



Outstanding Science Trade Books for Students K–12: 2006 (Books published in 2005)

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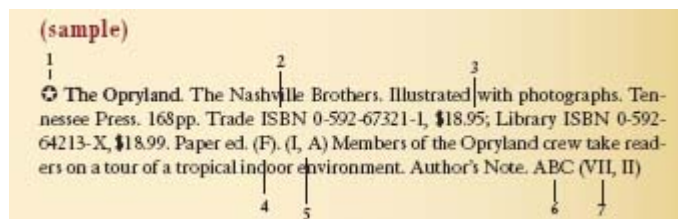
Each year many good science trade books are published for children. But teachers, media professionals, and parents want to know which are the very best. That's where this competition comes in. Working with The Children's Book Council in New York City, NSTA has refined the criteria for the highest quality, most engaging, and scientifically accurate publications for children.

The task is not an easy one. Children come to science with different backgrounds and interests. Standards change. Even science content itself changes. Judges on the NSTA/CBC Review Panel must read hundreds of books each year and research much of the content they contain. But the work is valuable.


As in past years, the list of publications that the committee has defined as “outstanding” is quite eclectic; you’ll find informational texts and biographies, fiction, poetry, and even a book of songs with an accompanying CD! What they all have in common is they convey the thrill of science. The committee is honored to share these outstanding books with you.

—Juliana Texley, NSTA Recommends

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 2006.
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 listed below).
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 Perspectives

IV Life Science

V Earth and Space Science

VI Science and Technology

VII Science in Personal and Social

VIII History and Nature of Science

Archaeology, Anthropology, and Paleontology

Bodies From the Ash: Life and Death in Ancient Pompeii. James M. Deem. Houghton Mifflin Company. 48pp. Trade ISBN 0-618-47308-4, \$16. (E, I) This book provides more than the usual coverage of Pompeii’s destruction, one of the earliest documented disasters. Letters discovered from a Roman historian have now given actual accounts of times and stages of the eruption. Rare images are shown, as the author was given access to buildings closed to the public. Bibliography, Index. BGS (VIII, II)

★ **How Dinosaurs Took Flight: Fossils, Science, What We Think We Know, and Mysteries Yet Unsolved.** Christopher Sloan. Illustrated with prints and photographs. National Geographic Children’s Books. 64pp. Trade ISBN 0-7922-7298-6, \$17.95; Library ISBN 0-7922-7404-0, \$27.90. (I) With an interesting format that presents evidence leading to various hypotheses, this book supports the theory that birds are descended from ancient dinosaurs. The evidence largely comes from recently discovered feathered dinosaurs in China. And the book points out the mysteries that are as-of-yet unsolved, awaiting further fossil discoveries. Bibliography, Glossary, Index. CVM (I, V, VIII)

★ **Outside and Inside Mummies.** Sandra Markle. Illustrated with photographs. Walker and Company. 40pp. Trade ISBN 0-8027-8966-8, \$17.95; Library ISBN 0-8027-8967-9, \$18.85. Paper ed. (F). (E)

This book depicts the sophisticated technology used by archaeologists to obtain information about mummified ancient humans. The author uses an engaging text and excellent photographs to demonstrate how archaeologists go about making valid inferences from their observations. Glossary, Index. CRB (II, VIII,VI)

Biography

★ **Bone Detective: The Story of Forensic Anthropologist Diane France.**

Lorraine Jean Hopping. Illustrated with prints and photographs. Franklin Watts/Scholastic Library Publishing. 128pp. Library ISBN 0-531-16776-3, \$31. (E, I) This biographical book depicts everything one needs to know about forensic anthropology, and it does so through the eyes and mind of Diane France. France's story starts with her childhood in Walden, Colorado, and describes her educational challenges and her life within the field of forensic anthropology. This is a great book for the budding anthropologist. Glossary, Selected Bibliography, Index, Author's Acknowledgments, About the Author, Further Resources. HDRC (II, I, VIII)



Figure 1: Used with permission of Franklin Watts, a division of Scholastic Inc.

