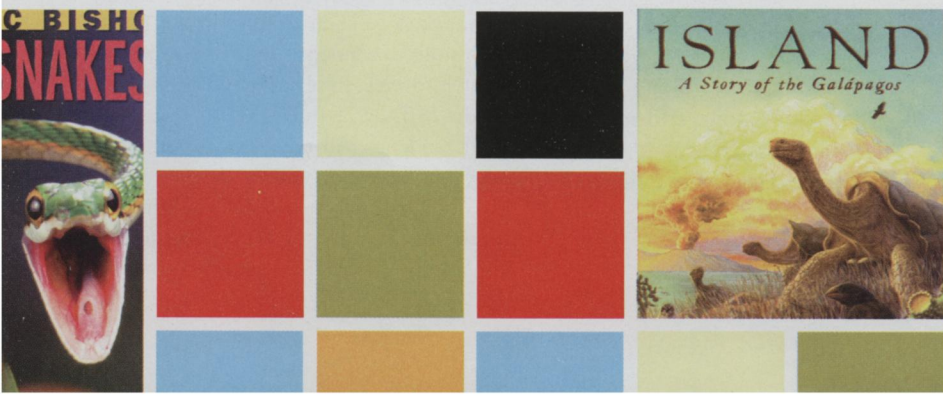


# OUTSTANDING SCIENCE TRADE BOOKS FOR STUDENTS K-12



## Books published in 2012



Our vision of what we call science has broadened. The practices we use to explore the natural world and to create new products now include mathematics and engineering. We also recognize the importance of the arts, history, and human perspectives in these explorations.

Science is not just one “way of knowing,” but many. The same is true for our vision of outstanding science literature. Today’s best science trade books include captivating stories of human achievement—like those of Rachel Carson or the diverse investigators in *What Color Is My World?* They combine science and engineering, like the story of the Mighty Mars Rovers. They feature outstanding art, lyric poetry, and plenty of ideas for hands-on activity. These great books have something to grab the minds and hearts of diverse learners.

So once again, we present a list of the year’s Outstanding Science Trade Books with pride and optimism. They have the potential to enrich and inspire, as they convey the best science content. Please share.



## Earth and Space Science

*Alien Deep: Revealing the Mysterious Living World at the Bottom of the Ocean.* Bradley Hague. National Geographic Children's Books. 48pp. Trade ISBN 978-1426310676, \$17.95. (3–8) Dive deep into a world of wild and weird life that only a few have seen. The author, a team of scientists and a crew from America's Flagship of Exploration, *Okeanos Explorer*, share their adventure and discoveries through the eyes of a camera with incredible photographs from their journey. Glossary, Websites, Additional Resources. (JMP) V

*Black Gold: The Story of Oil in Our Lives.* Albert Marrin. Alfred A. Knopf. 192pp. Trade ISBN 978-0-375-86673-9, \$19.99.

Library ISBN 978-0-375-96673-6, \$22.99. Paperback ISBN 978-0-375-85968-7, \$15.99. (6–8) Both an entertaining read and an excellent resource for understanding the history of, sources of, and role played in our lives by oil. Notes, Glossary, Index. (BGH) V, VIII

*Eight Days Gone.* Linda McReynolds. Illustrated by Ryan O'Rourke. Charlesbridge. 44pp. Trade ISBN 978-1-58089-364-0, \$16.95. Paperback ISBN 978-1-58089-365-7, \$7.95. (K–2) Simple story lines and clear illustrations will help young students understand the basic facts of what it took to send humans to the Moon. The author and illustrator have taken a complex endeavor and brought the story to life in a clear, accurate, and concise manner, filling a need for this type of book for

young children. Author's Note, Bibliography. (SAR) II, V, VIII

★ *Out of This World.* Amy E. Sklansky. Illustrated by Stacey Schuett. Alfred A. Knopf. 40pp. Trade ISBN 978-0-375-86459-9, \$17.99. Library ISBN 978-0-375-96459-6, \$20.99. Paper ed. (F). (K–2) The author does an amazing job of engaging the reader in the world of poetry while using sidebars to provide factual information. Children learn about our solar system and space exploration in an accessible way. This picture book is a brilliant example of how poetry and informational text can support each other. The illustrations allow the reader to be a part of the experience. Excellent classroom resource. (KAR) V

*Seymour Simon's Extreme Earth Records.* Seymour Simon. Chronicle Books. 57pp. Trade ISBN 978-1-4521-0785-1, \$17.99. (3–5) Simon begins with amazing facts that will fascinate middle level students: the highest, deepest, and rainiest place on Earth. Then he moves to why, with sound science and invitations to further inquiry. Accurate illustrations are bright and colorful. The explanations are broken down so children can understand complex vocabulary. Index. (SLS) V

