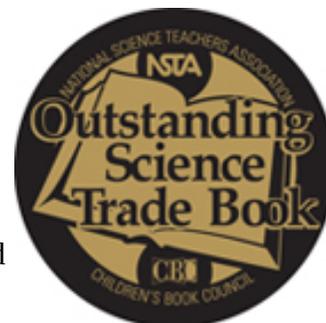




## Outstanding Science Trade Books for Students K–12: 1996 (Books published in 1995)

[OSTB home](#)

A cooperative project between the National Science Teachers Association and the [Children's Book Council](#). This list is published annually in the March issue of *Science and Children*, the journal devoted to preschool through middle level science teaching. The books on the list are targeted at grades K–8.



### Categories:

- [Biography](#)
- [Earth Science](#)
- [Environment and Ecology](#)
- [Fiction](#)
- [Life Science](#)
- [Medicine and Medical Research](#)
- [Paleontology](#)
- [Physical Science](#)
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### [About the Books and the Selection Process](#)

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## Biography

**ORDINARY GENIUS: THE STORY OF ALBERT EINSTEIN.** Stephanie Sammartino McPherson. Illustrated with various photographs. Carolrhoda. 96pp. ISBN library: 0-87614-788-0. \$14.96. (I) The reader learns about Albert Einstein's beliefs and private life. Einstein's personal trials and triumphs are presented with sensitivity and humor. His unprecedented contributions to science are addressed with unusual clarity. Author's Note. Bibliography. Index. GMM

**\*TAKING FLIGHT: MY STORY.** Vicki Van Meter with Dan Gutman. Illustrated with various photographs and maps. Viking. 144pp. ISBN 0-670-86260-6. \$14. (I) With the help of supporting

adults, Vicki Van Meter accomplished her dream of piloting a plane across the continent when she was 12 years old, and flying across the Atlantic Ocean when she was 14. Her inspiring story addresses the obstacles she had to overcome and integrates related fields such as mathematics, science, geography, and meteorology. Author's Note. BtB

## Earth Science

**CAVES.** Stephen Kramer. Illustrated with photographs by Kenrick L. Day. Carolrhoda. 48pp. ISBN library: 0-87614-447-4, \$14.96; paperback: 0-87614-447-4, First Avenue Editions, \$7.95. (I)

Outstanding, closeup photographs portray the geological features and development of caves. This descriptive book is certain to stimulate the imaginations of future scientists. Glossary. Index. Metric Conversion Chart. RJK

**THE CHILDREN'S ATLAS OF NATURAL WONDERS.** Joyce Pope. Illustrated with photographs and maps. Millbrook. 96pp. ISBN library: 1-56294-564-5, \$19.40; paperback: 1-56294-886-5, \$12.95. (I)

This visually stimulating book covers all the major land masses and describes 36 natural "wonders" in terms of their geological evolution. It provides an excellent overview and can be used to initiate an in-depth study of how the Earth evolved. Glossary. Index. RJK

**ORION, THE HUNTER.** Necia H. Apfel. Illustrated with photographs and diagrams. Clarion. 48pp. ISBN 0-395-68962-7. \$16.95. (I) Color photographs from the Hubble Space Telescope portray the splendor of the constellation Orion, its nebula, and other nearby constellations. Origins of stars such as blue-white giants and red supergiants are explained in easy-to-understand terms. Index. PSB

**OUR PATCHWORK PLANET.** Helen Roney Sattler. Illustrated by Giulio Maestro and with photographs. Lothrop. 48pp. ISBN trade: 0-688-09312-4, \$16; library: 0-688-09313-2, \$15.93. (I,A) Verbal and visual details offer a most pleasant excursion through present-day plate tectonic theory. This book can be reread a number of times with the reader gaining more understanding and appreciation of our dynamic planet. Index. Further Reading List. RJK

**SCIENCE ON THE ICE: AN ANTARCTIC JOURNAL.** Rebecca L. Johnson. Illustrated with photographs. Lerner. 128pp. ISBN library: 0-8225-2852-5. \$19.13. (I,A) This journal filled with breathtaking color photographs accurately depicts life at the research stations in Antarctica. Marginal notes provide interesting informational tidbits. This personalized account makes readers feel as if they have visited this frozen continent and its inhabitants. Index. Metric Conversion Chart. PSB