★ **Galileo: The Genius Who Faced the Inquisition (National Geographic World History Biographies).**

Philip Steele. Illustrated with prints and photographs. National Geographic Children's Books. 64pp. Trade ISBN 0-7922-3656-4, \$17.95; Library ISBN 0-7922-3657-2, \$27.90. Paper ed. (F). (I) Galileo's discoveries in astronomy, developed in the mid-1500s, are described and linked to what we know today. In this account, readers gain insight into the famous scientist's personal and professional life—from his childhood to his final days. Through illustrations and detailed narrative, the distant past becomes real. Authentic illustrations and photographs, Timeline at the bottom of each page, Glossary, Bibliography, Index. NJP (V, VIII)

Genius: A Photobiography of Albert Einstein. Marfé Ferguson Delano. Illustrated with prints and photographs. National Geographic Children's Books. 64pp. Trade ISBN 0-7922-9544-7, \$17.95; Library ISBN 0-7922-9545-5, \$27.90. (E, I, A) Readers will become fascinated with Einstein after reading this book, or at least be intrigued again if they have some basic knowledge of his life. The world has known Einstein for his ingenious side; this is a more personal look at his life, revealing his exceptional love for humanity. Foreword, Afterword, Chronology, Resources, Index. BGS (VII, II)

★ **Guinea Pig Scientists: Bold Self-Experimenters in Science and Medicine.** Leslie Dendy and Mel Boring. Illustrated by C.B. Mordan. Henry Holt Books for Young Readers. 213pp. Trade ISBN 0-8050-7316-7, \$19.95. (E, I) Scientific facts that are taken for granted become real. Ten scientists' lives are revealed; they experimented on themselves to further their own research. Unbelievable tests are described about everything from digestion to surviving in caves for months. Students will be fascinated. Author's Note, History Timetable, Resources, Quotation Sources, Index. BGS (II, VII)

Leonardo da Vinci (Giants of Science). Kathleen Krull. Illustrated by Boris Kulikov. Viking Children's Books. 128pp. Trade ISBN 0-670-05920-X, \$15.99. Paper ed. (F). (I, A) This volume

describes the life of one of the great artists, scientists, and thinkers in history—Leonardo da Vinci. The book includes information on his birth, youth, schooling, and adulthood. Bibliography, Index. DAG (VIII, VII)

★ **Reaching for the Moon.** Buzz Aldrin. Illustrated by Wendell Minor. HarperCollins Children's Books. 32pp. Trade ISBN 0-06-055446-0, \$23.89. (E, P) This autobiographical story details Buzz Aldrin's early years and how he became an astronaut and walked on the Moon. Throughout the story, Aldrin provides meaningful milestones he feels helped him reach the goal of becoming an astronaut. End Notes, Timeline. CAR (VII, VIII, V)

★ **Stephen Hawking: Breaking the Boundaries of Time and Space (Great Minds of Science).** John Bankston. Illustrated with photographs. Enslow Publishers. 128pp. Library ISBN 0-7660-2281-1, \$26.60. (A) Descriptive biography of one of the most famous scientists of the present day. The book leads readers through the early days of cosmology, Stephen Hawking's family and college life, his battle with the onset of ALS disease, and his development of the theory of black holes. Inspiring for future scientists who have to persevere through various problems and disabilities. Glossary, Index, Chronology. CDC (V)

Thomas Edison: A Brilliant Inventor. Editors of Time for Kids with Lisa deMauro. Illustrated with prints and photographs. HarperCollins Children's Books. 48pp. Trade ISBN 0-06-057612-X, \$20.99. (E) A fast-paced biography of the famous inventor, this book highlights Edison's unconventional education, his work with electricity and the lightbulb, and his unwavering persistence. With over 1,000 patents, Edison's curiosity and perseverance is an inspiration to all discoverers. Contains fascinating illustrations and fun sidebars about inventions and inventors. Timeline. CVM (II, VI, VII, VII)

Earth and Space Science

The Big Bang. Paul Fleisher. Illustrated with prints and photographs. Twenty-First Century Books/Lerner Publishing Group. 80pp. Library ISBN 0-8225-2133-4, \$27.93. (A) A comprehensive account of the big bang theory. In a clear and logical style, this book develops the theory from the early days of cosmology to the questions yet to be answered. The short biographies of famous astronomers at the end of the book give an interesting background to the development of astronomy. Glossary, Timeline, Index, Selected Bibliography. CDC (V, VIII)

Cave Sleuths. Laurie Lindop. Illustrated with photographs. Twenty-First Century Books/Lerner Publishing Group. 80pp. Library ISBN 0-7613-2702-9, \$27.93. (I) This book takes you into the world of caves and cave scientists. It provides information about how caves are formed, how scientists are exploring caves to learn more about how the Earth system functions, and how the organisms found in caves might be of use to humans. Source Notes, Index, Reading List. DAG (VIII, V)



Figure 2: Cave Sleuths: Solving Science Underground by Laurie Lindop. Text © 2006 Laurie Lindop. Published by Twenty-First Century Books, a division of Lerner Publishing Group. All rights reserved.

