



Outstanding Science Trade Books for Students K–12: 2004 (Books published in 2003)

[OSTB home](#)



Archaeology, Anthropology, and Paleontology

Great Dinosaur Expeditions and Discoveries: Adventures with the Fossil Hunters (The Dinosaur Library). Thom Holmes and Laurie Holmes. Illustrated by Michael William Skrepnick. Enslow. 112pp. Library ISBN 0-7660-2078-9, \$20.95. (I) Readers can explore the dinosaur world with this book that shares the stories of history's most famous dinosaur expeditions. These stories take the reader on a journey around the world and through time to learn about the earliest days of dinosaur hunting and present-day expeditions. Glossary, Index, Internet Resources, Reading Resources. TMC (V, VIII)

New Dinos: The Latest Finds! The Coolest Dinosaur Discoveries!
Shelley Tanaka. Illustrated by Alan Barnard. Atheneum. 48pp. Trade ISBN 0-689-85183-9, \$16.95. (E) High-powered electron microscopes, CT scans, and computer models are helping scientists discover new dinosaur species and reevaluate long-held ideas about dinosaur behavior. Inferences are well sub-stantiated with new data, and the dramatic illustrations graphically depict the revised notions. Emphasis is placed on how much more there is to learn about dinosaurs. Map of New Dinosaur Finds, Glossary, Index, Websites, Bibliography. BBB (II, V)



Figure 1: Illustration © 2003 by Alan Barnard from New Dinos by Shelley Tanaka, Atheneum Books for Young Readers. Used with permission of Atheneum Books, an imprint of Simon & Schuster Children's Publishing.

Biography

Benjamin Banneker: Pioneering Scientist (On My Own Biography). Ginger Wadsworth. Illustrated by Craig Orback. Lerner. 48pp. Library ISBN 0-87614-916-6, \$22.60; Paperback ISBN 0-87614-104-1, \$5.95. (P) A free black man in the 1700s, Benjamin Banneker was a brilliant thinker. At a time when clocks were very expensive, he built his own out of wood. America's first black man of science also was famous for his almanacs and his role in helping survey the streets of Washington, D.C. This book documents Banneker's love of learning and desire for an end to slavery. Colorful illustrations. Afterword, Important Dates. VDW (VII, VIII)

★ ***Darwin and Evolution for Kids: His Life and Ideas with 21 Activities***. Kristan Lawson. Illustrated with prints and photographs. Chicago Review. 160pp. Paperback ISBN 1-55652-502-8, \$16.95. (I) This very readable and interesting biography discusses the life, experiences, and discoveries of Charles Darwin. The reader shares the struggles and successes that led to his development of the theory of evolution. Good illustrations enhance the text, and the book contains 21 activities to model Darwin's ideas. Author's Note, Timeline, Glossary, Resources, Selected Bibliography, Further Reading, Index. DTC (VIII, I, IV)

Dr. Charles Drew: Blood Bank Innovator (African-American Biographies). Anne Schraff. Illustrated with photographs. Enslow. 112pp. Library ISBN 0-7660-2117-3, \$20.95. (A) Millions of people owe their lives to Dr. Charles Drew and his pioneering research on blood plasma. He developed a system of blood transfusions and the first blood-storage system. Drew was a champion of civil rights and a teacher of other black doctors. He accomplished all of this at a time when black doctors were not allowed to treat white patients. Chronology, Chapter Notes, Further Reading, Internet Addresses, Index. LEO (VIII, VII, IV)

★ ***First to Fly: How Wilbur and Orville Wright Invented the Airplane***. Peter Busby. Illustrated by David Craig. Crown. 32pp. Trade ISBN 0-375-81287-3, \$19.95; Library ISBN 0-375-91287-8, \$21.99. (E) From their introduction to flight via a flying toy bought by their father, Orville and Wilbur Wright were destined for a place in history as the first to fly a powered heavier-than-air craft. This biography features side notes, photographs, and colorful illustrations that bring the Wright brothers and their work to life. Bibliography, Glossary, Index. DAG (VIII, II)

