# OUTSTANDING SCIENCE TRADE BOOKS FOR STUDENTS K-12

This year, science teachers and mentors have been challenged to meet the high expectations of A Framework for K-12 Science Education and the Next Generation Science Standards. The Framework urges us to help learners "[build] progressively more sophisticated explanations of natural phenomena..." while NGSS provides a model for "gathering, describing, and using information about the natural and designed world(s)."

In the development of curricula that meet these challenges, literature is an essential partner. "The NGSS are aligned with the CCSS [Common Core State Standards] to ensure a symbiotic pace of learning in all content areas."

So, it is not surprising that this year's list of Outstanding Science Trade Books is both the longest and richest in the program's 42-year history. In these awardwinning books you'll find not only traditional science content, but also engineering and design. We hope you'll enjoy indulging your spirit of inquiry as you practice science through trade books.

#### **Earth and Space Science**

Beyond the Solar System: Exploring Galaxies, Black Holes, Alien Planets, and More. Mary Kay Carson. Chicago Review Press. 144pp. Trade ISBN 978-1-61374-544-1, \$18.95. (6-8) This book explores the field of astronomy through its historical development. Well-illustrated and includes 21 activities that complement the text. (BGH) VIII

Eruption! Volcanoes and the Science of Saving Lives. Elizabeth Rusch. Illustrated by Tom Uhlman. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-54750-350-9, \$18.99. (6-8) Volcanologists are using science and technology to "take the

pulse of volcanoes" in order to avert disasters that have led to loss of lives and land and disrupted people and communities around the globe. The book has a Volcanic Vocabulary list, Chapter Notes, Bibliography, Index. (LSG) VI

Next Time You See a Sunset. Emily Morgan. NSTA Kids, an imprint of NSTA Press. 32pp. Trade ISBN 978-1-936959-16-7, \$9.95. (K-2) This engaging text guides young learners on an exploration of the phenomenon of sunsets, Earth's day, shadows, and our star, the Sun. Students think, observe, and discover through questioning and ideas for investigations. Author's Note to Parents and Teachers, Activities, Websites. (DMH) I, II, IV

# **About the Reviews**

(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 2014.
- 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 70).
- 7. The most relevant National Science Education Content Standards are indicated by Roman numerals (see below).

# National Science Education Standards\*

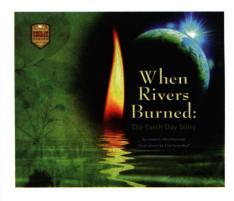
- I Unifying Concepts and Processes
- II Science as Inquiry
- III Physical Science

- VI Science and Technology

- IV Life Science
- V Earth and Space Science
- VII Science in Personal and Social Perspectives
- VIII History and Nature of Science

\*Although NSTA has adopted and fully supports the Next Generation Science Standards, they were not finalized in time to be incorporated into this year's Outstanding Science Trade Books list. Connections to NGSS will be made in next year's list. Tracking Tyrannosaurs: Meet T. Rex's Fascinating Family, From Tiny Terrors to Feathered Giants. Christopher Sloan. Illustrations by Xing Lida and Liu Yi. National Geographic Children's Books. 48pp. Trade ISBN 978-1-42631-374-5, \$18.95. (3-8) The fascinating text details over 20 kinds of tyrannosaurs. In addition, Tyrannosaur Tracker shares highlights of various paleontologists and their contributions. Key statistics for each species are explained and illustrated throughout this colorful, captivating book. Table of Contents, Author's Note, Bibliography, Glossary, Resource list, Index, Dino database. (DMH) IV

Volcano Rising. Elizabeth Rusch. Illustrated by Susan Swan. Charlesbridge. 32pp. Trade ISBN 978-1-58089-408-1, \$17.95. (K-2) This book is an excellent example of informational text supporting the important science concept of how the Earth can change quickly or slowly. This book could be used to instruct reading with excerpts of close reading. Within this text there are models and diagrams, which are parts of the science and engineering practices of the Next Generation Science Standards. Volcano Vocabulary, Selected Bibliography, Learn More. (KAR)