*A Warmer World.* Caroline Arnold. Illustrated by Jamie Hogan. Charlesbridge. 32pp. Trade ISBN 978-1-58089-266-7, \$16.95. Paperback ISBN 978-1-58089-267-4, \$7.95. (3–5) This beautiful book communicates on two levels. There is a main story line supported by facts, and insets explain an important current issue and the effect it has on animals. Glossary, For More Information. (BCC) I, IV

## History and Nature of Science

*Barnum's Bones: How Barnum Brown Discovered the Most Famous Dinosaur in the World.* Tracey Fern. Illustrated by Boris Kulikov. Margaret Ferguson Books, an imprint of Farrar Straus Giroux Books for Young Readers, an imprint of Macmillan Children's Publishing Group. 36pp. Trade ISBN 978-0-374-30516-1, \$17.99. (3–5) Students will enjoy this worthwhile story of discovery, which illustrates that scientific processes take time. Teachers will appreciate how the book documents the importance of careful observation when

### About the Reviews

1 (SAMPLE)

★ *The Opryland.* The Nashville Brothers. Illustrated with photographs. Tennessee Press. 168pp. Trade ISBN 0-592-67321-1, \$18.95; Library ISBN 0-592-64213-X, \$18.99. Paper ed. (F). (5–12) Members of the Opryland crew take readers on a tour of a tropical indoor environment. Author's Note. (ABC) VII, II

In addition to standard publishing information, the reviews 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 2013.
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 (K–2, 3–5, 6–8, and 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 on page 74).
7. The most relevant National Science Education Content Standards are indicated by Roman numerals (see below).

### National Science Education Standards

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



collecting evidence and samples. Teachers can support instruction by pairing this book with a guest speaker from a museum or a field trip to see dinosaur skeletons or participate in a fossil dig. Author's Note, Selected Bibliography. (SAR) II, IV, VII

★ *Bomb: The Race to Build—and Steal—the World's Most Dangerous Weapon.* Steve Sheinkin. Flash Point, an imprint of Roaring Brook Press, an imprint of Macmillan Children's Publishing Group. 272pp. Trade ISBN 978-1-59643-487-5, \$19.99. (6–12) This intriguing story describes the race to build the atomic bomb. As Soviet spies worked their way into the American scientific community, in Norway a commando force slipped behind enemy lines to attack German heavy-water manufacturing. At the same time, a group of scientists was hidden away at Los Alamos. This is a great story of risk-taking and deceit. It reads like an international spy thriller and will focus young adults' attention on the espionage that surrounded the bomb's development. Prologue, Epilogue, Source Notes, Quotation Notes, Acknowledgments, Index. (SKD) VIII, III

*The Book of Blood.* HP Newquist. Houghton Mifflin Books for Children. 160pp. Trade ISBN 978-0-547-31584-3, \$17.99. (6–8) Although a book about blood may seem like an odd read, this book will make you change your mind. It offers readers an engaging overview of the fluid of life and its impact on history, religion, science, and mythology. Bibliography, Index. (BGH) IV, VIII

*I, Galileo.* Bonnie Christensen. Alfred A. Knopf. 40pp. Trade ISBN 978-0-375-86753-8, \$17.99. Library ISBN 978-0-375-96753-5, \$20.99. Paper ed. (F). (3–5) This child-friendly biography is told in the first person, in Galileo's voice. Children will feel like Galileo is talking directly to them. The illustrations bring Galileo to life and take us back in time to "watch" Galileo's life unfold. This story shares Galileo's thinking, understandings, and inventions; it's an excellent example of how "out-of-the box" thinking can happen even in the face of adversity. Afterword, Timeline, Glossary. (KAR) VIII

*Invincible Microbe.* Jim Murphy and Alison Blank. Clarion Books/Houghton Mifflin Harcourt. 160pp. Trade ISBN 978-0-618-53574-3, \$18.99. (6–8) This history

## 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, 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, visit [www.cbcbooks.org](http://www.cbcbooks.org).