## Environment and Ecology

**AN AMERICAN SAFARI: ADVENTURES ON THE NORTH AMERICAN PRAIRIE.** Jim Brandenburg. Illustrated with photographs by the author. Walker. 48pp. ISBN trade: 0-8027-8319-8, \$16.95; library: 0-8027-8320-1, \$17.85. (I,A) Both history and wildlife come alive in this portrayal of America's grasslands. Striking color photographs highlight the beauty and ecology of the prairie as well as the changes that have occurred as civilization has encroached upon the prairie's delicate ecosystem. Author's Note. Index. Address List. PSB

**ANGEL FALLS: A SOUTH AMERICAN JOURNEY.** Tanis Jordan. Illustrated by Martin Jordan. Kingfisher. 36pp. ISBN 1-85697-541-X. \$15.95. (I) Brilliant text and stunning oil paintings capture the beauty of the Venezuelan Highlands with its immense grasslands, dense jungles, towering mountains, and the grandeur of Angel Falls, the highest waterfall in the world. Readers encounter native species either living in harmony or struggling to survive. Glossary. Pronunciation keys within the text. BtB

**THE CASE OF THE MUMMIFIED PIGS: AND OTHER MYSTERIES IN NATURE.** Susan E. Quinlan. Illustrated by Jennifer Owings Dewey. Boyds Mills. 128pp. ISBN 1-878093-82-7. \$15.95. (I,A) A wildlife biologist describes 14 real-life science adventures, all of which start with puzzling observations. Readers follow the steps of scientists as they track down the clues and discover some of the amazing ways that nature works. Author's Note. Index. Further Reading List. RJK

**FIRE IN THE FOREST: A CYCLE OF GROWTH AND RENEWAL.** Laurence Pringle. Illustrated by Bob Marstall. Atheneum. 32pp. ISBN 0-689-80394-X. \$16. (I) This book presents fire as a natural phenomenon necessary for the health of the forest. Pringle urges readers to look beyond the media presentation of fire as a destroyer, using the northern Rocky Mountain landscape to show the forest ecosystem before, during, and after a fire, and regrowth over two centuries. Small, labeled pictures identify plants and animals in the side margins. Bibliography. Further Reading List. JRW

**I SEE ANIMALS HIDING.** Jim Arnosky. Illustrated by the author. Scholastic Hardcover. 28pp. ISBN 0-590-48143-6. \$12.95. (P) Strikingly beautiful watercolors in soft hues highlight animals in their environment. Readers are challenged to find 20 deer on a hillside and to locate an owl and a moth hidden on a tree limb. A delightful introduction to animals' natural camouflage. PSB

**\*RAPTOR RESCUE!: AN EAGLE FLIES FREE.** Sylvia A. Johnson. Illustrated with photographs by Ron Winch. Dutton. 32pp. ISBN 0-525-45301-6. \$14.99. (I) A behind-the-scenes tour of Gabbert Raptor Center at the University of Minnesota explores what happens when eagles and other birds of prey are injured. Readers will be intrigued by the dedicated staff and volunteers who care for these remarkable raptors. Notes. DAD

**\*RICHARD ORR'S NATURE CROSS-SECTIONS.** Moira Butterfield. Illustrated by Richard Orr. DK Publishing. 30pp. ISBN 0-7894-0147-9. \$17.95. (I) Amazing double-page artwork reveals an incredible view of the natural world using cross-sectional detail of an oak tree, tide pool, woodland, ocean, arctic ecosystem, and rain forest. The large pages will captivate readers of all ages, kindling a long-lasting interest in the natural world. Metric and English measure are used. Index. BAZ