When Rivers Burned: The Earth Day Story. Linda Crotta Brennan. Illustrated by Lisa Greenleaf. Apprentice Shop Books. 80pp. Trade ISBN 978-0-98425-499-6, \$24.95. (3–8) Follow this incredible journey that begins with two men concerned with environmental issues. Taking readers through a series of historical events, the story includes amazing photographs and a timeline of actions that eventually establish the first Earth Day in America. (JMP)

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# History and Nature of Science

Lives of Scientists: Experiments, Explosions (and What the Neighbors Thought). Kathleen Krull. Illustrated by Kathryn Hewitt. Houghton Mifflin Harcourt. 96pp. Trade ISBN 978-0-15205-909-5, \$20.99 (3–5) The lives of worldchanging scientists come to life through this collection of short biographies. From Albert Einstein to Jane Goodall, the author shares intriguing details about 20 amazing science pioneers. Author's Note, Bibliography, Glossary, Index. (DMH) VII

The Tapir Scientist: Saving South America's Largest Mammal. Sy Montgomery. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-54781-548-0, \$18.99. (6–12). The reader travels with a team of scientists as they study the tapir, an elusive South American mammal sometimes called the gardener of the forest. This book presents an authentic picture of scientific research in the field and the people who engage in it. Bibliography, Index. (RMM)

## **Life Science**

The Animal Book: A Collection of the Fastest, Fiercest, Toughest, Cleverest, Shyest—and Most Surprising—Animals on Earth. Steve Jenkins. Houghton Mifflin Harcourt. 208pp. Trade ISBN 978-0-54755-799-1, \$21.99. (K–5) Beautiful illustrations of 300 remarkable animals make this book a must read for animal lovers of all ages. It's full of quick facts about these creatures, both past and present. Author's Notes, Bibliography, Glossary, Time Line, More Animal Facts, Making a Book. (VJR)

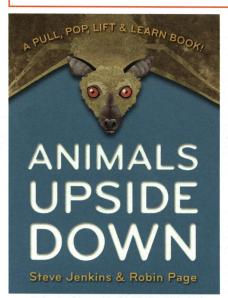
The Animal Book: A Visual Encyclopedia of Life on Earth. David Burnie. DK Publishing. 304pp. Trade ISBN 978-146541-457-1, \$24.99. (3–8) Beautiful photographs offer an overview of the varying forms of animal life on Earth. The book includes short sections on microscopic life, fungi, and plants. (BGH) II

✿ Animals Upside Down: A Pull, Pop, Lift & Learn Book! Steven Jenkins and Robin Page. Houghton Mifflin Harcourt. 24pp. Trade ISBN 978-0-54734-127-9,

# **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.

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). 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.



\$24.99. (K–2) A pop-up book with a focus on looking down, it shifts the readers perspective from the top to the bottom. Beautiful illustrations and fun animations complement this book on how the upside-down life is used as a strategy in the animal world. The pop-ups are well built and sturdy, making this useable in a classroom setting. (BGH) II

Best Foot Forward: Exploring Feet, Flippers, and Claws. Ingo Arndt. Holiday House. 36pp. Trade ISBN 978-0-82342-857-1, \$16.95. (K-2) Exploring the world of animal "feet," this well-photographed picture book allows the reader to visualize how feet adaptations affect animals' interactions with their environments. (BGH) II

Cougar: A Cat with Many Names. Stephen Person. Bearport Publishing. 32pp. Library ISBN 978-1-61772-569-2, \$19.95. (3-5) The cougar story—their habitats, predation, child-rearing, and territoriality, presented through narrative and photographs—creates an awareness of these wild animals and their necessary adaptations to humans impinging on their natural environments. The book includes a.glossary, bibliography, additional resources, index, Cougar Facts, and a "People Helping Cougars" section. (LSG)

The Dolphins of Shark Bay. Pamela S. Turner. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-54771-638-1, \$18.99. (3– 8) A true story about the lives of dolphins in Shark Bay and how they use sponges to find food. The story shows the lives of the whole family and the complexities that go along with being in a dolphin family. This is a Scientists in the Field series book. Index, More About Dolphins. (SLS)

A Dragonfly's Life. Ellen Lawrence. Bearport Publishing. 24pp. Library ISBN 978-1-61772-594-4, \$17.95. (K-5) Written in the style of a student's journal, with dated entries from June 1 to September 30, and including observations and illustrations, a dragonfly's metamorphosis is documented in a most engaging way. The book includes a suggested Science Lab, Glossary, Index, and bibliography for both books and online resources. (LSG) II, VIII

Eat Like A Bear. April Pulley Sayre. Illustrated by Steve Jenkins. Henry Holt BYR, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-8050-9039-0, \$16.99.