The books that appear in these lists were chosen by a review panel made up of educators and other subject-area experts, all appointed by the National Science Teachers Association. NSTA and CBC have joined forces on developing this annual list since 1973, and over the years it has become the go-to resource for school librarians, science teachers, and parents eager to cultivate a love of science in young readers. Initially, the list was primarily targeted at grades K through 8. Beginning in 2002, it expanded to include high school. Down through the years, this effort has had but a single mission—to highlight the very best in science trade books for young audiences.

of tuberculosis from its earliest records in Egyptian paintings to the modern superbugs gives readers an understanding of a disease's impact on society and on those who work to combat it. Bibliography, Source Notes, Index. (BGH) IV, VII, VIII

*Life in the Ocean: The Story of Oceanographer Sylvia Earle.* Claire A. Nivola. Frances Foster Books, an imprint of FSG Books for Young Readers, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-374-38068-7, \$17.99. (3–5) It takes an extraordinary book to adequately chronicle an extraordinary life. Students will be introduced to Sylvia Earle through an engaging story of her fascination with the ocean and her efforts to spend as much time there as possible. Like Earle herself, this book attempts to draw attention to the fact that the Earth's oceans are largely unexplored and that the oceans' health is crucial to the well-being of the planet and those who inhabit it on both land and in water. Author's Note, Selected Bibliography. (SAR) II, V, VI, VII

★ *Rachel Carson and Her Book That Changed the World.* Laurie Lawlor. Illustrated by Laura Beingessner. Holiday House. 32pp. Trade ISBN 978-0-8234-2370-5, \$16.95. (3–5) What an inspiration for young people (particularly girls) who want to pursue a science career! Beyond outstanding, the story remains inspiring even 50 years after Carson's signature work, *Silent Spring*, was released. This well-documented story of how Carson developed into a scientist and writer is beautifully chronicled in a well-crafted narrative

with equally outstanding illustrations. When paired with the epilogue, the story will engage upper elementary and middle school students in an insightful tale of a great woman scientist. Epilogue, Source Notes. (SAR) II, IV, VIII

*What Color Is My World?: The Lost History of African-American Inventors.* Kareem Abdul-Jabbar and Raymond Obstfeld. Illustrated by Ben Boos and A.G. Ford. Candlewick Press. 44pp. Trade ISBN 978-0-7636-4564-9, \$17.99. (3–5) African-American inventors and innovators who are often left out of the story of American achievement are the centerpiece of this fictional story of two children who learn about these individuals' important contributions to society. Author's Note, Bibliography, Additional Resources. (RMM) VII

## Life Science

*ABC Zooborns!* Andrew Bleiman and Chris Eastland. Beach Lane Books/Simon & Schuster. 40pp. Trade ISBN 978-1-4424-4371-6, \$12.99. (K–2) Beautiful photographs of baby animals representing each letter of the alphabet help young readers learn the alphabet and explore animal diversity in an enjoyable presentation. The images are also intended to raise awareness of conservation efforts at zoos and aquariums. (JMP) IV

*About Habitats: Oceans.* Cathryn Sill. Illustrated by John Sill. Peachtree Publishers. 48pp. Trade ISBN 978-1-56145-



618-5, \$16.95. (K-2) One in a series about habitats, this book's pictures and text give the reader a visual idea of what lives in the world's oceans. With an afterword, students can get more information about the book's pictures. Bibliography, Glossary, Afterword. (SLS) IV

**Animal Grossapedia.** Melissa Stewart. Scholastic Reference. 112pp. Trade ISBN 978-0-545-43348-8, \$8.99. (K-2) Wonderful photographs accompanied by "gross" topics will draw children in and keep their interest. This book covers the gross and nasty things a variety of animals, from the cute to the disgusting, do to survive. Glossary, Bibliography, Index. (VJR) II

**The Beetle Book.** Steve Jenkins. Houghton Mifflin Books for Children. 40pp. Trade ISBN 978-0-547-68084-2, \$16.99. (K-2) This is a perfect young children's field guide to beetles. Beautifully colored illustrations explore what makes a beetle a beetle and show an amazing variety of beetles. The actual size of each beetle is included. Author's Notes, Index. (VJR) II

**Birds of a Feather.** Bernadette Gervais and Francesco Pittau. Chronicle Books. 12pp. Trade ISBN 978-1-4521-1066-0, \$24.99. (K-2) An engagingly beautiful lift-the-flap book in which children use pictures of eggs, feathers, and silhouettes to determine which bird is being depicted. Intriguing factual information is included about each bird as its identity is revealed. (RMM) IV

**Body Actions.** Shelley Rotner. Illustrated by David A. White and Shelley Rotner. Holiday House. 32pp. Trade ISBN 978-0-8234-2366-8, \$16.95. (K-2) This book is an energetic introduction to body systems. The photographs of children engaged in everyday actions are overlaid with diagrams of organs and systems making it possible to peek inside the body. Glossary. (RM) IV

**D Is for Desert: A World Deserts Alphabet.** Barbara Gowan. Illustrated by Gijsbert van Frankenhuyzen. Sleeping Bear Press. 32pp. Trade ISBN 978-1-58536-501-2, \$16.95. (3-5) This beautifully illustrated guide to the desert ecosystem offers both poetry and science, giving this book a dual purpose. Glossary. (BGH) IV, V