★ ***Into the Woods: John James Audubon Lives His Dream***. Robert Burleigh. Illustrated by Wendell Minor. Atheneum. 40pp. Trade ISBN 0-689-83040-8, \$16.95. (E) The passion John James Audubon felt for the world of nature is obvious in this inspiring biography, which is a lyrical combination of poetry and excerpts from Audubon's journal entries. More than just a life story, the reader views the natural world through Audubon's eyes and gains a greater appreciation for the man as a naturalist and artist. LSG (VIII, VII, IV)

The Man Who Made Time Travel. Kathryn Lasky. Illustrated by Kevin Hawkes. Farrar, Straus and Giroux. 48pp. Trade ISBN 0-374-34788-3, \$17. (E) In this fascinating, inspirational book, author Kathryn Lasky brilliantly retells the story of John Harrison, an eighteenth-century carpenter who spent his life designing a timepiece to be used by sailors. Harrison's quest to win the Longitude Prize covered 35 years and five prototypes. Other than stating that the Moon traces a path across the sky every night, the facts in the book are accurate. Full-color paintings capture the spirit of this unforgettable story. Author's Note, Bibliography, Illustration Notes. VDW (VII, VIII, II)

Niels Bohr: Physicist and Humanitarian (Great Minds of Science). Naomi Pasachoff. Illustrated with photographs. Enslow. 128pp. Library ISBN 0-7660-1997-7, \$20.95. (A) This book will captivate any student with an interest in physics or the history of science. Written to highlight a mix of Bohr's scientific accomplishments and humanitarian efforts, this book gives the reader an appreciation of a great man. You don't have to be a physics teacher or a biography lover to enjoy this book! (This is a great choice to accompany the play *Copenhagen*.) Acknowledgements, Bibliography, Glossary, Index, Further Reading, Internet Addresses. DW (VIII, VII, II)

Rachel: The Story of Rachel Carson. Amy Ehrlich. Illustrated by Wendell Minor. Silver Whistle. 32pp. Trade ISBN 0-15-216227-5, \$16. (E) As a bright and curious child, a student at Woods Hole Marine Biology Laboratory, an ocean explorer, a collector of specimens, and author of the famous *Silent Spring*, Rachel Carson lived an interesting life. The book is beautifully written in a single-page narrative, and Minor's full-color illustrations give personality to every page. Epilogue. VDW (VII, II, IV)

Rider in the Sky: How an American Cowboy Built England's First Airplane. John Hulls. Illustrated by David Weitzman. Crown. 112pp. Trade ISBN 0-375-81106-0, \$16.95; Library ISBN 0-375-91106-5, \$18.99. (I) Samuel Cody came to England as a Wild West performer and became a hero for inventing England's first airplane. The reader follows as Cody moves from creating a controllable man-lifting kite to a lighter-than-air craft. Cody made his first airplane flight in England in 1907. Period illustrations add to the adventure. Author's Note, Index, Appendices. DAG (VII, VIII)

Tooth and Claw: Animal Adventures in the Wild. Written and illustrated by Ted Lewin. HarperCollins. 112pp. Trade ISBN 0-688-14105-6, \$15.99; Library ISBN 0-688-14106-4, \$16.89. (E) This book shares the author's experiences, many life-threatening, as he travels to countless exotic places worldwide. The reader shares the thrill of meeting a tiger or polar bear close up as the author details his experiences in journal format. Personal notations and pencil drawings give the expedition an authentic feel. Forward, Author's Note, Glossary, About the Author. BGS (IV, V, VIII)

★ ***The Tree of Life: Charles Darwin.*** Written and illustrated by Peter Sís. Farrar, Straus and Giroux. 44pp. Trade ISBN 0-374-45628-3, \$18. (E, I) This chronological journey through Darwin's life examines his public, private, and secret life. Sís's fascinating watercolor and pen-and-ink illustrations based on what Darwin saw and recorded are impressive; they include diary pages, maps, charts, and a foldout spread of *On the Origin of Species*. Author's Note, Teachers Guide may be found at www.petersis.com/content/tree_teachers_guide.html. VDW (VII, VIII, II)