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(K-2) The bear wakes up in the early spring and looks for food from spring to fall. Follow this bear and read what he finds to eat. Each page shows how this bear looks for, finds, and eats a variety of foods. Author's Note, Meet the Bear pages. (SLS)

Ferdinand Fox's First Summer. Mary Holland. Sylvan Dell Publishing. 32pp. Trade ISBN 978-1-60718-614-4, \$17.95. (K-2) Through beautiful photography, readers embark on a delightful journey as fox kits discover their new world and what it takes to survive. Four pages of learning activities with life cycle, fun facts, and adaptions. (DMH) V

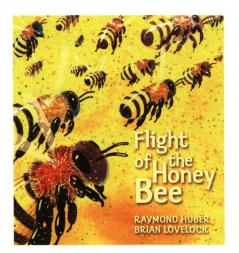
Frog Song. Brenda Z. Guiberson. Illustrated by Gennady Spirin. Henry Holt BYR, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-0-8050-9254-7, 17.99. (K-5) Frogs and toads around the world are showcased in this artistically illustrated book. The brief text on the pages packs a wallop of information, including how each species reproduces and information about their habitats. The book is sprinkled with "sound" words that describe the songs they sing. Quick facts about each frog or toad, Author's note, Bibliography, and Websites. (CAC)

Gelight of the Honey Bee. Raymond Huber. Illustrated by Brian Lovelock. Candlewick Press. 32pp. Trade ISBN 978-0-76366-760-3, \$16.99. (K−5) Descriptive language and colorful illustrations trace the sometimes treacherous journey of a scout bee as she finds flowers essential for the survival of a hive. Fascinating factual information about bees is included to enhance the story. Index. (RMM)

Giant Pacific Octopus: The World's Largest Octopus. Leon Gray. Bearport Publishing. 24pp. Library ISBN 978-1-61772-730-6, \$17.95. (3–5) Through detailed photographs and surprising facts, learn how the world's largest octopus hides from enemies, hunts for food, and squirts ink in self-defense. (JMP)

Here Come the Humpbacks! April Pulley Sayre. Illustrated by Jamie Hogan. Charlesbridge. 40pp. Trade ISBN 978-1-58089-405-0, \$17.99. (3-5) As you follow the humpback whales

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from winter childbirth in the Caribbean to summering in the northern Atlantic, the whales will "sing" their adventurous migration. Teachers or parents can help students with informational sidebars. The book includes a note to adults, summarizing the whales' migration and the study of whales. (LSG) Hide-and-Seek Science: Animal Camouflage. Emma Stevenson. Holiday House. 32pp. Trade ISBN 978-0-82342-293-7, \$16.95. (3–5) An engaging book challenging readers to find creatures hidden in seven global ecosystems. Through beautiful illustrations and facts about the hidden creatures, this book gives understanding to the importance of camouflage in animal survival. Author's Note, Index. (VJR)

Lifetime: The Amazing Numbers in Animal Lives. Lola M. Schaefer. Illustrated by Christopher Silas Neal. Chronicle Books. 40pp. Trade ISBN 978-1-452-10714-1, \$17.99. (K–5) A fabulous math/ science integration in one book that shows the "numbers" in a lifetime of various animals: sets of antlers that caribou shed, babies a male sea horse will carry, roosting holes a woodpecker will drill, and many other average lifetime events. There are delightful illustrations, a nice description

# Members of the Book Selection Panel

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

**Connie Crittenden** (CAC) Multiage 4/5th Looping Teacher Explorer Elementary Williamston, MI

**DeLene Hoffner** (DMH) 4th Grade Teacher Academy District 20 Colorado Springs, CO

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

Jean Pelezo (JMP) Science Lab Teacher New Century International Middle School Fayetteville, NC Kathy Renfrew (KAR)