**Desert Baths.** Darcy Pattison. Illustrated by Kathleen Rietz. Sylvan Dell Publish-

ing. 32pp. Trade ISBN 978-1-60718-5253, \$17.95. Paperback ISBN 978-1-60718-5345, \$9.95. (K-2) Explore the desert habitat through its animals and their hygiene habits. With gorgeous pictures, this great book introduces the desert and some of its inhabitants. The story tells how 12 animals take baths in the desert. Learning Activities, Online Resources. (SKD) IV

**Dolphin Baby!** Nicola Davies. Illustrated by Brita Granstrom. Candlewick Press. 32pp. Trade ISBN 978-0-7636-5548-8, \$15.99. (K-5) Nice dual text tells the story and gives related facts. Young students will benefit from hearing the story line as a read-aloud. Beautiful illustrations bring to life the manner in which dolphins live in their earliest days and months. This book would be a good fit for a study of animal life cycles or for lessons on ocean animals. It introduces a variety of science concepts, from food chains to animal behaviors, interwoven in an interesting and informative narrative. Index. (SAR) IV

**Frogs! Strange and Wonderful.** Laurence

Pringle. Illustrated by Meryl Henderson. Boyds Mills Press. 32pp. Trade ISBN 978-1-59078-371-9, \$16.95. (3-5) Want to learn more about frogs in the world, how they make different sounds, the sizes of frogs, how they hunt for food, and the differences between frogs and toads? Read this easy-to-read and highly descriptive book with many outstanding pictures. Author's Note, Answer Key, Environmental Groups Information. (SLS) IV

**Get the Scoop on Animal Poop!** Dawn Cusick. Imagine Publishing, a Charlesbridge imprint. 80pp. Trade ISBN 978-1-936140-42-8, \$14.95. Paper ed. (F). (3-5) The gross topic of poop fascinates even as it disgusts us. Packed full of information about how animals use feces, this book will keep kids turning pages for more information and pictures. Author's Notes, Glossary, Bibliography, Index, Acknowledgments. (VJR) II

**Giant Squid.** Mary M. Cerullo and Clyde F. E. Roper. Capstone. 48pp. Trade ISBN 978-1-4296-8023-3, \$8.95. Library ISBN

## Members of the Book Selection Panel

**Betty Crocker (BCC)**, Chair  
*College of Education (Retired)*  
University of North Texas  
Denton, TX

**Sharla Dowding (SKD)**  
*Science Teacher, NBCT*  
Newcastle High School  
Newcastle, WY

**Brian Hamilton (BGH)**  
*Science Department Chair*  
Centennial High School  
Columbus, OH

**Rebecca Monhardt (RMM)**  
*Associate Professor*  
Loras College  
Dubuque, IA

**Jean Pelezo (JMP)**  
*Science Lab Teacher*  
Fayetteville, NC

**Kathy Renfrew (KAR)**  
*K-4 Math and Science Assessment  
Coordinator*  
Department of Education  
Montpelier, VT

**Steve Rich (SAR)**  
*K-8 Science Specialist*  
Georgia Department of Education  
Atlanta, GA

**Vana Richards (VJR)**  
*Fifth-Grade Teacher*  
Kenneth J. Elementary School  
Emmett, ID

**Stephanie Selznick (SLS)**  
*Science Specialist*  
Curley K-8 School  
Jamaica Plain, MA

Visit CBC's and NSTA's websites at [www.cbcbooks.org](http://www.cbcbooks.org) and [www.nsta.org](http://www.nsta.org).

Expanded reviews of these award-winning books are available at [www.nsta.org/recommends](http://www.nsta.org/recommends).



978-1-4296-7541-3, \$21.49. (3–8) Do you believe in sea monsters? This is a story about a deep-sea mystery that keeps scientists searching for clues and secrets about the giant squid. Incredible photographs and illustrations reveal a few answers about this incredible creature. Follow scientists as they share their discoveries and convince you to become a believer. (JMP) IV

*Island: A Story of the Galápagos.* Jason Chin. Flash Point, an imprint of Roaring Brook Press, an imprint of Macmillan Children's Publishing Group. 36pp. Trade ISBN 978-1-59643-716-6, \$16.99. (3–5) Only a fascinating book like this one could do justice to the discoveries made by Charles Darwin nearly 200 years ago in the Galápagos Islands. As author and illustrator, Chin tells the story seamlessly with several series of pictures that show natural processes like island formation. Introducing students to natural selection becomes less daunting with a resource like this in the classroom. (SAR) II, IV, VII