Earth and Space Science

Exploring Our Solar System. Sally Ride and Tam O'Shaughnessy. Illustrated with photographs. Crown. 112pp. Trade ISBN 0-375-81204-0, \$19.95; Library ISBN 0-375-91204-5, \$21.99. (I) Beginning with an overview of our solar system, this book takes the reader on a journey to the Sun, each of the planets, and other features in the solar system. Stunning photographs and vivid artists' renderings add to the information provided in the text. Glossary, Index, List of Space Flights. DAG (V)

★ ***Killer Rocks from Outer Space: Asteroids, Comets, and Meteorites*** (Discovery!). Steven N. Koppes. Illustrated with photographs. Lerner. 112pp. Library ISBN 0-8225-2861-4, \$26.60. (I, A) This book provides an excellent account of the catastrophic effects of prehistoric meteor and comet impacts on Earth. A discussion of how astronomers are searching the Solar System for asteroids and comets in the hope of preventing future catastrophes is included. Glossary, Index, Internet Resources, Reading Resources. TMC (V, VIII)

The Moon. Seymour Simon. Illustrated with photographs. Simon and Schuster. 32pp. Trade ISBN 0-689-83563-9, \$17.95. (E) An exciting introduction to Earth's nearest neighbor, The Moon features wonderful color photography and very informative text. The book starts by outlining the work of early scientists and takes the reader through the Moon explorations of Apollo astronauts. TMC (V, VIII)

Probing Volcanoes (Science on the Edge). Laurie Lindop. Illustrated with photographs and diagrams. Twenty-First Century Books/Millbrook. 80pp. Library ISBN 0-7613-2700-2, \$26.60. (I) This book provides a captivating account of the scientists who venture into volcanic craters to learn the secrets of volcanoes. Readers get an excellent glimpse into the rewarding and exciting careers of geologists and geochemists. Glossary, Index, Internet Resources. TMC (V, II, VII)



Figure 2: From Probing Volcanoes by Laurie Lindop. Copyright © 2003. Reprinted with permission of The Millbrook Press. All rights reserved.

Environment and Ecology

★ **Arctic Lights, Arctic Nights.** Debbie S. Miller. Illustrated by Jon Van Zyle. Walker and Company. 32pp. Trade ISBN 0-8027-8856-4, \$16.95; Library ISBN 0-8027-8857-2, \$17.85. (E) Alaska is the “Land of the Midnight Sun.” This beautiful and intriguing book portrays arctic animals and weather throughout the changing seasons. Each two-page spread features a different time of year, complete with the total number of sunlight hours and average daily temperatures. Author’s Note, Glossary. BGS (V, IV, VII)

★ **The Case of the Monkeys That Fell from the Trees: And Other Mysteries in Tropical Nature.** Written and illustrated by Susan E. Quinlan. Boyds Mills. 172pp. Trade ISBN 1-56397-902-0, \$15.95. (I) This book contains a selection of ecological mysteries set in the tropical forests. From deadly frogs to falling monkeys, unusual occurrences in nature prompt scientists to find out why they happen. The author succeeds in conveying the scientists’ thought processes as they ask questions and design investigations that reveal the surprising answers to each mystery. This book is an excellent model for portraying scientific inquiry. Index, Selected References. CBR (IV, II, VII)

Horseshoe Crabs and Shorebirds: The Story of a Food Web. Victoria Crenson. Illustrated by Annie Cannon. Cavendish. 32pp. Trade ISBN 0-7614-5115-3, \$16.95. (E) Fabulous watercolors illustrate the predator-prey relationships described in this absorbing food web story. The author’s effective word choices enhance the tale of the horseshoe crabs’ cyclical journey from the depths of Delaware Bay to the sandy beaches and back as part of the crab life cycle. TH (IV)

Jackie’s Wild Seattle. Will Hobbs. HarperCollins. 192pp. Trade ISBN 0-688-17474-4, \$15.99; Library ISBN 0-06-051631-3, \$16.89. Paper ed. (F). (I, A) This is a lively story about a teenage girl and her younger brother who spend a summer living in Seattle with their uncle who works in an animal shelter. The book illustrates the many trials they have to go through on a daily basis to keep the animal shelter open. Author’s Notes. LEO (II, IV, VII)