K–4 Math & Science Assessment Coordinator Department of Education Montpelier, VT

**Vana Richards** (VJR) 5th Grade Teacher Kenneth J. Elementary School Emmett, ID

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

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

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 www.nsta.org/recommends.

of each animal in the back of the book, and an explanation of averages. Author notes. (CAC)

The Long, Long Journey: The Godwit's Amazing Migration. Sandra Markle. Illustrated by Mia Posada. Lerner Publishing Group/Millbrook Press. 32pp. Trade ISBN 978-0-7613-5623-3, \$26.60. (K-2) Follow the amazing life of a bartailed godwit from hatching through growing up in the Alaskan summer, and on the longest migration ever recorded. Readers will be drawn into this beautifully illustrated tale of survival. Author's Notes, Learner Source. (VJR)

Meat-Eating Plants: Toothless Wonders. Ellen Lawrence. Bearport Publishing. 24pp. Library ISBN 978-1-61772-589-0, \$17.95. (3-5) Stunning detailed photographs and easy-to-read text take you directly inside meat-eating plants. Maps include locations where the plants are found. There are also Picture Science Words and a recommended science lab investigation. (JMP)

National Geographic Kids Bird Guide of North America. Jonathan Alderfer. National Geographic Children's Books. 176pp. Trade ISBN 978-1-42631-094-2, \$15.95. (K–5) This beginning bird guide is full of beautiful photographs with key facts to highlight each bird. It is wonderful guide to North American birds found from backyards to isolated forests. Bibliography, Glossary, Index, and activity guide. (DMH)

National Geographic Kids First Big Book of the Ocean. Catherine D. Hughes. National Geographic Children's Books. 128pp. Trade ISBN 978-1-42631-368-4, \$14.95. (K-2) Children will be immersed in the world below the ocean's surface through this beautiful book. Gorgeous photography and engaging text highlights the animals who depend on our planet's oceans for their survival. Table of Contents, Parent tips, Ocean Map, Glossary, Index. (DMH) V

Next Time You See a Firefly. Emily Morgan. NSTA Kids, an imprint of NSTA Press. 32pp. Trade ISBN 978-1-936959-18-1, \$9.95. (K-5) This book has so many possibilities for children, parents, and teachers; it can be used as part of an instructional sequence on lifecycles. Excellent examples of the crosscutting concepts found in the *Next Generation Science Standards*, specifically patterns. Quote from Rachel Carson followed by a Note to Parents and Teachers, About the Photos, Activities to Encourage a Sense of Wonder about Fireflies. (KAR) ♥Next Time You See a Pill Bug. Emily Morgan. NSTA Kids, an Imprint of NSTA Press. 32pp. Trade ISBN 978-1-936959-17-4, \$9.95. (K-5) Wonderful closeup photographs of the pill bug, its habitat, and the curious kids observing them. Descriptions are clear and informative and explain in detail how the pill bug is not a

# About the Books and the Selection Process

The books that appear in this annotated bibliography selected as Outstanding Science Trade Books were published in 2013. 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.

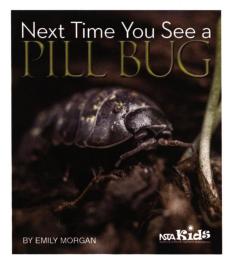
The panel looks at both content and presentation. Selection is based generally on the following criteria:

- 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. cbcbooks.org/membership/member-list.

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 68) to which the books relate. Where more than one standard is listed, the most applicable standard is given first.



bug but a crustacean that lives its whole life on land. Photo references, Activities for kids, and Websites. (CAC)

No Monkeys, No Chocolate. Melissa Stewart and Allen Young. Illustrated by Nicole Wong. Charlesbridge. 32pp. Trade ISBN 978-1-58089-287-2, \$16.95. (K–2, 3–5) Enjoy this wonderful story about the cocoa bean, the main ingredient in chocolate found in the trees of the tropical rain forests. Through a series of causes and effects, this book beautifully illustrates how everything in the rain forest has an important part to play. The sidebar of two personified worms provides a whimsical summary of each page. (JMP)

On the Move: Mass Migrations. Scotti Cohn. Illustrations by Susan Detwiler . Sylvan Dell Publishing. 32pp. Trade ISBN 978-1-60718-616-8, \$17.95. (3–5) Colorful images of animals that migrate in North America. Students can learn about these animals and the long journeys they undertake because of life cycles, seasonal changes, and food. (SLS)