*Ladybugs.* Gail Gibbons. Holiday House. 32pp. Trade ISBN 978-0-8234-2368-2, \$17.95. Paperback ISBN 978-0-8234-2760-4, \$7.99. (K–2) Want to learn more about the fascinating life cycle of the ladybug? Each stage is beautifully illustrated with painted pictures from Gail Gibbons. Students will also find the content amazing. Website links. (SLS) IV

*My First Day.* Steve Jenkins and Robin Page. Illustrated by Steve Jenkins. Houghton Mifflin Books for Children. 32pp. Trade ISBN 978-0-547-73851-2, \$16.99. (K–2) The first day of life is different for every animal. Human newborns don't do much at all, but some animals hit the ground running. Vividly colorful illustrations reveal how 22 different species adapt to the traumatic first few hours of life. The text is short and sweet for beginning readers. An illustrated guide in the back of the book provides descriptions of the animals. (SKD) IV

✶ *Nature's Patchwork Quilt: Understanding Habitats.* Mary Miché. Illustrated by Consie Powell. Dawn Publications. 32pp. Trade ISBN 978-1-58469-170-9, \$8.95. Library ISBN 978-1-58469-169-3, \$16.95. (K–5) Earth's major habitats are beautifully woven and illustrated within every page of this book. Concepts of biodiversity,

adaptation, and respect for our ecosystems are presented through simple language and images that are displayed in various patchwork quilt designs. This is a beautiful integration of science and art. Tips from the Author, Activities, Extensions, Websites. (JMP) IV

✶ *Nic Bishop Snakes.* Nic Bishop. Scholastic Press. 48pp. Trade ISBN 978-0-545-20638-9, \$17.99. (3–5) The author is an award-winning photographer who provides magnificent photographs, some of which are enlarged 2 to 3 times to show greater detail. Read to find out about all

## About the Books and the Selection Process

The books that appear in this annotated bibliography selected as Outstanding Science Trade Books were published in 2012. They are intended primarily for grades K–12. 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 that the information is misleading.
- Generalizations are supported by facts, and significant facts are not omitted.
- 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 reviews 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 CBC and in standard reference works such as Children's Books in Print. CBC's Member List is available at [www.cbc-books.org/about/members.html](http://www.cbc-books.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 Content Standards (see About the Reviews on page 72) to which the books relate. Where more than one standard is listed, the most applicable standard is given first.



different kinds of snakes and how they survive. Author's Note, Glossary, Index, Further Reading (SLS) IV

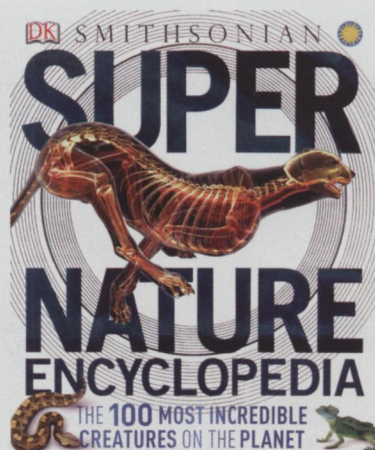
*Open Wide! A Look Inside Animal Mouths.* Catherine Ham. EarlyLight Books, distributed by Charlesbridge. 32pp. Trade ISBN 978-0-9832014-3-4, \$14.95. Paper ed. (F). (K-2) Eye-catching photographs of animals with mouths open wide are accompanied by clever rhymes. The combination of pictures and poetry lends a creative and child-pleasing perspective to adaptation. Index. (VJR) II

*Saving Yasha: The Incredible True Story of an Adopted Moon Bear.* Lia Kvatum. Photographs by Liya Pokrovskaya. National Geographic Children's Books. 32pp. Trade ISBN 978-1426310515, \$16.95. (K-2) Beautiful photographs tell the true story of how an orphaned moon bear was rescued by scientists who were careful to make sure he remained wild so he could eventually be returned to his natural habitat. Author's Note, Additional Resources. (RMM) IV

*Seahorses.* Jennifer Keats Curtis. Illustrated by Chad Wallace. Henry Holt Books for Young Readers, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-8050-9239-4, \$16.99. (K-2) A beautifully illustrated story of a baby seahorse's amazing life beneath the waves. A tiny, fascinating creature, he changes color to fit in with the surroundings of his spectacular coral reef and sea grass surroundings; his lizardlike eyes can look in two directions at once. The illustrations' soft edges, gentle colors, and filtered light give them a visual charm beyond their value in providing information. Young readers will love this book, which is full of science terms. Author's Note, Glossary, Sources. (SKD) IV