★ ***On the Way to the Beach.*** Written and illustrated by Henry Cole. Greenwillow. 32pp. Trade ISBN 0-688-17515-5, \$15.99. (P) Gorgeous illustrations and a unique layout encourage the reader to make observations in a forest, at the edge of a salt marsh, on sand dunes, and on the beach. This transect approach provides an interesting perspective. Fold-out pages list the ecosystem inhabitants, and the reader can search the illustration for each plant, animal, or item. Picture keys at the back of the book allow the reader to identify the ecosystem inhabitants. TH (IV, II)

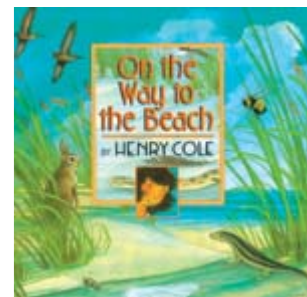


Figure 3: Jacket art © 2003 by Henry Cole for *On the Way to the Beach* by Henry Cole

Saving Birds: Heroes Around the World. Pete Salmansohn and Stephen W. Kress. Illustrated with photographs. Tilbury House. 40pp. Trade ISBN 0-88448-237-5, \$16.95. (E, I) This book features fascinating stories of six bird species that were saved from extinction. These success stories required collaboration between naturalists, locals, and community leaders. An emphasis is placed on how knowledge of local customs, differing ideologies, and local economic issues were necessary for problem resolution. Human-interest photographs illustrate the impact of society on science. Resources, Internet Resources. BBB (IV, VII, II)

Uluru: Australia's Aboriginal Heart. Caroline Arnold. Illustrated by Arthur Arnold. Clarion. 64pp. Trade ISBN 0-618-18181-4, \$16. (A) This is an integrated and respectful treatment of one of the world's most interesting and revered geological formations. Interweaving native lore with geology, ecology, and the social sciences, this book is a compelling portrayal of how a monolithic natural feature can evoke mystical and emotional responses from aboriginal people and international visitors alike. Author's Note, Glossary and Pronunciation Guide, Index. DW (VII, V, IV)

The Woods Scientist (Scientists in the Field). Stephen R. Swinburne. Illustrated with photographs by Susan C. Morse. Houghton Mifflin. 48pp. Trade ISBN 0-618-04602-X, \$16. (I, E) This profile of naturalist and forester Sue Morse describes how she uses tracks and traces to interpret wildlife behavior. Superb photographs enhance the text. Concepts such as ecological "corridors," plant and animal succession, and environmental health indicators are explained. The narrative describes the importance of critical inquiry in preserving ecosystems. Author's Challenges, Bibliography, Websites, Glossary, Index. BBB (IV, VII, II)

Life Science

101 Questions About Sex and Sexuality: With Answers for the Curious, Cautious, and Confused. Faith Hickman Brynie. Illustrated by Sharon Lane Holm. Twenty-First Century Books/Millbrook. 176pp. Library ISBN 0-7613-2310-4, \$27.90. (I, A) Written in a question-answer format, this book provides answers to questions and concerns about sex and sexuality that young people are likely to pose. This is an excellent resource for initiating frank discussion and addressing misconceptions and myths about sex and sexuality. Glossary, Author's Notes, Additional Books and Articles, Websites, Chapter Notes. GJB (VII, IV)

About Arachnids: A Guide for Children. Cathryn Sill. Illustrated by John Sill. Peachtree. 32pp. Trade ISBN 1-56145-038-3, \$15.95. Paper ed. (F). (P) An excellent introduction to arachnids for young

children, this book will entrance readers with its beautiful, full-page color plates. The simple text describes the salient features of arachnids, a group that includes spiders, mites, scorpions, and tarantulas. An Afterword provides additional information and descriptions of each color plate. Afterword. LSG (IV)