**SUMMER ICE: LIFE ALONG THE ANTARCTIC PENINSULA.** Bruce McMillan. Illustrated with photographs and maps by the author. Houghton Mifflin. 48pp. ISBN 0-395-66561-2. \$15.95. (I) Using stunning photographs and language suitable to young naturalists, the author demonstrates the thriving life of plants and animals in a vigorous environment. Offers a unique view of survival in a land like no other a land of summer ice. Metric conversions and Latin terms are integrated into the text. Author's Note. Bibliography. Glossary. Index. BAZ

**THE SUMMER SANDS.** Sherry Garland. Illustrated by Robert J. Lee. Gulliver. 32pp. ISBN 0-15-282492-8. \$15. (P) A delightful story about conservation is told from the point of view of children

observing the life-forms on a fragile sand dune. After the dune is destroyed by a storm, recycled Christmas trees are used as a base to help rebuild it. Author's Note. RJK

**SWEET MAGNOLIA.** Virginia Kroll. Illustrated by Laura Jacques. Charlesbridge. 32pp. ISBN trade: 0-88106-415-7, \$14.95; library: 0-88106-416-5, \$15.88; paperback: 0-88106-414-9, \$6.95. (I) Denise visits her grandmother, a wildlife rehabilitator, in the Louisiana bayou. A lush, vibrant environment is the scene for this exceptional story of generational love, cultural diversity, and ecological stewardship. BtB

**THE THREATENED FLORIDA BLACK BEAR.** Margaret Goff Clark. Illustrated with photographs. Cobblehill. 64pp. ISBN 0-525-65196-9. \$15.99. (I) Colorful photographs and interesting text provide information about how biologists and government agencies are working to keep the Florida black bear from becoming an endangered animal. Includes a section of black bear statistics and Florida black bear milestones. Index. CRB

**TREES AND FORESTS.** Gallimard. Illustrated with photographs and prints. Scholastic Inc./Gallimard Jeunesse. 44pp. ISBN 0-590-47639-4. \$19.95. (P,I) This is an interactive book with spectacular art, textured pages, and dazzling graphics, designed to be read, handled, and fully experienced. From the first plants to grow on land to modern cultivated tree farms, this book is truly a voyage of discovery. Stickers in the back can be removed without detriment to the book. Glossary. Index. Further Reading List. Time Line. Biographical Sketches. BAZ

**WOODS.** Donald M. Silver. Illustrated by Patricia J. Wynne. Scientific American. 48pp. ISBN 0-7167-6610-8. \$14.95. (I) Within a small square of forest, children explore an ecosystem of animals, plants, rocks, and soil. Encouraged to use scientific processes, readers learn how different seasons influence the forest community. Index. Further Reading List. Also recommended in the *One Small Square* series: **CACTUS DESERT.** Donald M. Silver. Illustrated by Patricia J. Wynne. Scientific American. 48pp. ISBN 0-7167-6573-X. \$14.95. (I) BtB

## Fiction

**MARTA'S MAGNETS.** Wendy Pfeffer. Illustrated by Gail Piazza. Silver Burdett. 32pp. ISBN trade: 0-382-24931-3, \$13.95; library: 0-382-24930-5, \$15.95; paperback: 0-382-24932-1, \$5.95. (I) Marta's collection of magnets, which her sister calls junk, provides the vehicle for Marta's acceptance into her new multicultural neighborhood. Directions for making a refrigerator magnet. A magnet in the back can be removed without detriment to the story or the book. JRW

**RETURN OF THE WOLF.** Dorothy Hinshaw Patent. Illustrated by Jared Taylor Williams. Clarion. 80pp. ISBN 0-395-72100-8. \$15.95. (I,A) Based on the author's firsthand observations, this dramatic story is realistic and fast-paced. Many intriguing details of animal communication, wolf pups' birth and training, and a pack's hunting and survival techniques enliven this unforgettable story of two wolves who meet and begin a family. BAZ

## Life Science

**AFRICAN ANIMALS ABC.** Philippa-Alys Browne. Illustrated by the author. Sierra Club. 32pp. ISBN 0-87156-372-X. \$15.95. (P) This alphabet book uses simple, rhyming text and bold illustrations to acquaint readers with 26 little-known and well-known animals of the African continent. Notes. DAD

