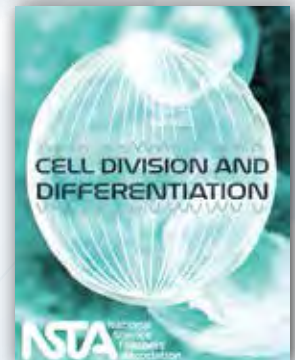
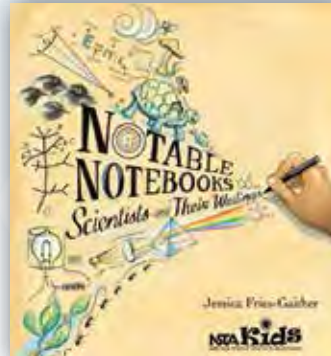
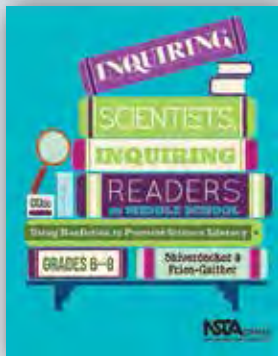
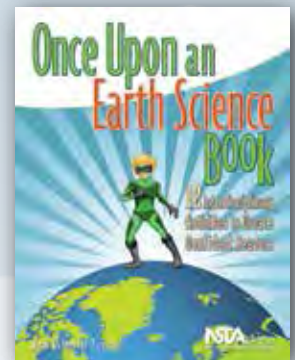
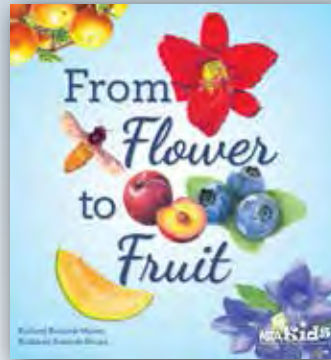
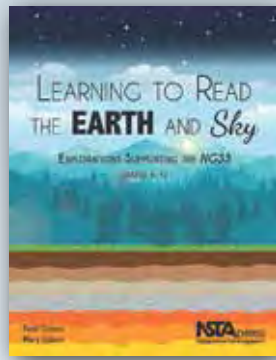


Fall 2016

NSTA RECOMMENDS

Professional Resources for Science Educators



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By following the ideas well expressed in this creative volume, a student can develop better writing skills and learn the science involved along the way.

13

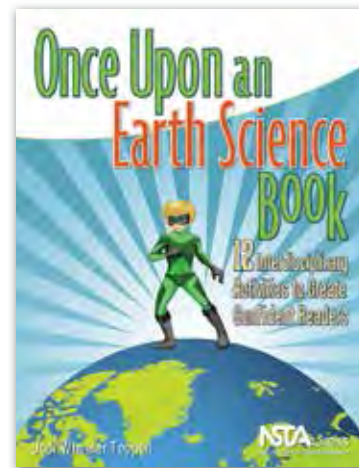
— *Science Books & Films/AAAS*



This book is an excellent choice for classroom teachers who wish to further their understanding of energy in order to learn how to build knowledge for their students, K–12.

59

— *Reader review*



This book is impressive, and it's easy to see it was written by a REAL teacher who thoroughly understands the problems faced by teachers whose students don't think you need to read in science.

11

— *NSTA Recommends*



This excellent book is a self-contained teacher's guide/activity book that has done most of the work for you, a sort of "one-stop shopping" resource for the classroom teacher and planetarian.

54

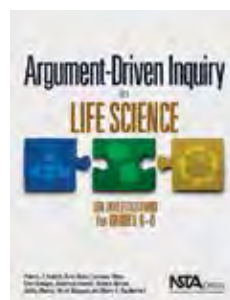
— *Planetarian/International Planetarian Society*



Be a Winner! is a worthwhile resource for teachers who want to see their ideas come to fruition. Teachers will see their creativity become reality as they gain confidence as successful grant writers, which will translate to new and exciting opportunities for their students.

13

— *NSTA Recommends*



The labs are well written, cover a variety of relevant topics, and encourage students to develop research and investigation skills in ways that should be interesting to them.

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— *Science Books & Films/AAAS*

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BESTSELLERS at a GLANCE

PREK-5

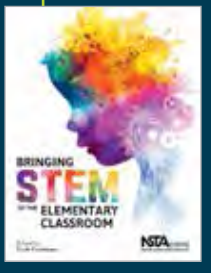
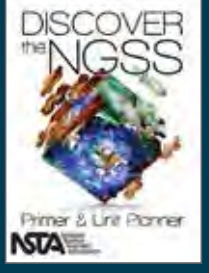
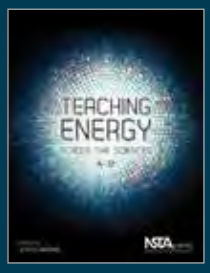
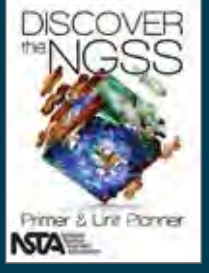
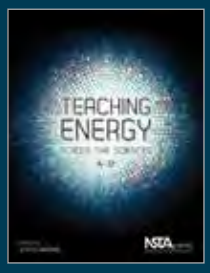
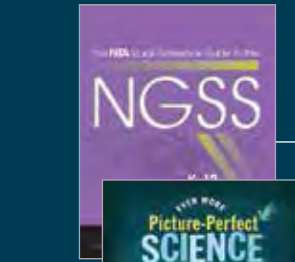
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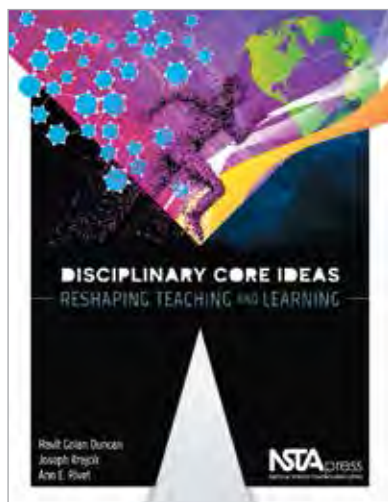
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AVAILABLE OCTOBER 2016



Disciplinary Core Ideas Reshaping Teaching and Learning

Edited by Ravit Golan Duncan, Joseph Krajcik, and Ann E. Rivet
NSTA PRESS, GRADES K–12

Of course you want your students to understand the ways important science concepts work together—but exactly how do you help them learn and apply these core ideas? *Disciplinary Core Ideas* can help. As the subtitle indicates, this thorough book aims to reshape your approach to teaching and how students learn so students can make age-appropriate sense of seemingly unrelated phenomena.

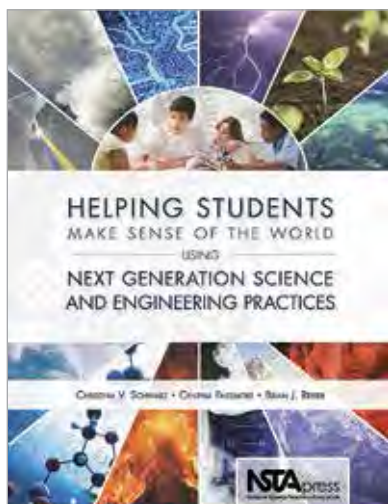
Building on the foundation provided by *A Framework for K–12 Science Education*, which informed the development of the NGSS, the book’s four sections cover four broad areas: physical science; life science; Earth and space science; and engineering, technology, and applications of science.