**G**A Place for Turtles. Melissa Stewart. Illustrated by Higgins Bond. Peachtree Publishers. 32pp. Trade ISBN 978-1-56145-693-2, \$16.95. (K−5) Delightful beginner guide to turtles around the United States showing how human interaction can help or hurt the ecosystems of these magnificent and ancient animals. Beautifully detailed drawings accurately show each species of turtle in its environment. Turtle Tidbits, Bibliography of recommended resources, Websites for further information. Fly pages of book include range maps of all the turtles in the book. (CAC)

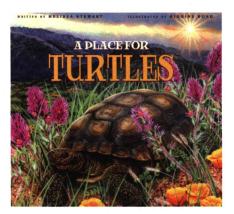
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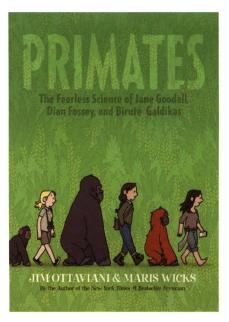
♦ Primates: The Fearless Science of Jane Goodall, Dian Fossey, and Birutè Galdikas. Jim Ottaviani. Illustrated by Maris Wicks. First Second Books, an imprint of Macmillan Children's Publishing Group. 144pp. Trade ISBN 978-1-59643-865-1, \$19.99. (3–5) What fun to read about these dedicated and brave female scientists as comic strip heroes. Superman has nothing on the adventures of all three scientists as they pursue their passion of studying primates in the wild. Inspirational! The book has an author's afterward and bibliography. (LSG) II, VII, VIII

**Roseate Spoonbill: Pretty in Pink.** Stephen Person. Bearport Publishing. 32pp. Library ISBN 978-1-61772-570-8, \$19.95. (3–5). The history of this bird through the eyes of biologist Jerry Lorenz. The book has photographs of all the stages of the bird's life, its habitat, what it eats, and how the Everglades need to be protected so this bird can survive. Author's Note, Bibliography, Glossary, Index, Roseate Spoonbill Facts, People Helping Spoonbills. (SLS)

See What a Seal Can Do. Chris Butterworth. Illustrated by Kate Nelms. Candlewick Press. 32pp. Trade ISBN 978-0-76366-574-6, \$14.99. (K–5) Although seals may seem slow and lethargic on land, they are actually dynamos in water. Their feeding habits, adaptations, and habitat are covered in this simple story of a seal's day. Book includes facts about the seal as sidebars on each page. Fly pages show various species of seals. Index. (CAC)

Seymour Simon's Extreme Oceans. Seymour Simon. Chronicle Books. 60pp. Trade ISBN 978-1-45210-833-9, \$17.99. (3–5) Explore the most extreme parts of the ocean with amazing photographs, unbelievable facts, and record-breaking





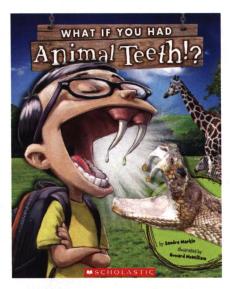
information that will keep you engaged during this incredible adventure. (JMP)

Snow School. Sandra Markle. Illustrated by Alan Marks. Charlesbridge. 32pp. Trade ISBN 978-1-5808-9410-4, \$16.95. (K-5) High in the Pakistan Hindu Kush Mountains, two young snow leopards tackle the challenges of snow school. Many life lessons build survival skills to ensure their graduation to adulthood. Author's Note, Bibliography. (DMH) VIII

*Stripes of All Types.* Susan Stockdale. Peachtree Publishers. 32pp. Trade ISBN 978-1-56145-695-0, \$15.95. (K-2) Its beautiful illustrations and concise text give us a chance to see how animals' adaptations communicate information or protect them from predators. (BGH) II

Too Hot? Too Cold? Keeping Body Temperature Just Right. Caroline Arnold. Illustrated by Annie Patterson. Charlesbridge. 32pp. Trade ISBN 978-158089-276-6, \$17.95. (K-5) No matter where we live, or what climate we live in, people and animals need to keep their temperature "just right." Remarkable connections made between humans and other animals around the world show how they adapt to heat and cold year round. Glossary, Author's Note. (CAC)