**ALL ABOUT OWLS.** Jim Arnosky. Illustrated by the author. Scholastic Hardcover. 28pp. ISBN 0-590-46790-5. \$14.95. (P) For young readers and nature observers, the author-artist uses vivid illustrations to present an interesting glimpse of where owls live, what they eat, how they care for their young, and how they see so well at night. GMM

**APES.** Eric S. Grace. Illustrated with photographs. Sierra Club. 64pp. ISBN 0-87156-365-7. \$15.95. Paper ed., Sierra Club (F). (I) This book explores the evolution of apes and examines their similarities to humans. Readers will discover differences among the primates' parenting, communication, social bonding, dexterity, and eating habits. Index. NPS

**BIGGEST, STRONGEST, FASTEST.** Steve Jenkins. Illustrated by the author. Ticknor/Houghton Mifflin. 32pp. ISBN 0-395-69701-8. \$14.95. (P) Using cut-paper collage, the author presents animals holding the record in such areas as size, speed, strength, and height. A chart organizes additional information regarding the animals' habitat, diet, and size. NPS

**BONES.** Anna Sandeman. Illustrated by Ian Thompson. Millbrook. 28pp. ISBN library: 1-56294-621-8. \$13.90. (P) Colorful photographs and diagrams make this an excellent resource for young children to learn about the human skeleton, joints, and muscles. Index. DAD

**THE BOOK OF NORTH AMERICAN OWLS.** Helen Roney Sattler. Illustrated by Jean Day Zallinger. Clarion. 64pp. ISBN 0-395-60524-5. \$15.95. (I,A) Owls are mysterious, nocturnal animals that intrigue young readers. This clear and accurate book includes owl classification and history, hunting and habitat, courtship and nesting, and the complex relationship between owls and humans. The comprehensive glossary includes all of the 21 North American species. Bibliography. Index. GMM

**BUTTERFLY.** Stephen Savage. Illustrated by Andre Boos. Thomson. 32pp. ISBN library: 1-56847-325-7. \$13.95. (P) Colorful, careful drawings of the butterfly's life cycle feature hibernation, mating, eggs, and chrysalis. The drawings culminate in a succinct summary of metamorphosis. A brief comparison of butterflies and moths is included. Glossary. Index. PSB

**BUTTERFLY STORY.** Anca Hariton. Illustrated by the author. Dutton. 32pp. ISBN 0-525-45212-5. \$14.99. (P) The red admiral's life cycle is so descriptively portrayed, readers can almost hear the "crunch" of the caterpillar eating leaves. Delicate illustrations show the organisms in the habitat as the butterfly's metamorphosis occurs. Includes detailed teacher information on butterflies and moths. PSB

**THE CONCISE ENCYCLOPEDIA OF THE HUMAN BODY.** David Burnie. Illustrated with photographs and prints. DK Publishing. 160pp. ISBN 0-7894-0204-1. \$19.95. (I,A) Four hundred full-color illustrations and more than 2,000 key words provide a rich source of information and an invaluable "first stop" reference guide to answer readers' questions about the world of the human body. Includes tables on infectious and noninfectious diseases and a biographical index of over 100 scientific pioneers. Index. BAZ

**COYOTES.** Cherie Winner. Illustrated with photographs. Carolrhoda. 48pp. ISBN library: 0-87614-938-7, \$14.96; paperback: 0-87614-957-3, First Avenue Editions, \$7.95. (I) This book describes the coyote from pack life to courtship and mating behavior. Beautiful photographs, accompanied by clear, concise text, provide readers with accurate information about an often misunderstood animal. Glossary. Index. Also recommended in the *Nature Watch* series: **SHARKS.** Ruth Berman. Illustrated with photographs by Jeffrey L. Rotman. Carolrhoda. 48pp. ISBN library: 0-87614-870-4, \$14.96; paperback: 0-87614-897-6, First Avenue Editions, \$7.95. (I) CRB