This book can make science lessons at all grade levels more coherent and memorable. Think of it as a conceptual tool kit you can use to encourage your students to learn important and useful science now and throughout their lives.

© 2017; ISBN: 978-1-938946-41-7; 312 pages

Stock #: PB402X	Members: \$31.96	Non-members: \$39.95
E-book #: PKEB402X	Members: \$23.97	Non-members: \$29.96
Book/E-book Set #: PKE402X	Members: \$38.35	Non-members: \$47.94

AVAILABLE NOVEMBER 2016



Helping Students Make Sense of the World Using Next Generation Science and Engineering Practices

Christina V. Schwarz, Cindy Passmore, and Brian J. Reiser
NSTA PRESS, GRADES K–12

At last, here’s a major stress reliever for educators who want a nuts-and-bolts understanding of the practices strand of the *Framework* and the *Next Generation Science Standards*. Written in clear, nontechnical language, this book provides real-world examples to show you what’s different about practice-centered teaching and learning at all grade levels. It addresses three important questions: How will engaging students in science and engineering practices help improve class? What do the eight practices look like in the classroom? And exactly how can educators teach and support the NGSS using the practices?

The book was developed for K–12 science teachers, curriculum developers, teacher educators, and administrators. Its authors contributed to the *Framework*’s initial vision and tested their ideas in science classrooms. If you want anxiety-free ways to use the NGSS to help students work together to generate and revise knowledge—and not just receive and repeat information—this book is for you.

© 2017; ISBN: 978-1-938946-04-2; 356 pages

Stock #: PB351X	Members: \$31.96	Non-members: \$39.95
E-book #: PKEB351X	Members: \$23.97	Non-members: \$29.96
Book/E-book Set #: PKE351X	Members: \$38.35	Non-members: \$47.94

More Everyday Engineering

Putting the E in STEM Teaching and Learning

Richard H. Moyer and Susan A. Everett

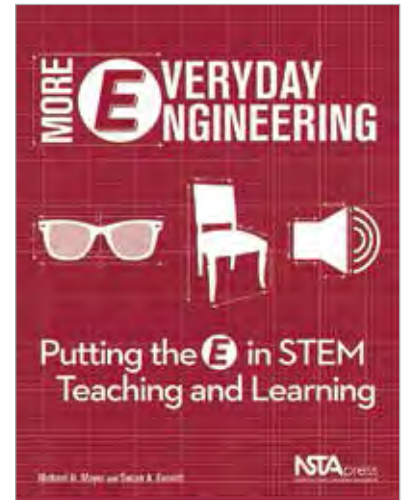
An **NSTA PRESS** Journals Collection, **GRADES 6–8**

What makes a windup toy get up and go? How does an earbud operate? And why does the line you're waiting in always seem the slowest? Get middle-schoolers engaged in the fascinating science behind familiar items with *More Everyday Engineering*. Like the original book (see p. 21), this compilation brings together activities based on the "Everyday Engineering" columns from NSTA's award-winning journal *Science Scope*. Thirteen hands-on investigations focus on three aspects of engineering: designing and building, reverse engineering to learn how something works, and constructing and testing models.

Like the original collection, this book is easy to use. Each investigation is a complete lesson that includes in-depth teacher background information, expected sample data, a materials list, and a student activity sheet for recording results. The activities use simple, inexpensive materials you can find in your science classroom or at a dollar store. Whether you're a teacher, a parent, or an enrichment-program leader, go beyond the usual bridge-building and egg-drop activities. Spark curiosity with appealing activities that will help middle schoolers understand that engineering truly is a part of their everyday lives.

© 2016; ISBN: 978-1-68140-278-9; 122 pages

Stock #: PB306X2	Members: \$20.76	Non-Members: \$25.95
E-book #: PKEB306X2	Members: \$15.57	Non-Members: \$19.46
Book/E-book Set #: PKE306X2	Members: \$24.91	Non-Members: \$31.14



Big Data, Small Devices

Investigating the Natural World Using Real-Time Data

Donna Governor, Michael Bowen, and Eric Brunzell

NSTA PRESS, GRADES 3–12

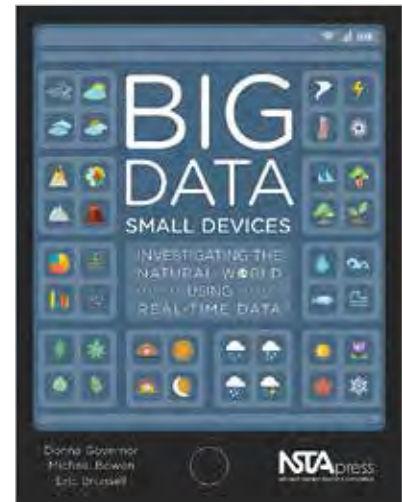
Now your students can transform their mobile phones and tablets into tools for learning about everything from weather to water quality. *Big Data, Small Devices* shows you how. This book is designed for Earth and environmental science teachers who want to help students tap into, organize, and deploy large data sets via their devices to investigate the world around them. Using the many available websites and free apps, students can learn to detect patterns among phenomena related to the atmosphere, biosphere, geosphere, hydrosphere, and seasons.

Written by veteran teachers, *Big Data, Small Devices* is organized into two major parts. It covers tools that help you find real-time data and understand what to do with the data. Then, the authors provide sample app-based activities that you can use as written or adapt to your specific needs. These days, opportunities to learn are as close as your students' personal technology. As the authors of *Big Data, Small Devices* note, "Allowing students to conduct investigations using their smart phone in app-based activities allows them to be more engaged in authentic science investigations."

© 2017; ISBN: 978-1-68140-276-5; 225 pages

Stock #: PB421X	Members: \$31.96	Non-Members: \$39.95
E-book #: PKEB421X	Members: \$23.97	Non-Members: \$29.96
Book/E-book Set #: PKE421X	Members: \$38.35	Non-Members: \$47.94

AVAILABLE NOVEMBER 2016



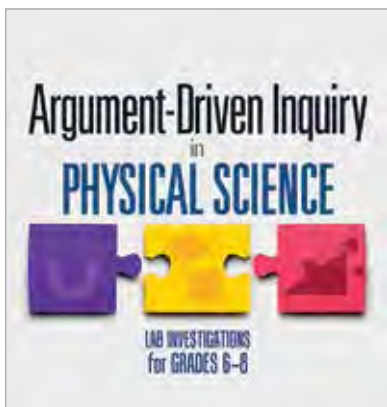
AVAILABLE SEPTEMBER 2016

Argument-Driven Inquiry in Physical Science

Lab Investigations for Grades 6–8

Jonathon Grooms, Patrick J. Enderle, Todd Hutner, Ashley Murphy, and Victor Sampson

NSTA PRESS, GRADES 6–8



Free your students—and yourself—from the same old worksheets and data tables. *Argument-Driven Inquiry in Physical Science* will make middle school labs much more active and engaging. Its 22 investigations teach students to use argument to construct, support, and evaluate scientific claims of their own and others. The labs cover four core ideas in physical science: matter, motion and forces, energy, and waves. Students dig into important content and discover scientific practices as they figure out everything from how thermal energy works to what could make an action figure jump higher.

This is the latest in NSTA's bestselling *Argument-Driven Inquiry* series (see pp. 14, 51, and 62). Easy-to-use features include reproducible student pages, teacher notes, checkout questions, and standards-alignment matrices. Its labs are versatile enough to introduce a topic or to act as a unit capstone. No matter how you use these authentic experiences, they'll change the focus of your lab instruction.