Erosion: How Land Forms, How It Changes. Darlene R. Stille. Illustrated by Jaime Martens. Compass Point Books. 48pp. Trade ISBN 0-7565-0857-1, \$25.27; Library ISBN 0-7565-0854-1, \$18.95. (I) This book is a straightforward resource for learning about erosion and its effects. The book discusses erosion by wind, water, and ice, and when or if erosion should be controlled. It has many color illustrations, but the type is very small, with particularly tiny caption text, and its reading level is advanced. Glossary, Index, Further Resources, Did You Know. CVM (I, V, VIII)

★ **Plate Tectonics.** Rebecca L. Johnson. Illustrated with prints and photographs. Twenty-First Century Books/Lerner Publishing Group. 80pp. Library ISBN 0-8225-3056-2, \$27.93. (A) From the Great Ideas in Science series, this volume describes in excellent detail the chronology of the plate tectonics theory and the evidence that finally led to its acceptance. It is a superb example of the arduous journey from hypothesis to scientific theory. Diagrams and explanations of the theory are also included. Bibliography, Glossary, Index, Biographies, Further Reading, Websites, Source Notes. CVM (I, V, VIII)

Waves: From Surfing to Tsunami. Drew Kampion. Illustrated by Jeff Peterson and with prints and photographs. Gibbs Smith, Publisher. 80pp. Trade ISBN 1-58685-212-4, \$19.95. (E) What causes waves to form? What makes them move? The melding of technical writing and storytelling, incredible photographs, and original artwork makes this book about wave formation and movement both interesting and easy to understand. This detailed analysis of wave action and influences also includes a section about tsunamis. Glossary, Web Resources, Photo Credits. NJP (V)



Figure 3: Photo by David Pu'u from Waves: From Surfing to Tsunami

Environment and Ecology

The Least of These: Wild Baby Bird Rescue Stories. Written and illustrated by Joan Harris. West Winds Press/Graphic Arts Center. 64pp. Paperback ISBN 1-55868-860-9, \$16.95. (I, A) A beautifully illustrated book that combines stories of bird rehabilitation with compassion for the natural environment, as well as bird identification information. Each story has the ability to capture the reader's mind and heart and will likely instill a fondness for the natural world around us. Author's Acknowledgment, Foreword, Artist's Notes, Wildlife Rescue and Rehabilitation Centers List, Glossary. HDRC (IV, VII, II)



Figure 4: Illustration by Joan Harris

Fiction

Code Orange. Caroline B. Cooney. Delacorte Books for Young Readers/Random House Children's Books. 208pp. Trade ISBN 0-385-73259-7, \$15.95; Library ISBN 0-3859-0277-8, \$17.99. (I, A) Finally, a fiction book saturated with science! Prepare to be captivated as a teenager runs through New York researching smallpox. His discovery of scabs in an old medical book

threatens an epidemic and leads us on a nerve-wracking journey leaving us feeling that we have psychological symptoms of the virus! Author's Note with a partial listing of resources. BGS (VII, II, IV)

Life Science

Alzheimer's Disease (Health Alert). Marlene Targ Brill. Illustrated with photographs. Benchmark Books/Marshall Cavendish Children's Books. 64pp. Library ISBN 0-7614-1799-0, \$19.95. (E) A book written with care and understanding on a difficult subject. As the average age of the population increases, Alzheimer's Disease (AD) will affect more people's lives. This book suggests ways to help people with AD and how lifestyle changes can reduce the risk of getting AD later in life. Very useful information. Glossary, Index. CDC (IV, VII)

Attack of the Superbugs: The Crisis of Drug-Resistant Diseases (Issues in Focus Today). Kathiann M. Kowalski. Illustrated with prints and photographs. Enslow Publishers. 128pp. Library ISBN 0-7660-2400-8, \$31.93. (A) As technology to attack disease-causing bacteria increases, the bacteria themselves have evolved resistance to many of the drugs that have become available. This book explores both the resistant "bugs" and the research to keep up with them. Several case studies are presented with relevant research in an interesting and readable format. Chronology of Disease, Chapter Notes, Glossary, Organization Addresses, Further Reading, Internet Resources. DTC (IV, VI, VII)