*Sneed B. Collard III's Most Fun Book Ever About Lizards.* Sneed B. Collard III. Charlesbridge. 48pp. Trade ISBN 978-1-58089-324-4, \$16.95. Paperback ISBN 978-1-58089-325-1, \$7.95. (6-8) You will want to read this down-to-Earth book about all lizards. Impressive photographs and content are perfect for middle school students. Glossary, Index. (SLS) IV

*Super Nature Encyclopedia: The 100 Most Incredible Creatures on the Planet.* Derek Harvey. DK Publishing. 256pp. Trade



ISBN 978-0-7566-9793-8, \$24.99. (K-8) Here's a gigantic book of everything that has to do with natural history. The photographs and content practically jump off the page. This captivating encyclopedia will make every student want to read more and more. Glossary, Index, Acknowledgments. (SLS) IV

*Survival at 120 Above.* Debbie S. Miller. Illustrated by Jon Van Zyle. Walker Children's Books. 40pp. Trade ISBN 978-0-8027-9813-8, \$17.99. Library ISBN 978-0-8027-9814-5, \$18.89. (3-5) Living in Australia's Simpson Desert poses challenges for even the hardiest of animals, and this desert is home to many unusual animals. The author uses elegant language to describe these creatures and the environment in which they live. Children will be drawn in by the description and illustrations of this elusive continent. Author's Note, Glossary, Further Sources for Reading and Surfing. (KAR) IV

*Track That Scat!* Lisa Morlock. Illustrated by Carrie Anne Bradshaw. Sleeping Bear Press. 32pp. Trade ISBN 978-1-58536-536-4, \$15.95. (K-2) The title and the awesome book cover are two of the immediate hooks for young children. The story is a very different way to look at and compare animals. Looking at animal tracks as well as scat is very engaging. The wonderful format combines literacy and informational text. A child can be engaged in the story yet use the factual information for a more formal learning activity. (KAR) IV

*Waiting for Ice.* Sandra Markle. Illustrated by Alan Marks. Charlesbridge. 32pp. Trade ISBN 978-1-58089-255-1, \$15.95. Paper ed. (F). (3-5) An orphaned

polar bear cub learning to survive on her own is certainly engaging for children. The cub is one of many vying for food as they wait for the pack ice to return. Survival is not guaranteed for this cub or any other polar bear. The reader develops a relationship with the orphan cub and will want to help the polar bear. Based on true events, this story inspires questions, thoughts, and concerns for survival of the polar bears. Author's Note, Additional Resources. (KAR) IV

## Physical Science

*Scholastic Discover More: Elements.* Dan Green. Scholastic Reference. 112pp. Trade ISBN 978-0-545-33019-0, \$15.99. Library ISBN 978-0-531-22961-3, \$32. (6-12) More than a walk through the periodic table, this book explains the tremendous forces that create elements. It chronicles the history of element discoveries and the elements' effects on our daily lives. Beautiful photographs and modern graphics make apparently ordinary substances, their extraction, and their reactions look extraordinarily interesting. A digital companion volume (ELEMENT COLLECTOR) of similarly stimulating content offers more information, photos, and videos. Table of Contents, Index, Credits. (SKD) III

## Science as Inquiry

*Alex the Parrot: No Ordinary Bird.* Stephanie Spinner. Illustrated by Meilo So. Alfred A. Knopf. 48pp. Trade ISBN 978-0-375-86846-7, \$17.99. Library ISBN 978-0-375-96846-4, \$20.99. Paper ed. (F). (3-5) The acronym ALEX for Avian Learning Experiment is the perfect beginning to an engaging story about an African parrot and a researcher. This picture book is an excellent example of current science research that is understandable for children. The text allows children to experience the inquiry process and envision themselves doing research science. Author's Note. (KAR) II

★ *Moonbird: A Year on the Wind With the Great Survivor B95.* Phillip Hoose. Farrar Straus Giroux, an imprint of Macmillan Children's Publishing Group. 160pp. Trade ISBN 978-0-374-30468-3, \$21.99. (6-12) This book's special appeal unfolds as the reader learns of research



techniques developed and used to establish the migration pattern of a four-ounce shorebird from one end of the Earth to the other. One more than 20-year-old bird is discovered to have flown the distance to the moon and halfway back, thus his name of Moonbird. Great STEM resource. Scientist's Profiles, Appendix: What You Can Do, Source Notes, Bibliography, Acknowledgments, Picture Credits, Index. (BCC) I, IV, VI, VII, VIII