© 2016; ISBN: 978-1-938946-23-3; 464 pages

Stock #: PB349X4	Members: \$35.96	Non-members: \$44.95
E-book #: PKEB349X4	Members: \$26.97	Non-members: \$33.71
Book/E-book Set #: PKE349X4	Members: \$43.15	Non-members: \$53.94

Student Lab Manual for Argument-Driven Inquiry in Physical Science

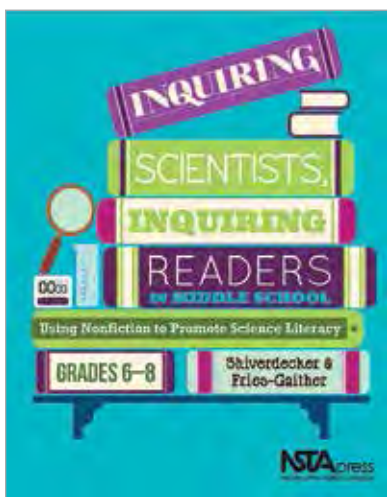
© 2016; ISBN: 978-1-68140-526-1; 214 pages

Stock #: PB349X4S	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB349X4S	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE349X4S	Members: \$19.15	Non-members: \$23.94

Bundled sets of 10 also available!

Stock #: PK349X4S10	Members: \$143.64	Non-Members: \$179.55
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AVAILABLE OCTOBER 2016



Inquiring Scientists, Inquiring Readers in Middle School

Using Nonfiction to Promote Science Literacy

Terry Shiverdecker and Jessica Fries-Gaither

NSTA PRESS, GRADES 6–8

Science educators Terry Shiverdecker and Jessica Fries-Gaither can help you blend inquiry-based science and literacy instruction to support learning and maximize your time. Several unique features make this book a valuable resource:

- **Lessons integrate all aspects of literacy**—reading, writing, speaking, listening, and viewing. The texts are relevant nonfiction, including trade books, newspaper and magazine articles, online material, infographics, and even videos.
- **A learning-cycle framework helps students deepen their understanding** with data collection and analysis before reading about a concept.
- **Ten investigations support current standards** and encompass life, physical, and Earth and space sciences.
- **Units are teacher-friendly.** Each unit comes with background, common misconceptions, an annotated text list, safety considerations, differentiation strategies, reproducible student pages, and assessments.

This resource is a follow-up to the authors' award-winning *Inquiring Scientists, Inquiring Readers* for grades 3–5 (see p. 42), which one reviewer called "thorough—and any science teacher's dream to read."

© 2017; ISBN: 978-1-68140-003-7; 384 pages

Stock #: PB325X2	Members: \$31.96	Non-Members: \$39.95
E-book #: PKEB325X2	Members: \$23.97	Non-Members: \$29.96
Stock #: PKE325X2	Members: \$38.35	Non-Members: \$47.94

The Go-To Guide for Engineering Curricula, PreK–12

Choosing and Using the Best Instructional Materials for Your Students
 Edited by Cary I. Sneider
 Corwin Press, **GRADES PREK–12**

With the implementation of the *Next Generation Science Standards (NGSS)*, your students won't just be scientists—they'll be engineers. Science educator Cary Sneider has done the groundwork for you, collecting a full range of time-tested curriculum materials to seamlessly weave engineering and technology concepts into your math and science lessons.

In this series, you'll find descriptions of instructional materials specifically created for—and tested in—preK–12 classrooms. Features include:

- A handy table that takes you straight to the chapters most relevant to your needs
- In-depth commentaries and illustrative examples that demystify engineering curricula
- A vivid picture of what each curriculum looks like in the classroom, the learning goals it accomplishes, and how it helps address the NGSS
- More information on the integration of engineering and technology into 21st-century science classrooms—and why it will make a difference

One of the most well-respected science educators in the country, Cary Sneider was an NGSS Writing Team Leader and is an associate research professor at Portland State University.

© 2014; ISBN: 978-1-4833-0736-7; 256 pages (Grades PreK–5)

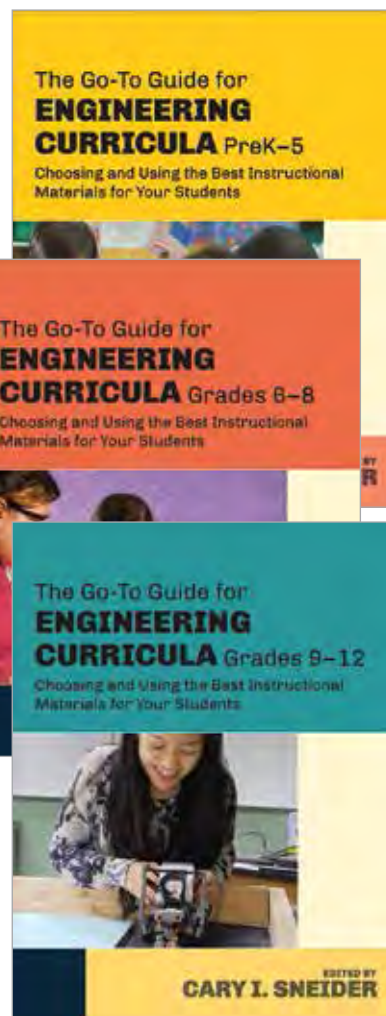
Stock #: OP938X1 Members: \$29.66 Non-Members: \$32.95

© 2014; ISBN: 978-1-4833-0737-4; 248 pages (Grades 6–8)

Stock #: OP938X2 Members: \$29.66 Non-Members: \$32.95

© 2014; ISBN: 978-1-4833-0738-1; 216 pages (Grades 9–12)

Stock #: OP938X3 Members: \$29.66 Non-Members: \$32.95



Teacher Learning in the Digital Age

Online Professional Development in STEM Education
 Edited by Chris Dede, Arthur Eisenkraft, Kim Frumin, and Alex Hartley
 Harvard Education Press, **GRADES 6–8**

With an emphasis on science, technology, engineering, and mathematics (STEM) training, *Teacher Learning in the Digital Age* examines exemplary models of online and blended teacher professional development, including information on the structure and design of each model, intended audience, and existing research and evaluation data. From video-based courses to just-in-time curriculum support platforms and MOOCs for educators, the cutting-edge initiatives described in these chapters (including NSTA's Learning Center) illustrate the broad range of innovative programs that have emerged to support preservice and inservice teachers in formal and informal settings.

"As teacher development moves online," the editors argue, "it's important to ask what works and what doesn't and for whom." They address these questions by gathering the feedback of many of the top researchers, developers, and providers working in the field today.

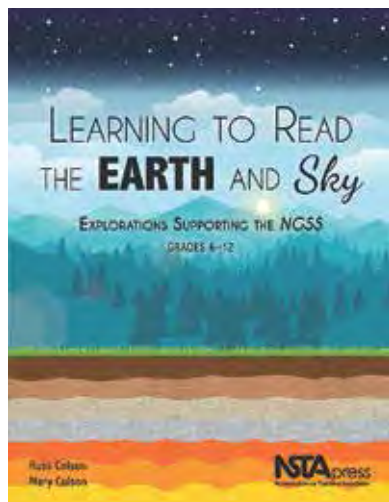
Filled with abundant resources, *Teacher Learning in the Digital Age* reveals critical lessons and insights for designers, researchers, and educators in search of the most efficient and effective ways to leverage technology to support formal, as well as informal, teacher learning.