Big Cats. Dorothy Hinshaw Patent. Illustrated by Kendahl Jan Jubb. Walker and Company. 32pp. Trade ISBN 0-8027-8968-4, \$16.95; Library ISBN 0-8027-8969-2, \$17.85. Paper ed. (F). (E) Big Cats provides general information about these animals at the beginning and end of the book, with specifics about different cats being the central part. Information about each cat is provided through inset maps and information boxes. Watercolor illustrations contribute to the narrative part of the text. Index of Big Cat Names. CAR (IV)

Cancer. Alvin and Virginia Silverstein and Laura Silverstein Nunn. Illustrated with photographs. Twenty-First Century Books/Lerner Publishing Group. 128pp. Library ISBN 0-7613-2833-5, \$27.93. (I, A) Through real-life vignettes that connect the reader to individual's stories, this book explores the different types of cancer, how the cancers are found and treated, and what it is like to live with cancer. Glossary, Index, Suggested Resources. CAR (VII, VI, IV)

The Facts About Inhalants (Drugs). Francha Roffé Menhard. Illustrated with photographs. Benchmark Books/Marshall Cavendish Children's Books. 92pp. Library ISBN 0-7614-1809-1, \$25.95. (A) This book describes the escalating use of inhalants among children and adolescents. Complete with definitions, health concerns, lists of commonly used inhalants, history of inhalant use, and information about treatment. Presented in a readable format for teens and adults looking for information about inhalants and associated issues. Glossary, Further Information, Bibliography, Index. DTC (IV, VII, VIII)

Forensics (Kingfisher Knowledge). Richard Platt. Illustrated with prints and photographs. Kingfisher/Houghton Mifflin Company. 64pp. Trade ISBN 0-7534-5862-4, \$12.95. (I, A) This book presents the real information behind TV shows like CSI. The author condensed the topic of forensics into three

major areas: Signs of the Crime, Who Is It?, and Crime Lab. The aspiring forensic scientist can gain a wealth of information on such topics as evidence collection, DNA analysis, and fingerprinting. Table of Contents, Foreword, Glossary, Index, Acknowledgments, Go Further Information Panels. HDRC (II, I, VI)

Gorilla Doctors: Saving Endangered Great Apes. Pamela S. Turner. Illustrated with photographs. Houghton Mifflin Company. 48pp. Trade ISBN 0-618-44555-2, \$17. (E, I) Using pictures and text, this book looks at the work of the Mountain Gorilla Veterinary Project as it attempts to maintain the health of wild gorillas. The relationship between humans, including human-borne diseases and their impact on mountain gorillas, is a major focus of this book. Index, Postscript, Resources. DAG (IV, VII)

The Great Brain Book: An Inside Look at the Inside of Your Head. H.P. Newquist. Illustrated by Keith Kasnot with line drawings by Eric Brace. Scholastic Reference. 160pp. Trade ISBN 0-439-45895-1, \$18.95. Paper ed. (F). (I, A) A definitive resource on the brain for kids and adults. Content includes history, brain structure and functions, neurons, learning and memory, brain imaging, disease, and future treatment and technology. Excellent photographs throughout. Written in a very readable format with complementary illustrations and sidebars with related information. Introduction, Author's Note, Internet Resources, Index. DTC (IV, VI, VIII)

Guts: Our Digestive System. Seymour Simon. Illustrated with photographs. HarperCollins Children's Books. 32pp. Trade ISBN 0-06-054652-2, \$23.89. (E) Using outstanding photographs of every step of the digestive system of the human body, Seymour Simon vividly describes how food enters the mouth, travels through each of the major organs (e.g., stomach, small intestine, and large intestine), and even how waste is eliminated. This book is educational, engaging, and even a little icky. Author's Note. HDRC. (IV, VII)

Honey in a Hive. Anne Rockwell. Illustrated by S.D. Schindler. HarperCollins Children's Books. 40pp. Trade ISBN 0-06-028567-2, \$16. (E) This book describes the complex social life of honey bees. It identifies the different types of honey bees and explains their role within the honey bee society. There are also interesting facts presented at the end of the book. CRB (IV)

I See a Kookaburra! Steve Jenkins and Robin Page. Illustrated by Steve Jenkins. Houghton Mifflin Company. 32pp. Trade ISBN 0-618-50764-7, \$16. (P, E) Animal habitats in six different regions of the world are shown through a creative approach that includes the prompt of "I see" followed by the identification and very brief description of eight animals that are found within the habitat. There is a longer discussion of each animal at the end of the book. Author's Note, End Notes, Suggested Reading. CAR (IV, II)



Figure 5: I See a Kookaburra! Discovering Animal Habitats Around the World, illustrated by Steve Jenkins, written by Steve Jenkins and Robin Page, ©2005 Houghton Mifflin Co.