An American Plague: The True and Terrifying Story of the Yellow Fever Epidemic of 1793. Jim Murphy. Illustrated with prints. Clarion. 176pp. Trade ISBN 0-395-77608-2, \$17. (I) This book describes the yellow fever epidemic of 1793 in Philadelphia, Pennsylvania. The author weaves pertinent information about the chronological, social, and medical history of the epidemic with a vivid description of the controversy among doctors over the cause of the disease and appropriate care of patients. The use of newspaper articles and citations as primary documentation enhances this book's portrayal of medical practice in the late 1700s. Index. CBR (IV, VII, VIII)

★ ***Amphibians, Reptiles, and their Conservation.*** Written and illustrated with photographs and drawings by Marty Crump. Linnet Books. 149pp. Trade ISBN 0-208-02511-1, \$25. (A) A great introduction to the field of herpetology for advanced readers, this accurate and timely resource explains the basics of amphibians and reptiles, with an emphasis on the plight of these two classes of animals. Examining the decline of herpetofauna worldwide, the author explores various reasons for the decline of reptile and amphibian populations worldwide and provides hopeful, practical suggestions for their conservation. Acknowledgements, Bibliography, Glossary, Index, Book Resources List, Websites, Conservation Organizations List. DW (VII, IV, VIII)

Antarctic Ice. Jim Mastro and Norbert Wu. Illustrated with photographs by Norbert Wu. Henry Holt. 32pp. Trade ISBN 0-8050-6517-2, \$16.95. (P) Beautiful photographs illustrate this description of life, both above and below the Antarctic ice, during the short Antarctic summer. Of significance is the focus on Antarctic food webs and the importance of phytoplankton and algae, which enhances the traditional description of seals, whales, and penguins. The content may be suitable for lower elementary grades as well as upper primary. LSG (IV)

Brilliant Bees. Linda Glaser. Illustrated by Gay W. Holland. Millbrook. 32pp. Library ISBN 0-7613-2670-7, \$22.90; Paperback ISBN 0-7613-1943-3, \$8.95. (P) The importance of bees to the ecosystem is highlighted in this delightful and beautifully illustrated book that describes the pollination process, hive structure and social order, methods of communication, and life cycle of the honeybee. Young children will enjoy the simple and informative text. Author's Note, FAQ and Answers. LSG (IV)

Ebola Virus (Diseases and People). Edward Willett. Illustrated with photographs. Enslow. 112pp. Library ISBN 0-7660-1595-5, \$20.95. (A) This book provides the history, diagnosis, treatments, social implications, and prevention of the deadly Ebola virus. Written in readable chapters with some graphic detail and duplication, the author tells the tale of this fascinating but devastating virus. Includes information from Michael Preston's popular book, *The Hot Zone*. Africa Map, Questions/Answers, Timeline, Glossary, More Info, Chapter Notes, Further Reading, Internet Addresses, Index. DTC (IV, VIII, VI)

Eyes and Ears. Seymour Simon. Illustrated with prints and photographs. HarperCollins. 32pp. Trade ISBN 0-688-15303-8, \$15.99; Library ISBN 0-688-15304-6, \$16.89. Paper ed. (F). (E) Powerful photographs and informative illustrations enhance written descriptions of how the eyes and ears work

to sense the surrounding world, contribute to the sense of balance, and send messages to the brain. The book also includes a brief discussion of optical illusions and deficiencies in seeing and hearing. TH (III, IV)

Fabulous Fluttering Tropical Butterflies. Dorothy Hinshaw Patent. Illustrated by Kendahl Jan Jubb. Walker and Company. 32pp. Trade ISBN 0-8027-8838-6, \$16.95; Library ISBN 0-8027-8839-4, \$17.85. (E) Exotic, little-known tropical butterflies are introduced to young readers through bright illustrations and interesting facts. The descriptions of the largest and most poisonous butterflies in the world are fascinating. A butterfly identification key and map are printed on the book's endpapers. BGS (IV)

Genes and DNA (Kingfisher Knowledge). Richard Walker. Illustrated with prints and photographs. Kingfisher. 64pp. Trade ISBN 0-7534-5621-4, \$11.95. (I) This resource book covers three major topics: genes and inheritance; DNA, the molecule of life; and genetic technology. Written encyclopedia style, the text is enhanced with beautiful, full-color illustrations and photographs. The figures and graphics will help intermediate readers fully understand the complex concepts of DNA and genetics. Glossary, Index, Websites, Further Reading, Career Paths, Places to Visit. DTC (IV, VI)