© 2016; ISBN: 978-1-61250-897-9; 248 pages

Stock #: OP939X Members: \$30.56 Non-Members: \$33.95



AVAILABLE NOVEMBER 2016



Learning to Read the Earth and Sky Explorations Supporting the NGSS, Grades 6–12 Russ Colson and Mary Colson NSTA PRESS, GRADES 6–12

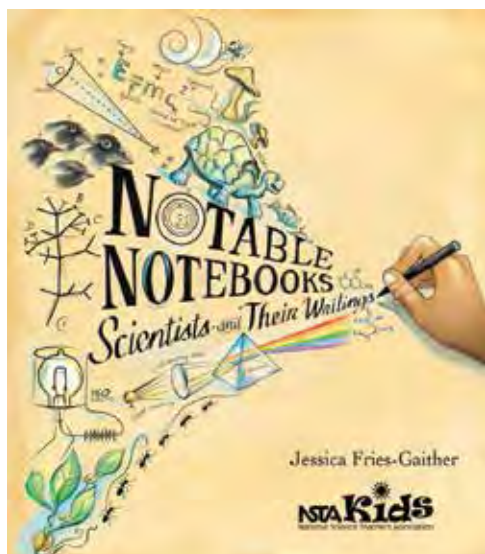
Learning to Read the Earth and Sky is the resource you need to bring authentic science—and enthusiasm—into your classroom. It offers inspiration for reaching beyond prepared curricula, engaging in discovery along with your students, and using your lessons to support the NGSS. The book provides examples of labs and activities you and your students can do together; insights into expectations and misconceptions, plus ideas to inspire investigation; stories of real scientific discovery translated for classroom consideration; exploration of how you can model behavior for your students as a teacher-scholar; and guidance on how to translate the core ideas of the NGSS into specific examples. The authors are husband-and-wife educators who write, “It is our hope that readers will find our book short on ‘edu-speak,’ long on the joy of doing science, and full of stories of students, classrooms, scientists, and Earth and sky.”

© 2017; ISBN: 978-1-941316-23-8; 394 pages

Stock #: PB409X	Members: \$31.96	Non-Members: \$39.95
E-book #: PKEB409X	Members: \$23.97	Non-Members: \$29.96
Book/E-book Set #: PKE409X	Members: \$38.35	Non-Members: \$47.94

New from NSTA Kids

National Science Teachers Association



Notable Notebooks Scientists and Their Writings Jessica Fries-Gaither NSTA KIDS, GRADES 3–5

Take a trip through time to discover the value of a special place to jot your thoughts, whether you’re a famous scientist or a student. *Notable Notebooks: Scientists and Their Writings* brings to life the many ways in which trailblazers from Galileo to Jane Goodall have used a science notebook—to sketch observations, imagine experiments, record data, or write down their thoughts. You will also get four steps to starting your own notebook, plus mini-biographies of the diverse featured scientists. Written in captivating rhyme, the text is sprinkled with lively illustrations. In fact, it may well look a lot like the science notebook you’ll be eager to start after reading this inspiring book.

© 2016; ISBN: 978-1-68140-307-6; 32 pages; Lexile: 670L

Stock #: PB415X	Members: \$10.36	Non-members: \$12.95
E-book #: PKEB415X	Members: \$8.42	Non-members: \$9.71
Book/E-book Set #: PKE415X	Members: \$13.47	Non-members: \$16.84

Library Edition

© 2016; ISBN: 978-1-68140-379-3; 32 pages; Lexile: 670L

Stock #: PB415XL	Members: \$15.16	Non-members: \$18.95
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Next Time You See a Cloud

Emily Morgan

NSTA KIDS, GRADES K-5

Next time you want to see a show, go outside and look at the sky. Clouds will put on a pageant for you with ever-changing shapes and sizes. This book reveals some fascinating science behind these beautiful displays. Author Emily Morgan answers all kinds of questions: What are clouds made of? Why are some white? If you could reach those fluffy, floaty puffs, could you jump on them like a trampoline? As *Next Time You See a Cloud* makes clear, you should make it a habit to keep looking up. There's a new show every day. (See pp. 64–68 for more books in the award-winning *Next Time You See* series—including three titles in Spanish.)

© 2016; ISBN: 978-1-938946-36-3; 32 pages; Lexile: 980L

Stock #: PB329X8	Members: \$10.36	Non-members: \$12.95
E-book #: PKEB329X8	Members: \$8.42	Non-members: \$9.71
Book/E-book Set #: PKE329X8	Members: \$13.47	Non-members: \$16.84

Library Edition

© 2016; ISBN: 978-1-941316-32-0; 32 pages; Lexile: 980L

Stock #: PB329X8L	Members: \$15.16	Non-members: \$18.95
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From Flower to Fruit

Richard Konicek-Moran and Kathleen Konicek-Moran

NSTA KIDS, GRADES K-4

After reading *From Flower to Fruit*, no child will look at a flower or fruit in the same way again—and no grown-up will, either! The rich pictures and engaging story line will spark curiosity about the parts of a flower and the vital roles of bees and seeds in plant reproduction. The book also encourages readers to explore several mysteries: How does a seed change as it sprouts into a plant? Why do scientists call a tomato a fruit? Can some fruits really fly, float, and stick to your socks?

Six kid-friendly activities and background information for parents and teachers complement the text. Written and illustrated by a husband-and-wife team, *From Flower to Fruit* will transform curious readers—children and adults—into budding botanists.

© 2016; ISBN: 978-1-941316-34-4; 36 pages; Lexile: 910L

Stock#: PB416X	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB416X	Members: \$7.77	Non-members: \$8.96
Book/E-book Set #: PKE416X	Members: \$12.43	Non-members: \$15.54



AVAILABLE SEPTEMBER 2016



Fragrant as a Flower

I Wonder Why

Lawrence F. Lowery

NSTA KIDS, GRADES K-3

Do kids know they can explore with the nose? This book invites them to discover what their sense of smell can teach them about the world around them—if they only pay attention. Young readers can roam along as a father tells his son about taking in the deliciousness of a pastry shop, the woodsy smells of a lumberyard, the nose-wrinkling stink of trash, the sweet scents of flower and fruit markets, and the freshness of spring. Kids will see what the young boy means when he says, “Everywhere I go, there is a new smell to know.” Then they’ll want to follow their own noses, too!

© 2016; ISBN: 978-1-68140-353-3; 36 pages; Lexile: 610L

Stock #: PB330X23	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB330X23	Members: \$7.77	Non-members: \$8.96
Book/E-book Set #: PKE330X23	Members: \$12.43	Non-members: \$15.54

AVAILABLE SEPTEMBER 2016



Look and See

I Wonder Why

Lawrence F. Lowery

NSTA KIDS, GRADES K-3

This lively book’s title provides the perfect motto for young scientists: Look and see! With the help of charming text and bright pictures, children can learn about the richness of sight. But the book’s goal is not to explain how the sense of sight works. Instead, toys and tools, birds and bugs, flowers and fish, and alligators and apple trees all invite readers to look carefully. Soon children will be making comparisons and identifying patterns in what they see. Before you know it, kids will gaze beyond this delightful book to see more details in everything around them.