Ultimate Bug-opedia. Darlyne Murawski and Nancy Honovich. National Geographic Children's Books. 272pp. Trade ISBN 978-1-42631-376-9, \$24.95. (3–8) Amazing photographs make this the perfect book for insect lovers. Factfilled with up-to-date information that introduces a worldwide look at bugs of all kinds. Authors' Notes, Glossary, Index, Find Out More. (VJR)



♥ What If You Had Animal Teeth? Sandra Markle. Illustrated by Howard McWilliam. Scholastic. 32pp. Trade ISBN 978-0-545-48438-1, \$3.99. (K−5) Fun story about animal adaptations of teeth. Each spread has information about the animal on one page, and on the facing page an imaginary tale exploring what if human kids had those teeth. Information on human teeth. (SLS)

What's In There? All About Before You Were Born. Robie H. Harris. Illustrated by Nadine Bernard Westcott. Candlewick Press. 40pp. Trade ISBN 978-0-7636-3630-2, \$15.99. (3–5) With an engaging, honest narrative and childfriendly illustrations of a multicultural community, the issues of pregnancy, baby (fetal) development, and birth are addressed in a child- and parent-sensitive manner. (LSG)

Yummy! Good Food Makes Me Strong! Shelly Rotner and Sheila M. Kelly. Holiday House. 32pp. Trade ISBN 978-0-82342-426-9, \$16.95. (K–2) Each page is loaded with color photographs of children eating healthy foods. The book helps children know what to eat for all meals of the day, along with guides for helping to make the food with their parents. More Helpful Tips. (SLS)

#### **Physical Science**

Things That Float and Things That Don't. David A. Adler. Illustrated by Anna Raff. Holiday House. 32pp. Trade ISBN 978-0-82342-862-5, \$16.95. (K–5) Using charming illustrations and easily understood text, the basic principles of floatation and density are explained. Readers are asked to perform fun, simple experiments demonstrating the relationship of floating and sinking to density. (VJR)

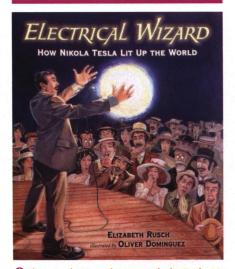
Up, Up in a Balloon. Lawrence Lowery. Illustrated by Gordon Laite. NSTA Kids, an Imprint of NSTA Press. 36pp. Trade ISBN 978-1-938946-14-1, \$10.95. (K–5) This book has a lot of potential as part of science instruction in the classroom. It can be used to learn about air as matter and what happens when the temperature of the air is changed. The book also has an engineering flavor as revisions are made constantly during the balloon-making process. I Wonder Why Introduction, Parent-Teacher Handbook. (KAR) II

#### Science as Inquiry

One Minute Mysteries: 65 More Short Mysteries You Solve With Science. Eric Yoder and Natalie Yoder. Science, Naturally! 188pp. Trade ISBN 1-9384920-0-5, \$9.95. (3-7) One Minute Mysteries is a great way to get students thinking scientifically, or start off a lesson or a new unit. One-page scenarios give clues to the solution, but lots of "out of the box" thinking is required to come up with the answers. Mysteries cover life, physical, and Earth/space science, plus a section that requires math knowledge to solve. Keep this one on your desk for any spare moments during the day and keep your students on their toes! Includes an index. (CAC) III, IV, V

**Something Stinks!** Gail Hendricks. Tumblehome Learning. 192pp. Trade ISBN 978-0-98500-089-9, \$7.95. (3–5) A novel for the young adolescent that demonstrates relevance and purpose. As an emerging newspaper recorder, Emily decides to find out why dead fish are washing ashore along the Higdon River. Emily and her friends take science learning beyond the classroom. So, will the citizen scientist be able to solve the mystery? You will have to read the book to find out. (KAR)

## Science and Technology



♥Electrical Wizard: How Nikola Tesla Lit Up the World. Elizabeth Rusch. Illustrated by Oliver Dominguez. Candlewick Press. 40pp. Trade ISBN 978-0-76365-855-7, \$16.99. (K−5) This book is a perfect example of how science and engineering can work together naturally. Science is embedded in all engineer and design thinking that Tesla used. There are great illustrations. The book provides a wonderful opportunity to develop academic vocabulary. Ahead of His Time, Tesla vs. Edison: The Rivalry, Scientific Notes, Selected Bibliography & Further Reading. (KAR) III