★ ***Obsessive-Compulsive Disorder*** (Twenty-First Century Medical Library). Bruce M. Hyman and Cherry Pedrick. Twenty-First Century/Millbrook. 112pp. Library ISBN 0-7613-2758-4, \$26.90. (A) This succinct but informative book discusses obsessive-compulsive disorder, commonly referred to as OCD. It examines the symptoms and manifestations of OCD and describes how it is controlled and treated. Most interestingly, the authors describe what it is like to live with the disorder. Glossary, Resources, Websites, Further Readings, Index. LEO (VII, VIII)

Organ and Tissue Transplants: Medical Miracles and Challenges (Issues in Focus). Marilyn McClellan. Illustrated with photographs. Enslow. 128pp. Library ISBN 0-7660-1943-8, \$20.95. (A) Ironically, the miracle of life-saving organ and tissue transplants is usually only possible through the tragedy of death. Human emotions and decisions are integrated throughout this thoughtful discussion of the medical advancements that have improved and extended the quality of lives through organ and tissue transplants. Chapter Notes, Glossary, Organizations, Further Reading, Internet Addresses, Index. GJB (IV, VI, VII, VIII)

Plants on the Trail with Lewis and Clark. Dorothy Hinshaw Patent. Illustrated with photographs by William Muñoz. Clarion. 104pp. Trade ISBN 0-618-06776-0, \$18. (I) This book describes how Lewis and Clark painstakingly observed, collected, and catalogued previously unknown plant life as they made their journey across the western United States. This book is an excellent companion to a previous book by this author, *Animals on the Trail with Lewis and Clark*. Although the Lewis and Clark expedition took place nearly 100 years ago, this book helps readers recognize the enduring scientific importance of their journey. Author's Note, Table, Index. CBR (IV, VIII, VII)

Sea Horses (Early Bird Nature). Sally M. Walker. Illustrated with photographs. Lerner. 48pp. Library ISBN 0-8225-3051-1, \$23.93. (E) Beautiful photographs depict several species of sea horses in their natural environments. The reader will learn how the characteristics and behaviors of these fascinating fish help them survive and meet their basic needs. The book concludes with a discussion of how people can help protect sea horses and how sea horses help people. Table of Contents, Note to Adults, Glossary, Index. GJB (IV, VII)



Figure 4: From Sea Horses by Sally M. Walker. Text copyright © 2004 by Sally M. Walker. Used by permission of the publisher, Lerner Publications Company, a division of Lerner Publishing Group. All rights reserved.

Snake Pits, Talking Cures, and Magic Bullets: A History of Mental Illness. Deborah Kent. Twenty-First Century Books/Millbrook. 160pp. Library ISBN 0-7613-2704-5, \$26.90. (A) This history of mental illness vividly describes how mentally ill people have been treated throughout history. Myths about mental illness that have been passed down through generations are included. The book relates the progress that has been made in treating mental illness during the last two centuries. Author's Notes, General References, Online Resources, Chronology, Glossary, Index. LEO (VII, VIII)

Starting Life Butterfly. Claire Llewellyn. Illustrated by Simon Mendez. NorthWord. 32pp. Trade ISBN 1-55971-868-4, \$16.95. (P, E) A beautifully illustrated and detailed book about the life cycle of a monarch butterfly, *Starting Life Butterfly* also covers the topics of migration, predation, and ecosystems. The book is accurate in content but includes variations of typical egg-laying patterns for monarchs. Additionally, when the butterfly comes out of the chrysalis, the author refers to the butterfly as being "tired," which is debatable. Regardless, this book will serve as a wonderful resource for children to learn about monarch butterflies. The book uses a unique disclosure page style that features two types of text. The main text is written at a primary level, but supplemental information on each page allows for much broader readability. Glossary, Index, Life Cycle Diagram. DTC (IV, I)