Figure 6: Illustration ©2005 by Gary Blythe from Ice Bear: In the Steps of the Polar Bear by Nicola Davies. Used with permission of the publisher, Candlewick Press.

★ **Ice Bear: In the Steps of the Polar Bear.** Nicola Davies. Illustrated by Gary Blythe. Candlewick Press. 32pp. Trade ISBN 0-7636-2759-3, \$16.99. (P, I) This richly illustrated book follows the life of the polar bear in the Arctic region. It uses large narrative text with smaller informational text so the book can be enjoyed on a variety of levels. Index. DAG (IV)

Invisible Allies: Microbes That Shape Our Lives. Jeanette Farrell. Illustrated with prints and photographs. Farrar, Straus, and Giroux Books for Young Readers. 176pp. Library ISBN 0-374-33608-3, \$17. (I, A) This book contains five sections on different microbes that positively impact our lives. Sections include historical to present-day information on bacteria and cheese, yeast and bread, bacteria and the cocoa bean (chocolate), bacteria and digestion, and decomposition. The book is very readable and accompanied by black-and-white pictures and illustrations. Introduction, Glossary, Notes and Bibliography, Illustration Credits, Index. DTC (IV, VIII, VII)

★ **Mosquito Bite.** Alexandra Siy. Illustrated with photographs by Dennis Kunkel and Alan Siy. Charlesbridge Publishing. 32pp. Trade ISBN 1-57091-591-1, \$15.91; Paperback ISBN 1-57091-592-X, \$6.95. (E, I) A fascinating book about the life of mosquitoes. The book begins with a boy and girl playing hide-and-seek, but something else is playing the game. In comes the mosquito. The book then uses both pictures and illustrations to describe the life cycle of the mosquito. Each page also includes micrographs (scanning electron) inset pictures. More Information on Mosquitoes, About Micrographs, Glossary, Index, Resources. DTC (IV, VII)

A Mother's Journey. Sandra Markle. Illustrated by Alan Marks. Charlesbridge Publishing. 32pp. Trade ISBN 1-57091-621-7, \$15.95. Papered. (F). (P) Follow a mother emperor penguin on her long trek to the sea to bring food back to her chick. This intriguing story describes the nurturing habits of female and male penguins, the perilous journey to the sea, and the female's race against time to return home to feed her chick. Both miles and kilometers are used, and there are vivid watercolor illustrations. Emperor Facts, References. NJP (IV)



Figure 7: Illustration © 2005 by Alan Marks. Charlesbridge Publishing.

My Bodyworks: Songs About Your Bones, Muscles, Heart, and More! Jane Schoenberg with music by Steven Schoenberg. Illustrated by Cynthia Fisher. Crocodile Books/Interlink Publishing. 32pp. Trade ISBN 1-56656-583-9, \$16.95. (P) A simple introduction to the parts of the body in songs with a 12-song CD. Well written and informative with some catchy lyrics. This book describes the body from bones to the five senses in a fun and enjoyable manner. A good way to sing along with science. Compact Disc. CDC (IV, VII)

One Night in the Coral Sea. Sneed B. Collard III. Illustrated by Robin Brickman. Charlesbridge Publishing. 32pp. Trade ISBN 1-57091-389-7, \$15.95. (E) This book takes the reader on a "field trip" along the Great Barrier Reef. As you progress along your journey, you are able to observe the diversity of living things on the reef and examine the coral's life cycle. This book contains beautiful illustrations and interesting information about this natural wonder. Glossary, Index. CRB (IV)

A Platypus, Probably. Sneed B. Collard III. Illustrated by Andrew Plant. Charlesbridge Publishing. 32pp. Trade ISBN 1-57091-583-0, \$16.95; Paperback ISBN 1-57091-584-9, \$6.95. (P, E) The

platypus's life cycle is described through this narrative story, which is accompanied by detailed illustrations. Each page tells part of the story through the text but also includes additional inset text for adult use while reading the story. End Notes, Glossary. CAR (IV)

The Prairie Builders: Reconstructing America's Lost Grasslands. Sneed B. Collard III. Illustrated with photographs. Houghton Mifflin Company. 72pp. Trade ISBN 0-618-39687-X, \$17. (E) This is the story of how biologists created a large tallgrass prairie in central Iowa. Along with this story, there is valuable information about grasslands and some of the animals that inhabit these areas. This book contains beautiful photographs of the grassland, its inhabitants, and the individuals involved in its creation. Glossary, Index. CRB (IV, VII)

