visionaries, outdoes himself with his illustrations.

J567.9 / BIO / Hawkins

The Dinosaurs of Waterhouse Hawkins: An Illuminating History of Mr. Waterhouse Hawkins, Artist and Lecturer by Barbara Kerley. 2001.

J608.72 / BIO / McCoy

The Real McCoy: The Life of an African American Inventor by Wendy Towle. 1993.

J609 / ST

So You Want To Be An Inventor? by Judith St. George. 2002. 53 p.

From Publishers Weekly

All Ages - With a lighthearted style similar to the collaborators' Caldecott Medalwinning **So You Want to Be President?**, this volume furnishes brief sketches of inventors and inventions both famous and little-known.

Inventions and Inventors

J500 / BIO / MCC The Kid Who Named Pluto and Stories of Other Extraordinary Young People in Science by Marc McCutcheon. 2004. 85 p.

From School Library Journal

Grade 3-6–This book profiles nine people who made significant contributions to science while still quite young. Louis Braille and Robert Goddard are among the more famous, while others, such as television pioneer Philo Farnsworth and Venetia Burney, the girl who named Pluto, are less well known. Most of the figures are historical, but the inclusion of a couple of young geniuses from the 1990s adds contemporary perspective. All of them, four girls and five boys, are from Europe or the United States.

J609 / WUL

The Kid Who Invented the Trampoline: More Surprising Stories about Inventions by Don L. Wulffson. 2001. 120 p.

From Publishers Weekly

Learn how 50 different things, among them false teeth, parking meters and Post-it

notes, came to be in The Kid Who Invented the Trampoline: More Surprising Stories About Inventions by Don Wulffson. Leotards, for example, were named after Jules Leotard, a 19th-century French circus acrobat who was "in love... with himself." Designed with a retro look, the book offers two- to three-page sections for each invention and includes illustrations, period photographs and factoid sidebars.

J609 / SAN

Inventors by Martin W. Sandler. 1996. 93 p.

303.4 / DIA

Guns, Germs, and Steel: The Fates of Human Societies by Jared Diamond. 1997. 480 p.

Diamond has a fascinating chapter on invention and technological developments – "Necessity's Mother", pages 239 – 264

J973 / DAV

What a Great Idea! Inventions that Changed the World by Stephen M. Tomecek. 2003. 112 p.

From School Library Journal

Grade 5-9-Rather than presenting a "how it works" compendium or a series of minibiographies, Tomecek puts significant inventions and discoveries in a historical context. Dividing the text into five broad time periods, he offers a series of essays on important advances that occurred in each "age." For example, the Metal Age (3500 B.C.-A.D. 1) includes discussions of measurement, money, irrigation, waterwheels, and maps. Each two-page explanation provides some background and a brief description of how the invention works as well as information about its impact on society and on later discoveries. What emerges is a sense of interconnectedness that other books often lack. Especially in the early essays, the influence of Chinese, Egyptian, and other civilizations is clear. However, even the explanations of recent discoveries acknowledge that inventions seldom occur in isolation. Full-color diagrams and illustrations are well integrated into each spread, providing additional insights into the topic without cluttering the pages.

J609 / BEN

Eyewitness Books: Invention by Lionel Bender. 1991. 63 p.

Q609 / INV

Inventors and Discoverers: Changing Our World published by the National Geographic Society. 1988. 320 p.

J608 / BRI

1000 Inventions and Discoveries by Roger Bridgman. 2002. 256 p.

From School Library Journal

Grade 5 and Up Instantly recognizable as a DK production, this book contains numerous entries on a variety of scientific discoveries and inventions. Encyclopedic in style, it is profusely illustrated and attractive.

608 / FRE

Why Didn't I Think of That? Bizarre Origins of Ingenious Inventions We Couldn't Live Without by Allyn Freeman and Bob Golden. 1997. 240 p.

J609 / PAR

53 ¹⁄₂ Things That Changed the World and Some That Didn't! by David West. 1992. 62 p.

From School Library Journal

Grade 3 and up A book that's chronologically organized and punctuated with lighthearted cartoons that add humor and reinforce the text. Its main strength is the first section, "Before History Began," which sets an easy tone and presents inventions, such as tools, clothes, and the wheel, that were pivotal in forming early society. The second section discusses how toilets, clocks, the printing press, and a variety of other increasingly sophisticated inventions have changed the ways people live. Parker winds up with the atomic bomb and fusion power. The third section is extraneous: useful things that haven't really changed the course of history, such as chess, napkins, and umbrellas.... This title adds some spark to learning about everyday things. It's a good introduction to inventions, their basic principles, and why we use them.

J302.2 / PLA

Communication: From Hieroglyphs to Hyperlinks by Richard Platt. 2004. 64 p. (British publisher)

African American Inventors

604.89 / BRO

Created Equal: The Lives and Ideas of Black American Innovators by James Michael Brodie. 1993. 208 p.

J500 / BIO / HAB Black Pioneers of Science and Invention by Louis Haber. 1970. 182 p.

609.22 / AAS Black Inventors by Nathan Aaseng. 1998. 128 p.

J500 / BIO / JON Five Brilliant Scientists by Lynda Jones. 2003. 48 p.

Especially for Girls

J609 / BIO / THI Girls Think of Everything: Stories of Ingenious Inventions by Women. 2000. 57 p.

From School Library Journal

Grade 5-8 An outstanding collective biography of women and girls who changed the world with their inventions. Thimmesh surveys unique and creative ideas that were both borne of necessity or were simply a product of ingenuity and hard work... The book also encourages young women to start inventing themselves and offers a list of organizations with postal and Internet addresses to help them get started. Colorful collage artwork shows the women and their creations and adds vibrancy and lightness to the text.

J609 / KAR

Girls and Young Women Inventing: Twenty True Stories about Inventors plus How You Can Be One Yourself. 1995. 168 p.

Examines twenty young female inventors and their creations, from Jennifer Donabar and her electric lock to Jeanie Low and her kiddie stool. Great questions at the end of each chapter which encourage kids to think up their own inventions, and which teach the scientific process of invention.

J604.8 / ROM

The Technology Book for Girls and Other Advanced Beings by Trudee Romanek. 2001. 56 p.

And two more...

J608.773 / MUR

Weird and Wacky Inventions by Jim Murphy. 1978.

Includes drawings of unusual inventions submitted to the patent office with clues to aid the reader in guessing the purpose of each invention.

Q363.25 / PLA

Crime Scene: The Ultimate Guide to Forensic Science by Richard Platt. 2003. 144 p.

Revealing the very latest high-tech techniques of forensic detection, Crime Scene: The Ultimate Guide to Forensic Science is a truly absorbing book that uses case studies and amazing digital imagery to show how science helps uncover the truth about how crimes were committed and who carried them out.