© 2016; ISBN: 978-1-68140-355-7; 36 pages; Lexile: 300L

Stock #: PB330X22	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB330X22	Members: \$7.77	Non-members: \$8.96
Book/E-book Set #: PKE330X22	Members: \$12.43	Non-members: \$15.54

AVAILABLE SEPTEMBER 2016



Quiet as a Butterfly

I Wonder Why

Lawrence F. Lowery

NSTA KIDS, GRADES K-3

“One day I listened. I listened to all the sounds I heard. I listened and I wondered.” Starting with these simple words, *Quiet as a Butterfly* follows an attentive boy as he listens his way through a school day. He hears a clock ticking, horns beeping, school bells ringing, rain dripping, pans clanging, and, at day’s end, the staircase creaking and his father snoring. The book’s point is not to explain how hearing works; rather, it aims to sharpen young readers’ awareness of all they can listen to ... and all they can learn as they do.

© 2016; ISBN: 978-1-68140-354-0; 36 pages; Lexile: 780L

Stock #: PB330X24	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB330X24	Members: \$7.77	Non-members: \$8.96
Book/E-book Set #: PKE330X24	Members: \$12.43	Non-members: \$15.54

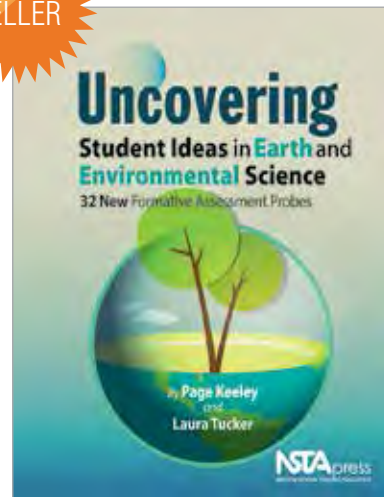
See pages 70–76 for more books in the *I Wonder Why* series.

Uncovering Student Ideas in Earth and Environmental Science

32 New Formative Assessment Probes

Page Keeley and Laura Tucker

NSTA PRESS, GRADES 3–12



Even if you're new to formative assessment probes, you'll love the latest book in the best-selling *Uncovering Student Ideas in Science* series. Authors Page Keeley and Laura Tucker give you 32 engaging questions, or probes, that can reveal what your students already know—or think they know—about core Earth and environmental science concepts. Armed with those insights, you can use the probes' teacher notes to adjust your approach and present the science in grade-appropriate ways so students will learn the content accurately. And if you're among the thousands of educators who already rely on this series (see pp. 40–41) and crave probes specifically about Earth and environmental science, you're in luck. These probes are organized into four sections: land and water; water cycle, weather, and climate; Earth history, weathering and erosion, and plate tectonics; and natural resources, pollution, and human impact.

The 10th book in this wildly popular, award-winning series offers field-tested teacher materials that provide science background and link to national standards, including the *Next Generation Science Standards*. The new probes are short, ready to reproduce, and easy to use. Why wait? It's time to help your students demystify why the ocean is salty, how old the Earth is, and what the difference is between weather and climate.

© 2016; ISBN: 978-1-938946-47-9; 180 pages

Stock #: PB355X	Members: \$30.36	Non-members: \$37.95
E-book #: PKEB355X	Members: \$22.77	Non-members: \$28.46
Book/E-book Set #: PKE355X	Members: \$36.43	Non-members: \$45.54

Once Upon an Earth Science Book

12 Interdisciplinary Activities to Create Confident Readers

Jodi Wheeler-Toppen

NSTA PRESS, GRADES 6–8

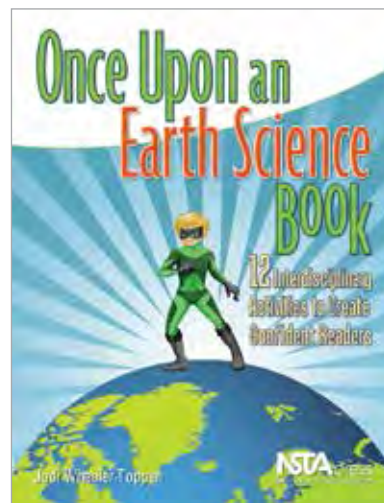
If you work with students who struggle to understand their Earth science texts, this book provides everything you need to boost their skills in both science and reading. *Once Upon an Earth Science Book* starts with advice on teaching reading comprehension strategies to middle school students. Then, the 12 content chapters give you

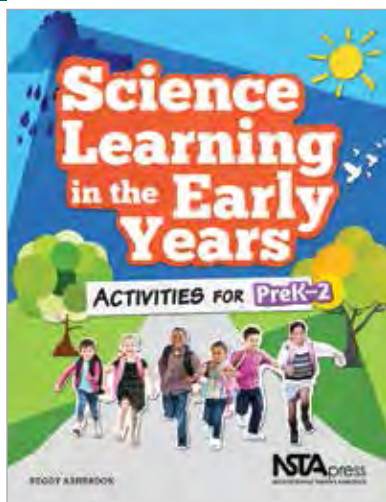
- hands-on science activities with engaging titles such as “Mountain Mayhem,” “Oceans on the Move,” and “Trash Soup”;
- readings that cover important Earth science concepts and support the *Next Generation Science Standards*;
- writing activities that prompt students to connect what they did with what they read; and
- assessment exercises to give you feedback on what your students are learning.

You'll love how practical and easy this book is to use. Jodi Wheeler-Toppen is an experienced teacher who couldn't find a resource that integrated reading, writing, and science—so she wrote it herself. She's also the author of NSTA Press's *Once Upon a Life Science Book* (see p. 52). “As you and your students work through these lessons together,” she predicts, “you will be able to watch their confidence as readers—and your confidence as a reading educator—grow.”

© 2016; ISBN: 978-1-941316-09-2; 185 pages

Stock #: PB275X2	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB275X2	Members: \$15.57	Non-members: \$19.46
Book/E-book Set #: PKE275X2	Members: \$24.91	Non-members: \$31.14





Science Learning in the Early Years

Activities for PreK–2

Peggy Ashbrook

NSTA PRESS, GRADES PREK–2

At first glance, you can see the value of *Science Learning in the Early Years* because it provides you with 40-plus classroom activities and an understanding of how to use them with young students. The book shows you how to go beyond demonstrations to experiences that actually get children engaged. The activities focus on science concepts that are important, clearly presented, and developmentally appropriate; connect to the NGSS; and highlight safety concerns. The book also helps you group individual activities into an ongoing science unit so students can develop science inquiry skills over time.

When you start to immerse yourself in *Science Learning in the Early Years*, you'll see that the value of this collection goes far beyond activities. The author is teacher, columnist, and blogger Peggy Ashbrook, who has been called a mover and shaker in promoting high-quality science content for grades preK–2. Reading this book makes you feel as though you're talking with a fellow practitioner—one who's been where you are and wants to share all the insights she's gained. Meeting her through her writing is the next best thing to having her as your own personal guide to the challenges and fun of working with the youngest scientists.