★ **Spinning Spiders** (Let's-Read-and-Find-Out Science Books). Melvin Berger. Illustrated by S.D. Schindler. HarperCollins. 40pp. Trade ISBN 0-06-028696-2, \$15.99; Library ISBN 0-06-028697-0, \$16.89; Paperback ISBN 0-06-445207-7, \$4.99. (P) This book describes several species of spiders and shows how different kinds of webs help spiders capture, secure, or store their prey. Readers learn how spiders produce silk for building their webs, how spiders that don't spin webs catch their prey, and why spiders are important. Activity, Websites. GJB (IV)

Physical Science

Dyes: From Sea Snails to Synthetics (Material World). Ruth G. Kassinger. Illustrated with photographs, diagrams, and maps. Twenty-First Century Books/Millbrook. 80pp. Library ISBN 0-7613-2112-8, \$25.90. (I) This book traces the historical and social significance of dyes. The author discusses the science of color, differences between natural and synthetic dyes, and various manufacturing techniques for dyeing textiles. This book would be a great tool for integrating science and social studies topics. Timeline, Glossary, Index. CBR (III, VIII, VI)

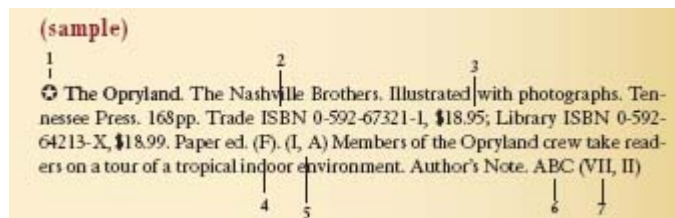
Technology and Engineering

Eureka! Great Inventions and How They Happened. Richard Platt. Illustrated with prints and photographs. Kingfisher. 96pp. Trade ISBN 0-7534-5580-3, \$18.95. (E) This excellent resource for inventions and technology features photographs mixed with well done artists' interpretations. The stories of how some of the greatest inventions in the world, including nylon, the safety elevator, and the microwave oven, will captivate as well as inspire. Readers will learn how some inventions evolve through years of trial and error and some are the product of serendipity. Small biographical sketches are provided for each inventor. Foreword, Introduction, Chronology of Inventors, Glossary, Index. BGS (VIII, VI, II)

The Incredible Record-Setting Deep-Sea Dive of the Bathysphere (Incredible Deep-Sea Adventures). Brad Matsen. Illustrated with photographs. Enslow. 48pp. Library ISBN 0-7660-2188-2, \$18.95. (I) This captivating tale about the marvelous journey of two men who dared to explore the deep sea includes descriptions of the technological challenges they had to overcome as well as the incredible sights seen from the bathysphere. Interesting diagrams, maps, and historical photos help document this inspirational story. Bibliography by Chapter, Glossary, Index. TH (VIII, VI, II)

★ ***The Wondrous Whirligig: The Wright Brothers First Flying Machine.*** Written and illustrated by Andrew Glass. Holiday House. 32pp. Trade ISBN 0-8234-1717-4, \$16.95. (P) Young Orville and Wilbur Wright demonstrate ingenuity in the modification of a flying toy. Attributes necessary for inventors, such as curiosity, determination, and enthusiasm, are delightfully developed in both text and illustrations. Great for problem solving and design technology. Author's Note. BBB (VI, II)

About the Annotations



In addition to standard publishing information, the annotations indicate the following:

1. Titles marked with ★ are Selectors' Choices—books that individual panel members responded to with particular enthusiasm.
2. International Standard Book Numbers (ISBN) are included for all available editions (trade, library, and paperback).
3. The prices are current as of January 2005.
4. The notation Paper ed. (F) indicates that a paperback edition is forthcoming and whether the publisher is different from the hardcover edition.
5. Reading levels [P = Primary (K–2); E = Elementary (3–5); I = Intermediate (6–8); A = Advanced (9–12)] are provided by the reviewers. They are intended as guidelines and are not meant to limit the potential use of titles.
6. The reviewer's initials follow each description (see [Members of the Book Selection Panel](#)).
7. The most relevant National Science Content Standards are indicated by Roman numerals (see below).