*The Plant Hunters: True Stories of Their Daring Adventures to the Far Corners of the Earth.* Anita Silvey. Farrar Straus Giroux, an imprint of Macmillan Children's Publishing Group. 96pp. Trade ISBN 978-0-374-30908-4, \$19.99. (3–8) Excellent book all about the history of plants from the observations of ordinary people to the first botanists. *The Plant Hunters* makes plants even more exciting for the reader. Author's Note, Bibliography, Index, Notes, Illustration Credits, Time Line. (SLS) II

*The Polar Bear Scientists.* Peter Lourie. Houghton Mifflin Books for Children. 80pp. Trade ISBN 978-0-547-28305-0, \$18.99. (6–8) With interviews and photography this book provides the reader with a rare glimpse into the world of the polar bear scientists and their work. Glossary, Polar Bear Field Guide, Suggested Books and Websites, Quoted Sources, Index. (BGH) II, IV, VI, VIII

*Wild Horse Scientists.* Kay Frydenborg. Houghton Mifflin Books for Children. 80pp. Trade ISBN 978-0-547-51831-2, \$18.99. (6–8) This inside look at wild horses on Assateague Island as well as those in Montana highlights the field of equine animal science and work of two scientists who have devoted their careers to saving America's wild horses. Glossary, Index, Additional Resources. (RMM) II

## Science and Technology

*Eye of the Storm.* Kate Messner. Walker Books for Young Readers. 304pp. Trade ISBN 978-0-8027-2313-0, \$16.99. Paper ed. (F). (6–12) Good engineering and complex science concepts including weather control are presented in this entertaining science fiction novel. It also deals with challenging social interactions among

peers and family members. (BCC) V, VII, VIII

*The Mighty Mars Rovers: The Incredible Adventures of Spirit and Opportunity.* Elizabeth Rusch. Houghton Mifflin Books for Children. 80pp. Trade ISBN 978-0-547-47881-4, \$18.99. (6–8) Mesmerizing photos of the surface of Mars illustrate the journey of the two previous Martian rovers as we learn how they got there and what they found. Mission Update, Sources, Chapter Notes, For Further Exploration, Glossary, Index. (BGH) V, VI

★ *The Boy Who Harnessed the Wind.* William Kamkwamba and Bryan Mealer. Illustrated by Elizabeth Zunon. Dial. 32pp. Trade ISBN 978-0-8037-3511-8, \$16.99. (3–5) Creativity, engineering design, and problem solving come together in this true story of how a young man, just 14 years old, built a windmill to provide much needed water for his drought-stricken African village. Author's Note. (RMM) IV

## Science in Personal and Social Perspectives

*Citizen Scientists: Be a Part of Scientific Discovery From Your Own Backyard.* Loree Griffin Burns. Photographs by Ellen Harasimowicz. Henry Holt Books for Young Readers, an imprint of Macmillan Children's Publishing Group. 80pp. Trade ISBN 978-0-8050-9062-8, \$19.99. Paperback ISBN 978-0-8050-9517-3, \$12.99. (K–12) Anyone can become a scientist—even everyday people! This book represents four specific Citizen Scientists projects, one for each season. Beautiful photographs, information about how to prepare to participate in a project, examples of recording information, and real-world action scenarios invite readers to participate in each project. This valuable resource includes action steps in becoming a Citizen Scientist, websites of various organizations, and more. Bibliography, Glossary, Index. (JMP) VII

★ *Hiss-s-s-s!* Eric A. Kimmel. Holiday House. 208pp. Trade ISBN 978-0-8234-2415-3, \$16.95. (6–8) This book reveals challenges of caring for a difficult, and for some, scary pet. It emphasizes the responsibility of becoming a pet owner in a very entertaining story, while dealing with cultural issues sensitively. (VJR) VII

*Leopard and Silkie: One Boy's Quest to Save the Seal Pups.* Brenda Peterson. Illustrated by Robin Lindsey. Christy Ottaviano Books, an imprint of Henry Holt Book for Young Readers, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-8050-9167-0, \$16.99. (K–5) This sweet, simple version of an important story is told through clear language and wonderful photographs. It relates being a citizen scientist to real ecological issues. Author's Note, Bibliography. (BCC) IV, VII

*One White Dolphin.* Gill Lewis. Atheneum/Simon & Schuster, Inc. 352pp. Trade ISBN 978-1-4424-1447-1, \$15.99. Paperback ISBN 978-1-4424-1448-8, \$6.99. (6–12) This novel presents complex scientific dilemmas such as the often-conflicting needs of ecological protection and economic growth in an interesting format that even non-traditional science students will love. (BCC) IV

*Saving Animals From Oil Spills.* Stephen Person. Bearport Publishing. 32pp. Library ISBN 978-1-61772-288-2, \$18.95. (3–8) Oil spills cause harm to animals in large numbers. This book chronicles how humans intervene one by one to save animals, including the best methods to free animals from oil that clings to their bodies or has been ingested. This book takes a complex issue and makes it understandable for elementary students. Glossary, Bibliography. (SAR) II, VII