© 2016; ISBN: 978-1-941316-33-7; 376 pages

Stock #: PB407X

Members: \$24.76

Non-members: \$30.95

E-book #: PKEB407X

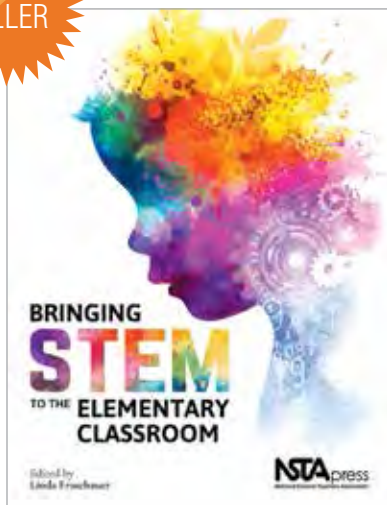
Members: \$18.57

Non-members: \$23.21

Book/E-book Set #: PKE407X

Members: \$29.71

Non-members: \$37.14



Bringing STEM to the Elementary Classroom

Linda Froschauer, Editor

An **NSTA PRESS** Journals Collection, **GRADES PREK–5**

Many resources help you encourage children to learn about science, technology, engineering, and math (STEM), but only this book was curated by the veteran educator who edits *Science and Children*, NSTA's journal for elementary teachers. Sensitive to the needs of preK–5 students and busy teachers, Linda Froschauer developed *Bringing STEM to the Elementary Classroom* as a comprehensive source of classroom-tested STEM investigations. The 36 lessons are conveniently organized into grade-level bands; grounded in research; designed to encourage learning across disciplines, promote problem-solving skills, introduce children to STEM careers, and serve all students equally well; and connected to all elements of the NGSS. Whether you're just beginning to delve into STEM experiences or eager for fresh ideas, *Bringing STEM to the Elementary Classroom* provides you with new, interesting, and productive strategies.

© 2016; ISBN: 978-1-68140-030-3; 275 pages

Stock #: PB413X

Members: \$28.76

Non-members: \$35.95

E-book #: PKEB413X

Members: \$21.57

Non-members: \$26.96

Book/E-book Set #: PKE413X

Members: \$34.51

Non-members: \$43.14

Creative Writing in Science

Activities That Inspire

Katie Coppens

NSTA PRESS, GRADES 3–12

Boost the creativity in your classroom by assigning a travel blog about the digestive system or an interview with an atom. You'll inspire students to be better writers while you enjoy new strategies to assess their scientific understanding. That's the idea behind *Creative Writing in Science*, which has activities that integrate writing with content in life science, Earth and space sciences, and engineering and physical sciences.

Each activity comes with strategies for teaching a creative writing style, whether prose or poetry. The assignments work as in-class activities, homework, or final assessments for a unit. Also included are reproducible handouts, graphic organizers, writing models, scoring rubrics, and connections to standards. See for yourself how rewarding it can be to combine two vital subjects into one class. Get your students started on their phytoplankton comic right away!

© 2016; ISBN: 978-1-941316-35-1; 140 pages

Stock #: PB411X	Members: \$19.96	Non-members: \$24.95
E-book #: PKEB411X	Members: \$14.97	Non-members: \$18.71
Book/E-book Set #: PKE411X	Members: \$23.95	Non-members: \$29.94



The Feedback Loop

Using Formative Assessment Data for Science Teaching and Learning

Erin Marie Furtak, Howard M. Glasser, and Zora M. Wolfe

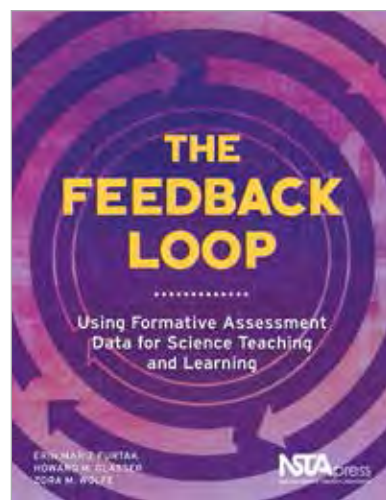
NSTA PRESS, GRADES 6–12

What helps students learn? Find out with data that go beyond what test scores tell you. *The Feedback Loop* describes how to design formative assessments and collect a variety of forms of data and shows you ways to use the information to improve your teaching.

This guide offers practical ideas for teachers, regardless of discipline. The first chapters introduce the Feedback Loop framework; highlight the four elements of goals, tools, data, and inferences; and explore how to close the loop by connecting inferences and goals through feedback. Later chapters show how to use the full loop to inform instruction. The book supports the NGSS and includes vignettes that ground the ideas in real-life situations. Meant to illuminate without overwhelming, *The Feedback Loop's* data-driven approach will support student learning and strengthen your teaching right away.

© 2016; ISBN: 978-1-941316-14-6; 175 pages

Stock #: PB405X	Members: \$28.76	Non-members: \$35.95
E-book #: PKEB405X	Members: \$21.57	Non-members: \$26.96
Book/E-book Set #: PKE405X	Members: \$34.51	Non-members: \$43.14



Be a Winner!

A Science Teacher's Guide to Writing Successful Grant Proposals

Patty McGinnis and Kitchka Petrova

NSTA PRESS, GRADES K–12

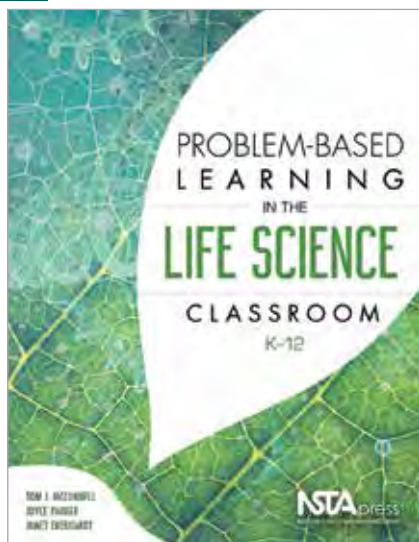
Be a Winner! is your chance to learn from veteran science teachers about the secrets to successful grant writing. Formatted as a handy workbook, this book takes you step by step through the writing process. You'll learn the top 10 reasons to write a grant proposal, how to identify and refine proposal ideas, the basic components of every proposal, the ins and outs of submitting a proposal, and how to manage a funded project.

Appendixes provide you with writing templates, a grant proposal rubric, science-related grant listings and teaching awards, and more. By the time you complete the practice exercises, you'll just about have compiled a complete proposal and be well on your way to winning your first grant.

© 2016; ISBN: 978-1-68140-001-3; 136 pages

Stock #: PB412X	Members: \$28.76	Non-members: \$35.95
E-book #: PKEB412X	Members: \$21.57	Non-members: \$26.96
Book/E-book Set #: PKE412X	Members: \$34.51	Non-members: \$43.14





Problem-Based Learning in the Life Science Classroom, K–12

Tom J. McConnell, Joyce M. Parker, and Janet Eberhardt

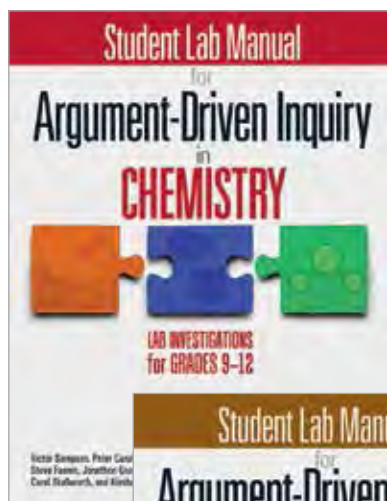
NSTA PRESS, GRADES K–12

Problem-Based Learning in the Life Science Classroom, K–12 offers a great way to ignite creativity. Authors Tom McConnell, Joyce Parker, and Janet Eberhardt show how to engage students with scenarios that represent real-world science in all its messy, thought-provoking glory. The scenarios prompt learners to immerse themselves in analyzing problems, asking questions, posing hypotheses, finding needed information, and constructing a proposed solution. In addition to complete lesson plans supporting the NGSS, the book offers extensive examples, instructions, and tips. The lessons cover life cycles, ecology, genetics, and cellular metabolism.