**DO YOU KNOW THE DIFFERENCE?** Andrea and Michael Bischhoff-Miersch. Illustrated by Christine Faltermayr. North-South. 28pp. ISBN trade: 1-55858-371-8; \$14.95; library: 1-55858-372-6, \$14.88. (P,I) The similarities of and differences between a variety of common animals are presented through a clear text accompanied by lifelike illustrations. The book compares, for example, grey seals with sea lions. CRB

**\*EAGLES OF AMERICA.** Dorothy Hinshaw Patent. Illustrated with photographs by William Mu? Holiday. 40pp. ISBN 0-8234-1198-2. \$15.95. (I) Eagles have long been an important symbol for the United States and for many Native American tribes. Wonderful photographs and concise text help readers learn more about the similarities of and differences between the bald and golden eagles of North America. Index. GMM

**ELEPHANTS SWIM.** Linda Capus Riley. Illustrated by Steve Jenkins. Houghton Mifflin. 40pp. ISBN 0-395-73654-4. \$14.95. (P) Large print and vivid, full-color collages will delight young readers as they learn how 16 swimming animals behave in the water. Notes. DAD

**EYES.** Stephen Savage. Illustrated with photographs. Thomson. 32pp. ISBN library: 1-56847-349-4. \$14.95. (I) Animals' eyes must be suited for certain ways of life. This remarkable book explores the different ways that eyes can help animals move, gather food, and avoid dangerous predators. The huge, closeup photographs add to the enjoyable text. Glossary. Index. Further Reading List. GMM

**HAVE YOU SEEN TREES?** Joanne Oppenheim. Illustrated by Jean and Mou-Sien Tseng. Scholastic Hardcover. 40pp. ISBN 0-590-46691-7. \$14.95. (P) Delightful poetry and watercolor illustrations encourage readers to use their senses while exploring trees, leaves, fruits, and seasons. Includes a tree identification key. BtB

**INSECTS.** Joni Phelps Hunt. Illustrated with photographs. Silver Burdett. 46pp. ISBN library: 0-382-24878-3, \$14.95; paperback: 0-382-24879-1, \$7.95. (I,A) Close-up photographs and detailed text unlock the mysteries of the behaviors, body parts, and life cycles of many kinds of insects. Ants, grasshoppers, and termites are just a few of the insects discussed. Includes list of insect exhibits. Glossary. Index. Further Reading List. GMM

**\*THE LIFE AND TIMES OF THE HONEYBEE.** Charles Micucci. Illustrated by the author. Ticknor/Houghton Mifflin. 32pp. ISBN 0-395-65968-X. \$13.95. (P) Everything you ever wanted to know about bees presented in a lively, simple text that labels easy-to-understand color illustrations. Employs graphs, cross sections, calendars, size comparisons, and the history of bees and honey in the world. Both interesting and amusing, this book will appeal to many ages. JRW

**LUCKY MOUSE.** Elizabeth Ring. Illustrated with photographs by Dwight Kuhn. Millbrook. 32pp. ISBN library: 1-56294-344-8. \$15.40. (P) The life cycle of an orphaned deer mouse unfolds as a group of children place it with a white-footed mouse family. Relevant facts on mice are included in a question-and-answer section. NPS

**METAMORPHOSIS: ANIMALS THAT CHANGE.** Luise Woelflein. Illustrated by Ruth Lindsay. Lodestar. 12pp. ISBN 0-525-67496-9. \$15.99. (I) This pop-up/lift-the-flap book presents the metamorphosis of various insects, amphibians, and marine invertebrates. The pop-ups require extra care in handling. CRB

**NATURE IN YOUR BACKYARD: SIMPLE ACTIVITIES FOR CHILDREN.** Susan S. Lang, *et al.* Illustrated by Sharon Lane Holm. Millbrook. 48pp. ISBN library: 1-56294-451-7, \$16.90; paperback: 1-56294-893-8, \$6.95. (I) A variety of easy-to-follow science activities that can be conducted in your backyard. Index. Further Reading List. CRB

**NIGHTS OF THE PUFFLINGS.** Bruce McMillan. Illustrated with photographs by the author. Houghton Mifflin. 32pp. ISBN 0-395-70810-9. \$14.95. (P) For two weeks every year, the children of Heimaey Island, Iceland, stay out late rescuing hundreds of stranded pufflings. Many of the birds are confused by the village lights and need help flying toward the sea. Describes a unique culture and environment. Bibliography. Notes. GMM