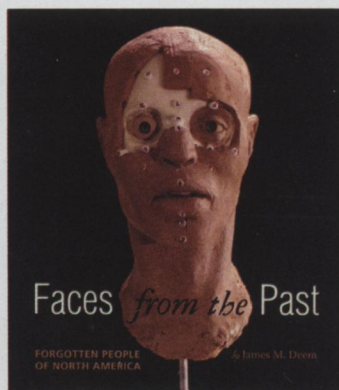
★ *Temple Grandin: How the Girl Who Loved Cows Embraced Autism and Changed the World.* Sy Montgomery. Houghton Mifflin Books for Children. 160pp. Trade ISBN 978-0-547-44315-7, \$17.99. (6–8) This book introduces students to Temple Grandin, who uses



her unique perspective on the world to improve the lives of animals. This book offers both a view of science in action and insight into the world of those on the autism spectrum. Forward by Temple Grandin, Temple's Advice for Kids on the Spectrum, Bibliography, Index. (BGH) VII

## Unifying Concepts and Processes

*Faces From the Past: Forgotten People of North America.* James M. Deem. Houghton Mifflin Books for Children. 160pp. Trade ISBN 978-0-547-37024-8, \$18.99. (6–8) The science of facial reconstruction is used to combine



historic time periods, geography, and climate into a fascinating study of human history. The photography and illustrations enhance this intriguing book. Quotation Sources, Bibliography, Further Research and Information, Index. (VJR) I, VII

*Forensic Identification: Putting a Name and Face on Death.* Elizabeth A. Murray. Twenty-First Century Books. 72pp. Library ISBN 978-0-7613-6696-6, \$30.60. (6–8) This book describes the important work of forensic scientists who use multiple scientific methods and advanced technologies to identify the unknown dead. Actual case files make this an interesting and intriguing book for older readers. Bibliography, Additional Resources. (RMM) I

*Gopher to the Rescue!: A Volcano Recovery Story.* Terry Catasús Jennings.

Illustrated by Laurie O'Keefe. Sylvan Dell Publishing. 32pp. Trade ISBN 978-1-60718-1316, \$17.95. Paperback ISBN 978-1-60718-1415, \$9.95. (K–2) This picture book is based on observations of succession on Mount St. Helens. Gopher survives in his underground burrow and gets to work, digging through the ash, and mixing it into the soil below. This book makes a true historical and scientific event interesting for elementary children. Learning Activities, Online Resources. (SKD) I, IV

*Seababy: A Little Otter Returns Home.* Ellen Levine. Illustrated by Jon Van Zyle. Walker Children's Books. 40pp. Trade ISBN 978-0-8027-9808-4, \$16.99. Library ISBN 978-0-8027-9809-1, \$17.89. (3–5) Charming illustrations support a story of human intervention to save an orphaned sea otter pup. The rescuers provide limited human interference by using a surrogate sea otter mom before returning Seababy to his natural habitat. There is a link to a live webcam. Note to the Reader, Further Reading and Surfing. (BCC) IV, VII

## Call for Submissions

for 2014 Outstanding Science Trade Books for Students K–12

Deadline for submissions: June 19, 2013

### Eligibility

- Titles should be for grades K–12.
- All titles must originate from a children's publishing company or division and must be published (not simply distributed) by a publisher incorporated in the United States.
- Titles must be published in 2013.
- Titles originally published abroad are eligible only if they have a 2013 U.S. publication date; reprints or licensed editions of titles initially published in the United States before 2013 are not eligible.
- Original paperbacks are eligible; paperback reprints are not. If a book is published simultaneously in hardcover and paperback, either edition may be submitted. If both editions are submitted, they constitute separate entries.
- Revisions are eligible only if the book has been newly illustrated or if substantial text, constituting at least 25% of the book, has been changed or added.
- Math books are not eligible unless the mathematical principles are applied to scientific functions such as measuring for experiments, using statistical models for scientific research, and so on.
- Textbooks, workbooks, kits, experiment-only books, and activity books are not eligible.
- Spanish-language editions of titles published in English before 2013 are not acceptable. Spanish-language editions published simultaneously with English-language editions in 2013 are eligible.
- Fiction is eligible if the book has substantial science content.

### Number of titles you may submit

Each participating publisher may submit an unlimited number of titles.

### Submission guidelines

Books should have value for both classroom studies and library collections supporting students' work. Full submission guidelines will be available in late April, 2013 at [www.cbcbooks.org](http://www.cbcbooks.org).