Problem-Based Learning in the Life Science Classroom, K–12 also provides you with what many think is the trickiest part of the Problem-Based Learning (PBL) approach: rich, authentic problems. The authors facilitated the National Science Foundation–funded PBL Project for Teachers and used the problems in their own science teaching, so you can be confident that the problems and the approach are teacher tested and approved.

© 2016; ISBN: 978-1-941316-20-7; 245 pages

Stock #: PB408X2	Members: \$31.96	Non-members: \$39.95
E-book #: PKEB408X2	Members: \$23.97	Non-members: \$29.96
Book/E-book Set #: PKE408X2	Members: \$38.35	Non-members: \$47.94



Student Lab Manual for Argument-Driven Inquiry in Chemistry

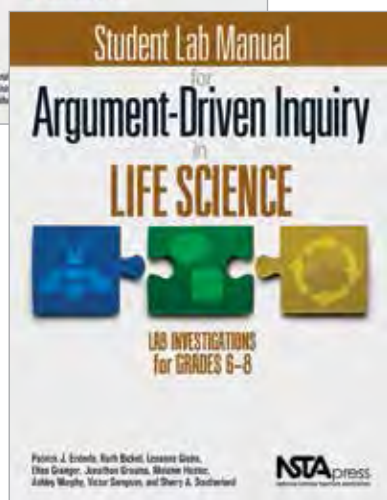
Victor Sampson, Peter Carafano, Patrick Enderle, Steve Fannin, Jonathon Grooms, Sherry A. Southerland, Carol Stallworth, and Kiesha Williams

NSTA PRESS, GRADES 9–12

Student Lab Manual for Argument-Driven Inquiry in Life Science

Patrick J. Enderle, Ruth Bickel, Leanne Gleim, Ellen Granger, Jonathon Grooms, Melanie Hester, Ashley Murphy, Victor Sampson, and Sherry A. Southerland

NSTA PRESS, GRADES 6–8



The bestselling *Argument-Driven Inquiry* series (pp. 6, 51, and 62) includes field-tested labs that help your students learn important content and scientific practices. The labs cover various topics in chemistry and life science. These student lab manuals have everything your students need to fully engage in the activities, and you may find it convenient to supply a copy to each student to eliminate long spells at the photocopier. These time-saving books will make it easier for your students to get started with their investigations.

Student Lab Manual for Argument-Driven Inquiry in Chemistry

© 2016; ISBN: 978-1-68140-013-6; 266 pages

Stock #: PB349X2S	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB349X2S	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE349X2S	Members: \$19.15	Non-members: \$23.94

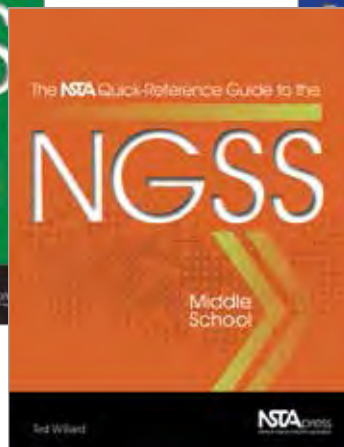
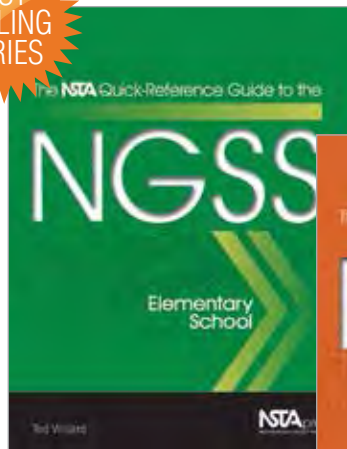
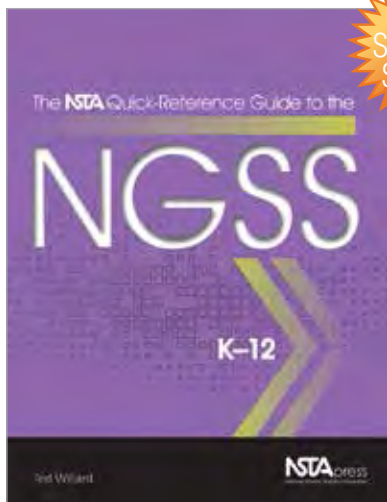
Student Lab Manual for Argument-Driven Inquiry in Life Science

© 2016; ISBN: 978-1-68140-015-0; 189 pages

Stock #: PB349X3S	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB349X3S	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE349X3S	Members: \$19.15	Non-members: \$23.94

Bundled sets of 10 also available!

Stock #: PK349X2S10 (Chemistry)	Members: \$143.64	Non-Members: \$179.55
Stock #: PK349X3S10 (Life Science)	Members: \$143.64	Non-Members: \$179.55



Science Books & Films/AAAS
Best of 2015!

The NSTA Quick-Reference Guides to the NGSS

K-12, Elementary School, Middle School, and High School

Edited by Ted Willard

NSTA PRESS, GRADES K-12

The guides are available in grade-specific versions for elementary, middle, and high school, plus a version for K-12. Each book provides the appropriate performance expectations; disciplinary core ideas; practices; crosscutting concepts; connections to engineering, technology, and applications of science; and connections to nature of science. The guides are designed to be used with the NGSS.

© 2015; 978-1-941316-10-8; 160 pages (K-12)

Stock #: PB354X	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB354X	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE354X	Members: \$19.15	Non-members: \$23.94

© 2015; ISBN: 978-1-941316-11-5; 110 pages (Elementary School)

Stock #: PB354X1	Members: \$13.56	Non-members: \$16.95
E-book #: PKEB354X1	Members: \$10.17	Non-members: \$12.71
Book/E-book Set #: PKE354X1	Members: \$16.27	Non-members: \$20.34

© 2015; 978-1-941316-12-2; 105 pages (Middle School)

Stock #: PB354X2	Members: \$13.56	Non-members: \$16.95
E-book #: PKEB354X2	Members: \$10.17	Non-members: \$12.71
Book/E-book Set #: PKE354X2	Members: \$16.27	Non-members: \$20.34

© 2015; 978-1-941316-13-9; 110 pages (High School)

Stock #: PB354X3	Members: \$13.56	Non-members: \$16.95
E-book #: PKEB354X3	Members: \$10.17	Non-members: \$12.71
Book/E-book Set #: PKE354X3	Members: \$16.27	Non-members: \$20.34

NGSS for All Students

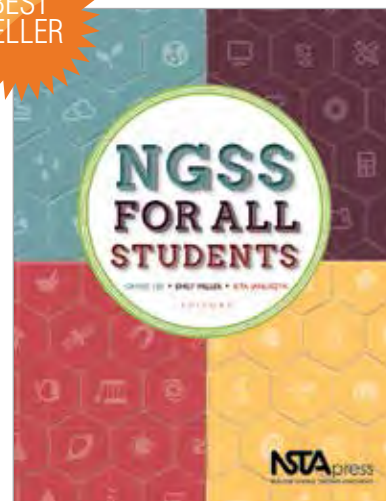
Okhee Lee, Emily Miller, and Rita Januszyk, editors

NSTA PRESS, GRADES K-12

NGSS for All Students shows you how to teach diverse students and align your lessons with the *Next Generation Science Standards (NGSS)*. The emphasis is on *show*. At the core of the book are case studies that vividly illustrate research- and standards-based classroom strategies to engage seven diverse demographic groups: economically disadvantaged students, students from major racial and ethnic groups, students with disabilities, English language learners, girls, students in alternative education, and gifted and talented students. The case studies span all grade levels and science disciplines.