**PUFFINS CLIMB, PENGUINS RHYME.** Bruce McMillan. Illustrated with photographs by the author. Gulliver. 36pp. ISBN 0-15-200362-2. \$14. (P) Travel to both of Earth's polar regions to experience the behavior and lives of two amazing and unique birds. Two-word, rhyming sentences and large, vivid photographs will captivate young readers. Notes. Author's Note. DAD

**RHINO.** Caroline Arnold. Illustrated with photographs by Richard Hewett. Morrow. 48pp. ISBN trade: 0-688-12694-4, \$16; library: 0-688-12695-2, \$15.93. (I) Clear photographs of baby Shimba and her mother, residents of the Edinburgh Zoo in Scotland, complement the informative text. Covers the life cycle, daily habits, problems, and efforts to save the five species of rhinoceroses in captivity and the wild. Index. Also recommended in the *Baby Zoo Animals* series: **LION.** Caroline Arnold. Illustrated with photographs by Richard Hewett. Morrow. 48pp. ISBN trade: 0-688-12692-8, \$16; library: 0-688-12693-6, \$15.93. (I) JRW

**SEA TURTLES.** Gail Gibbons. Illustrated by the author. Holiday. 32pp. ISBN 0-8234-1191-5. \$15.95. (P) One of the oldest surviving creatures, the sea turtle is examined in this colorfully illustrated book. Readers learn about the size, habitat, and diet of the eight kinds of sea turtles and efforts environmentalists are making to protect them. Notes. NPS

**SHARKS.** Seymour Simon. Illustrated with various photographs. HarperCollins. 32pp. ISBN trade: 0-06-023029-0, \$15.95; library: 0-06-023032-0, \$15.89; paperback: 0-06-446187-4, Harper Trophy, \$5.95. (P,I) An award-winning author explores the fascinating undersea life of sharks, examining the truths and myths about these amazing creatures. Astounding close-up photographs enhance the informative and exciting text. DAD

**\*SKY TREE: SEEING SCIENCE THROUGH ART.** Thomas Locker with Candace Christiansen. Illustrated by Thomas Locker. HarperCollins. 40pp. ISBN trade: 0-06-024883-1, \$15.95; library: 0-06-

024884-X, \$15.89. (P) This treasure combines the seasonal changes of a tree perched atop a hill near a riverbank with lyrical text and delicately muted color drawings. A must volume for integrating science and the arts. PSB

**TREES.** Jonathan Pine. Illustrated by Ken Joudrey. HarperCollins. 48pp. ISBN trade: 0-06-021468-6, \$15; library: 0-06-021469-4, \$14.89. (I) This guide introduces readers to seven North American trees, discussing their history and characteristics. The author's love for trees is evident throughout as he extends an invitation to explore and study them. Author's Note. NPS

**THE VISUAL DICTIONARY OF THE SKELETON.** Richard Walker. Illustrated with photographs and prints. DK Publishing. 64pp. ISBN 0-7894-0135-5. \$16.95. (I,A) This comprehensive and exquisitely illustrated treasure trove of anatomical terms provides clear and instant access to the skeletons of humans, trees, amphibians, sea mammals, and others. Index. BAZ

**WHAT IS A REPTILE?** Robert Snedden. Illustrated with photographs. Sierra Club. 32pp. ISBN 0-87156-493-9. \$14.95. (I) What do turtles, snakes, crocodiles, and tuataras have in common? Color photographs on double-page spreads compare these reptiles, describing their physical characteristics, movement, senses, defenses, and eating habits. Vocabulary words are in bold print and summarized in a glossary section. Index. JRW