★ **Red Eyes or Blue Feathers: A Book About Animal Colors.** Patricia M. Stockland. Illustrated by Todd Ouren. Picture Window Books. 24pp. Trade ISBN 1-4048-0931-7, \$22.60; Library ISBN 1-4048-0931-7, \$16.95. (P) What's the best way to survive in the wild? The book opens with this question and then explains how an animal's color serves as a structure for survival in its environment. Many animals and their habitats are described, so young readers will become familiar with the function of survival. Questions, Fun Facts, Glossary, Index, Resources. NJP (IV)

Smoking 101: An Overview for Teens. Margaret O. Hyde and John F. Setaro. Illustrated with photographs. Twenty-First Century Books/Lerner Publishing Group. 160pp. Library ISBN 0-7613-2835-1, \$26.60. (A) This is an excellent look at smoking and tobacco and their effects on young adults. This straightforward book describes the science of nicotine addiction, the effects on human health, and the politics of the big tobacco companies. Resources for quitting are also included. This book should be considered required reading for teens. Glossary, Index, Further Reading, Source Notes, Resources to Help You Quit. CVM (IV, VII)

Song of the Water Boatman and Other Pond Poems. Joyce Sidman. Illustrated by Beckie Prange. Houghton Mifflin Company. 32pp. Trade ISBN 0-618-13547-2, \$16. (P, I) This book brings to life many of the organisms found in a pond, through verse. The poetry is supported by additional text and colorful illustrations. Glossary. DAG (IV)

Physical Science

The Elements: What You Really Want to Know. Ron Miller. Illustrated with prints and photographs. Twenty-First Century Books/Lerner Publishing Group. 128pp. Library ISBN 0-7613-2794-0, \$29.27. (I) This book provides a historical account of how scientists studied the elements, from the early Greeks and their idea of the atom to the proposed existence of quarks. The book is also an excellent source of information about each of the naturally occurring and transuranium elements. Glossary, Index. CRB (III, VIII, II)

Technology & Engineering

Built to Last: Building America's Amazing Bridges, Dams, Tunnels, and Skyscrapers. Written and illustrated by George Sullivan. Scholastic Nonfiction. 128pp. Trade ISBN 0-439-51737-0, \$18.99. Paper ed. (F). (I) From the Erie Canal in New York to the Central Artery/Tunnel Project in Boston, this

book describes the major engineering projects that built modern-day America. The excellent full-page photographs illustrate how engineers worked together to produce structural marvels while solving problems caused by social, environmental, and financial factors. Inspiring for all budding engineers. Author's Note, Further Reading, Websites, Index. CDC (VI)

Members of the Book Selection Panel

Norby Pratt (NJP), Chair

Consultant

Educational Consultant, Inc.

Littleton, Colorado

Charlie Barman (CRB)

Professor of Science

Education

Indiana University School

of Education

Indianapolis, Indiana

Christopher Clements (CDC)

Physics Teacher

Marlborough High School

Marlborough, Massachusetts

David T. Crowther (DTC)

Associate Professor,

Science Education

University of Nevada, Reno

Reno, Nevada

Heather Curton (HDRC)

Science Consultant

OSMTech Center

Waterford, Michigan

David A. Gillam (DAG)

Teacher Specialist

Anchorage School District

Anchorage, Alaska

Christine McLelland (CVM)

GSA Earth Science Educator

Geological Society of America

Boulder, Colorado

Christine Royce (CAR)
Assistant Professor
of Education
Shippensburg University
Shippensburg, Pennsylvania

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

About the Books and the Selection Process

The books that appear in this annotated bibliography selected as Outstanding Science Trade Books were published in 2005. They are intended primarily for kindergarten through 12th 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 appear 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 at www.cbcbooks.org/about/members.html.

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.

Visit CBC's and NSTA's websites at www.cbcbooks.org and www.nsta.org.

Expanded reviews of these award-winning books are available at old.nsta.org/recommends.

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 packagers 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.

Single copies of this list are available for \$2 with a self-addressed 6" × 9" envelope with 87¢ postage to CBC at 12 West 37th St., 2nd fl, New York, NY 10018-7480. 10–24 copies, \$1.50 each; 25 or more copies, \$1 each. Payment must accompany order.