National Science Content Standards

- I Unifying Concepts and Processes
- II Science as Inquiry
- III Physical Science
- IV Life Science
- V Earth and Space Science
- VI Science and Technology
- VII Science in Personal and Social Perspectives
- VIII History and Nature of Science

Members of the Book Selection Panel

Timothy Cooney (TMC)

Chairperson
Professor, Earth Science and Science Education
University of Northern Iowa
Cedar Falls, Iowa

Bonnie Barr (BBB)

Professor, Science Education (retired)
Cortland, New York
Gloria Bolton (GJB)
Instructional Supervisor
Shelby County Schools
Memphis, Tennessee

David Crowther (DTC)

Associate Professor, Science Education
University of Nevada, Reno
Reno, Nevada

David Gillam (DAG)

Elementary Science Support Teacher
Anchorage (Alaska) School District
Anchorage, Alaska

Trisha Herminghaus (TH)

Elementary Science Support
Anchorage (Alaska) School District
Anchorage, Alaska

Larry Olsen (LEO)

Science Teacher
Apopka High School
Apopka, Florida

Cynthia Roepcke (CBR)
Science Curriculum Coordinator
Pickerington Local Schools
Pickerington, Ohio

Linda Schoen Giddings (LSG)
Science Consultant
South Carolina Department of Education
Columbia, South Carolina

Brenda Shackelford (BGS)
Assistant Principal
Elizabeth Elementary School
Shelby, North Carolina

Vickie Weiss (VDW)
Multiage Teacher
City School
Grand Blanc, Michigan

David Wojnowski (DW)
Ph.D. Graduate Student, Curriculum & Instruction, Science Education
Kent State University
Kent, Ohio

About the Books and the Selection Process

The books that appear in this annotated bibliography were selected as Outstanding Science Trade Books published in 2003. They are intended primarily for kindergarten through twelfth grade. They were selected by members of a book review panel appointed by the National Science Teachers Association (NSTA) and assembled in cooperation with the Children's Book Council (CBC). NSTA and CBC have cooperated on this bibliographic project since 1973.

The panel looks at both content and presentation. Selection is based generally on the following criteria:

- The book has substantial science content;
- Information is clear, accurate, and up to date;
- Theories and facts are clearly distinguished;
- Facts are not oversimplified to the point where the information is misleading;
- Generalizations are supported by facts and significant facts are not omitted; and
- Books are free of gender, ethnic, and socioeconomic bias.

The panel also uses rigorous selection guidelines relating to the presentation of material, including the following: logical presentation and a clear sequence of ideas; appropriate content level for the intended audience; compatible text and illustrations; illustrations that are accurate representations in size, color, and scale; appropriate trim size and format of the book for the subject and audience; and well organized

layout that advances the text. The panel also gives attention to the quality of binding, paper, reproduction, and the appropriateness of typeface.

Each panel member reads all the books, but annotations reflect only the appraisal of the individual panelist whose initials follow at the end of each entry.

Publishers' names appear in abbreviated form; complete names and addresses are available from the Children's Book Council and in standard reference works such as *Children's Books in Print*. [CBC's Member List](#) is available online.

Titles are arranged by subject category. Although some titles are appropriate for more than one category, the books have been placed where their usefulness in science education appears greatest. Panelists have also indicated the *National Science Education Standards* (see explanation above) to which the books relate. Where more than one standard is listed, the most applicable standard is given first.

About CBC and NSTA

The Children's Book Council (CBC) is a nonprofit trade organization that encourages the use and enjoyment of books and related literacy materials for young people. The official sponsor of Children's Book Week and Young People's Poetry Week, the CBC supports reading-encouragement programs both independently and with other national and international organizations. The CBC's members are U.S. publishers and packers of trade books for children and young adults and producers of book-related materials for young people. For more information, see www.cbcbooks.org.

The National Science Teachers Association (NSTA) is an organization of science education professionals and has as its purpose the stimulation, improvement, and coordination of science teaching and learning. For further information on NSTA membership and services, call 800-722-NSTA.

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