**WHO EATS WHAT?: FOOD CHAINS AND FOOD WEBS.** Patricia Lauber. Illustrated by Holly Keller. HarperCollins. 32pp. ISBN trade: 0-06-022981-0, \$15; library: 0-06-022982-9, \$14.89; paperback: 0-06-445130-5, Harper Trophy, \$4.95. (P). Using simple diagrams and illustrations, this book explains the concept of food chains and how plants, animals, and humans are ecologically linked. Also recommended in the *Let's-Read-and-Find-Out Science* series: **HOW MOUNTAINS ARE MADE.** Kathleen Weidner Zoehfeld. Illustrated by James Graham Hale. HarperCollins. 32pp. ISBN trade: 0-06-024509-3, \$14.95; library: 0-06-024510-7, \$14.89; paperback: 0-06-445128-3, Harper Trophy, \$4.95. (P) BtB

**WHO LIVES HERE?** Maggie Silver. Illustrated by the author. Sierra Club. 20pp. ISBN 0-87156-371-1. \$10.95. (P) Describing the habitat of eight animals and using clues about family patterns and nest building, this lift-the-flap book invites readers to discover wildlife. NPS

## Medicine and Medical Research

**GENETIC ENGINEERING.** Jenny Bryan. Illustrated with various photographs. Thomson. 64pp. ISBN library: 1-56847-268-4. \$15.95. (I,A) A comprehensive examination of the history, achievements, politics, and prospects of genetic research. Readers will find this an extremely interesting area that blends science and ethics and affects the life of every individual. Includes milestones of genetic engineering. Glossary. Index. Further Reading List. BtB

**LIVING WITH ASTHMA.** Margaret O. Hyde and Elizabeth H. Forsyth. Illustrated with photographs and prints. Walker. 96pp. ISBN trade: 0-8027-8286-8, \$14.95; library: 0-8027-8287-6, \$15.85. (I,A) Questions are answered and myths dispelled as children learn what asthma is and what life is like for the six million people in the United States living with this disease. Readers will gain insight and empathy. Glossary. Index. Further Reading List. Address List. DAD

**MEDICINE.** Steve Parker. Illustrated with photographs and prints. DK Publishing. 64pp. ISBN 1-56458-882-3. \$15.95. (I,A) This lavishly illustrated resource book presents the discoveries, tools, and practice of medicine and health through history and around the world. Begins by defining medicine and ends with a projection into the future. Some graphic illustrations and descriptions may not be suitable for all readers but will interest many. Index. JRW

**THE VOICES OF AIDS.** Michael Thomas Ford. Morrow. 240pp. ISBN 0-688-05322-X, \$15; paperback: 0-688-05323-8, Beech Tree, \$4.95. (A) Twelve sections of facts concerning AIDS are interspersed with personal stories about how this disease changed several young people's lives. The book speaks frankly about sensitive issues related to HIV/AIDS and, therefore, would be most appropriate for middle school and older students. Author's Note. Index. Address List. CRB

## **Paleontology**

**HOW DO WE KNOW DINOSAURS EXISTED?** Mike Benton. Illustrated by John Butler and Alan Male. Raintree. 42pp. ISBN library: 0-8114-3878-3. \$15.98. (P,I) Detailed illustrations and graphs enhance the fact-filled text in a question-and-answer format. Numerous theories and unanswered questions are interspersed with a few activities. For the dinosaur buff and a good resource book for elementary students. Metric and English measure are used. Glossary. Index. JRW

**\*THE SEARCH FOR THE ORIGIN OF BIRDS.** Lawrence M. Witmer. Illustrated by Kit Mather. Watts. 64pp. ISBN library: 0-531-11232-2. \$21.90. Paper ed., Watts (F). (I,A) This book demonstrates how the methods of a scientist can be similar to those of a detective. Readers are provided with the data scientists have used to construct their current explanation for the origin of birds. Glossary. Index. Further Reading List. CRB

## **Physical Science**

**IT'S ALL IN YOUR BRAIN.** Sylvia Funston and Jay Ingram. Illustrated by Gary Clement. Grosset. 64pp. ISBN library: 0-448-40940-2, \$13.99; paperback: 0-448-40939-9, \$9.95. (I) Senses, emotions, memory, and thinking are the major categories featured in this interactive tour through the brain. The activities in each category are an excellent introduction to concepts not often discussed in the classroom. Author's Note. Index. RJK