National Geographic Little Kids Ocean Counting. Janet Lawler. National Geographic Children's Books. 32pp. Trade ISBN 978-1-42631-116-1, \$16.95. (K–2) Great connections to the Common Core State Standards in mathematics as students learn not only how to count but also about the beautiful creatures of the deep. It is an opportunity to be explicit about the connection between mathematics and science. The book includes visual displays of the creatures, Animal Facts, map of world showing where the photographs were taken, Glossary. (KAR) IV

Papa's Mechanical Fish. Candace Fleming. Illustrated by Boris Kulikov. Margaret Ferguson Books/Farrar Straus Giroux Books for Young Readers, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-0-374-39908-5, \$16.99. (3-5) An ambitious inventor is instrumental in designing an underwater mechanical device. Based on true events, this fiction story illustrates the challenges of design and the perseverance that

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motivate scientists and engineers to make further discoveries. (JMP) lll

#### Stronger than Steel: Spider Silk DNA and the Quest for Better Bulletproof Vests, Sutures, and Parachute Rope. Bridget Heos. Illustrated by Andy Comins.

Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-54768-126-9, \$18.99. (3-8) This well-written book follows the search for and use of the spider-silk gene. This is a great book on the science of genetic engineering and biotechnology. (BGH) VII

# Science in Personal and Social Perspectives

Who Says Women Can't Be Doctors? The Story of Elizabeth Blackwell. Tanya Lee Stone. Illustrated by Marjorie Priceman. Christy Ottaviano Books/Henry Holt BYR, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-0-8050-9048-2, \$17.99. (3–5) While no one would say this today, in Elizabeth Blackwell's day women weren't allowed to be doctors. This inspiring story recounts the challenges she faced in becoming our country's first female doctor in 1849. Author's note, Bibliography. (RMM)

The Eagles Are Back. Jean Craighead George. Illustrated by Wendell Minor. Dial, an Imprint of Penguin Random House. 32pp. Library ISBN 978-0-80373-771-6, \$16.99. (K–5) The beloved children's author tells of the miraculous renaissance of the American bald eagle. Beautiful illustrations from landscape artist Wendell Minor add to the magic of this inspiring picture book that reinforces the idea that people can make a difference. Websites for additional information. (RMM)

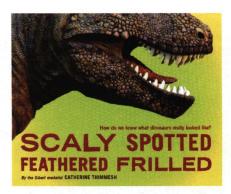
#### Eight Dolphins of Katrina: A True Tale

of Survival. Janet Wyman Coleman. Illustrated by Yan Nascimbene. Houghton Mifflin Harcourt. 40pp. Trade ISBN 978-0-54771-923-8, \$16.99. (3–5) This touching story describes how eight dolphins raised in captivity were taken out to sea by Hurricane Katrina's storm surge. The dolphins stayed together and cared for each other, which is credited with helping them survive one of the worst natural disasters in U.S. history. Notes on the individual dolphins, Sources. (RMM)

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# Unifying Concepts and Processes

♥ Scaly Spotted Feathered Frilled: How Do We Know What Dinosaurs Really Looked Like? Catherine Thimmesh. Houghton Mifflin Harcourt. 64pp. Trade ISBN 978-0-54799-134-4, \$17.99. (3-8) Track the scientific process as dinosaurs' appearances change throughout history, with colored paintings created by respected paleoartists. It is a fascinating process, using only what is left of dinosaurs, whose



images evolve with each new discovery. Glossary, Index, About the Artist, Sources, Dinosaur Groups. (VJR) VIII

# **Call for Submissions**

for 2015 Outstanding Science Trade Books for Students K-12

Deadline for submissions: June 30, 2014

#### 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 2014.
- Titles originally published abroad are eligible only if they have a U.S. publication date; reprints or licensed editions of titles initially published in the United States before 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 are not acceptable. Spanish-language editions published simultaneously with English-language editions in 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 on June 1 at *www.cbcbooks.org*.

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