**WHAT'S SMALLER THAN A PYGMY SHREW?** Robert E. Wells. Illustrated by the author. Whitman. 32pp. ISBN library: 0-8075-8837-7, \$13.95; paperback: 0-8075-8838-5, \$6.95. (P). Using humorous illustrations, this volume facilitates readers' understanding of the relative term "small." Beginning with the eight-centimeter pygmy shrew, the author depicts a diminishing progression from ladybug to protozoa, bacteria, and finally to the atom and its constituent parts. Glossary. PSB

## **Technology and Engineering**

**\*CATASTROPHE!: GREAT ENGINEERING FAILURE AND SUCCESS.** Fred Bortz. Illustrated by Gary Tong and various photographs. Scientific American. 80pp. ISBN 0-7167-6538-1, \$19.95; paperback: 0-7167-6539-X, \$13.95. (I) Examines engineering failures and demonstrates that engineers

try to look for and then to eliminate anything that can lead to failure in their designs. Pictures, diagrams, and text explain both failures and corrective measures. Index. Epilogue. Further Reading List. NPS

**FLUSH!: TREATING WASTEWATER.** Karen Mueller Coombs. Illustrated with photographs by Jerry Boucher. Carolrhoda. 56pp. ISBN library: 0-87614-879-8. \$16.13. (I) Ever wonder what happens to water you flush down the toilet? A step-by-step trip through the process of cleaning wastewater gives a behind-the-scenes look using excellent, full-color photographs. A unique book concerning our most valuable natural resource—water. Glossary. Index. BAZ

**\*NATURE GOT THERE FIRST: INVENTIONS INSPIRED BY NATURE.** Phil Gates. Illustrated with photographs and prints. Kingfisher. 80pp. ISBN 1-85697-587-8. \$17.95. (I,A) Inventions from eight categories of technology, including building materials and building designs, and the shape of tools, are presented and contrasted with nature's designs. Glossary. Index. RJK

## About the Books and the Selection Process

The books that appear in this annotated bibliography were selected as outstanding children's science trade books published in 1995. They are intended primarily for kindergarten to eighth grade. They were selected by 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 generally based 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 so that 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: presentation is logical and sequence of ideas is clear; the content level is appropriate for the intended audience; text and illustrations are compatible; illustrations enhance the presentation and are accurate representations in size, color, and scale; trim size and format are appropriate to the subject and audience; and layout is well-organized and advances the text. In addition, the panel gives attention to the quality of binding, paper, reproduction, and to the appropriateness of typeface.

Each annotation is initialed by the person who wrote it. All panel members read the books, but annotations do not necessarily reflect the appraisal of the entire panel. Appropriate reading levels for titles are given in parentheses and are as follows:

**P** = Primary

**I** = Intermediate

**A** = Advanced

These levels are general guidelines only and are not meant to be prescriptive. International Standard Book Numbers (ISBNs) are included. Prices are accurate as of January 1996, but are subject to change. Information on paperback editions is given when known. The symbol "F" indicates that there are firm

plans for a paperback edition in the future. Some titles on this list are appropriate for more than one category, and they have been placed where their usefulness in science education appears greatest.

The titles marked with an asterisk (\*) are Selectors' Choices—books that individual panel members responded to with particular enthusiasm.

The Children's Book Council is a not-for-profit association encouraging the use and enjoyment of children's books and related literacy materials. Its members are publishers of trade books for children and producers of book-related materials for young people. CBC is the official sponsor of National Children's Book Week and cooperates on reading development projects with several national associations, including NSTA. To receive a brochure of CBC's reading encouragement materials and a sample of its newsletter, send a self-addressed 6x9 envelope with 78 cents postage to CBC, Attn.: Dept. S96CF, 568 Broadway, Ste. 404, New York, NY 10012. The National Science Teachers Association 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, telephone 800-830-3232. Visit NSTA's and CBC's websites at [www.nsta.org](http://www.nsta.org) and [www.CBCbooks.org](http://www.CBCbooks.org), respectively.

Current members of the book review panel are:

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