© 2015; ISBN: 978-1-938946-29-5; 210 pages

Stock #: PB400X	Members: \$28.76	Non-members: \$35.95
E-book #: PKEB400X	Members: \$21.57	Non-members: \$26.96
Book/E-book Set #: PKE400X	Members: \$34.51	Non-members: \$43.14



AAP REVERSE AWARDS
PRE-K-12 LEARNING
2016 FINALIST

Next Generation Science Standards (NGSS)

Next Generation Science Standards

For States, by States

NGSS Lead States

National Academies Press, **GRADES K-12**

Not since the release of *A Framework for K-12 Science Education* has a document held such promise and significance for science education as do the *Next Generation Science Standards (NGSS)*. Science—and therefore science education—is central to the lives of all Americans. Never before has our world been so complex and science knowledge so critical to making sense of it all. When tracking current events, choosing and using technology, or making informed decisions about health care, science understanding is key. Science is also at the heart of the country's ability to innovate, lead, and create the jobs of the future. All students—whether they become chefs, doctors, or researchers—must have a solid science education.

The NGSS have been packaged as a two-volume set. The first volume includes the standards themselves—with spiral binding—and the second contains the appendices.

© 2013; ISBN: 978-0-309-27227-8; 400 pages (Vol. 1), 200 pages (Vol. 2)

Stock #: OP907X

Members: \$44.96

Non-members: \$49.95



The NSTA Reader's Guide to the Next Generation Science Standards

Harold Pratt

NSTA PRESS, **GRADES K-12**

The NGSS aim to better prepare U.S. students for the rigors of career and college-level scientific study by stressing the importance and integration of three dimensions: science and engineering practices, crosscutting concepts, and disciplinary core ideas. They will provide for a more integrated and cohesive approach to science instruction, leading to a more scientifically literate citizenry. The NGSS also mark a change in how we think about science instruction. The adoption of these new standards and their incorporation into instruction will require a significant amount of support. This easy-to-use *Reader's Guide* offers teachers, principals, and district and state administrators—anyone with a vested interest in improving the quality of science education—the tools they need to fully absorb the new standards and begin to implement them effectively.

© 2013; ISBN: 978-1-938946-06-6; 42 pages

Stock #: PB340X

Members: \$12.76

Non-members: \$15.95

E-book #: PKEB340X

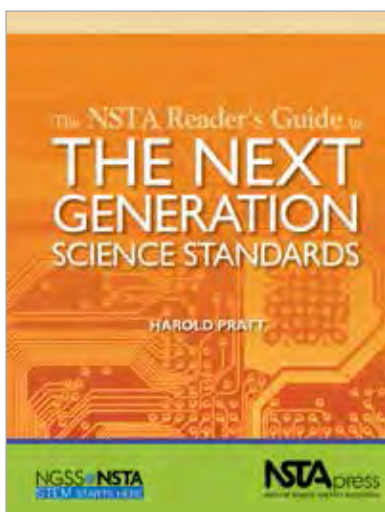
Members: \$9.57

Non-members: \$11.96

Book/E-book Set #: PKE340X

Members: \$15.31

Non-members: \$19.14



Science Books & Films/AAAS
Best of 2014!

Buy the NGSS and The NSTA Reader's Guide and save!

Stock #: PK340X2

Members: \$54.83

Non-members: \$62.61

The NGSS Resource Value Pack + Bag

This pack consists of the following titles:

- *Next Generation Science Standards* and *The NSTA Reader's Guide to the Next Generation Science Standards*
- *A Framework for K-12 Science Education* and *The NSTA Reader's Guide to A Framework for K-12 Science Education*
- *NGSS for All Students*
- *The NSTA Quick-Reference Guide to the NGSS, K-12*

The set comes in an NSTA nylon briefcase with handles and a shoulder strap.

Stock #: PKNGSSX6

Members: \$147.39

Non-members: \$173.57



A Framework for K–12 Science Education

Practices, Crosscutting Concepts, and Core Ideas

National Research Council

National Academies Press, **GRADES K–12**

Science, engineering, and technology permeate nearly every facet of modern life and hold the key to meeting many of humanity's most pressing challenges. *A Framework for K–12 Science Education* outlines an approach that will capture the interest of teachers and students and better prepare future generations. Written for science teachers, standards developers, curriculum designers, assessment developers, teacher educators, state and district science administrators, and informal educators, the *Framework* is the first step toward a research-grounded basis for improving science teaching and learning.

Intended to be used with the *Next Generation Science Standards*, *A Framework for K–12 Science Education* enables a deeper and more thorough understanding of the new standards. The *Framework* describes a broad set of expectations for students in science and engineering. These expectations have informed the development of the *Next Generation Science Standards* and fundamental revisions to curriculum, instruction, assessment, and professional development for educators.

© 2012; ISBN: 978-0-309-21742-2; 320 pages

Stock #: OP901X

Members: \$35.96

Non-members: \$39.95

The NSTA Reader's Guide to A Framework for K–12 Science Education, Second Edition

Practices, Crosscutting Concepts, and Core Ideas

Harold Pratt, with Rodger W. Bybee, Richard A. Duschl, Joseph Krajcik, and more

NSTA PRESS, GRADES K–COLLEGE

This handy *Reader's Guide* unpacks the three key dimensions of *A Framework for K–12 Science Education*—scientific and engineering practices, crosscutting concepts, and core ideas in each specific discipline—allowing teachers, administrators, curriculum developers, university professors, and others to more easily grasp how the *Next Generation Science Standards (NGSS)* differ from the old standards. Harold Pratt, a career science educator who was deeply involved in the development of the *National Science Education Standards (NSES)*, offers the following information for each chapter of the *Framework*:

- An overview, with a brief synopsis of key ideas
- An analysis of what is similar to and different from the *NSES*
- A suggested action to help readers understand and start preparing for the NGSS

This new edition also includes 10 essays by key leaders in science education, each explaining the *Framework* further. Rodger Bybee discusses scientific and engineering practices; Cary Sneider, engineering and technology core ideas; Richard Duschl, crosscutting concepts; and Joe Krajcik, engaging students in scientific practices. Six additional essays are also included to help you better grasp the new *Framework*.

© 2013; ISBN: 978-1-938946-19-6; 160 pages

Stock #: PB326E2

Members: \$16.76

Non-members: \$20.95

E-book #: PKEB326E2

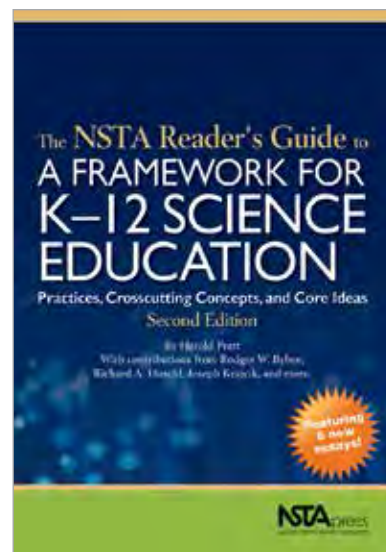
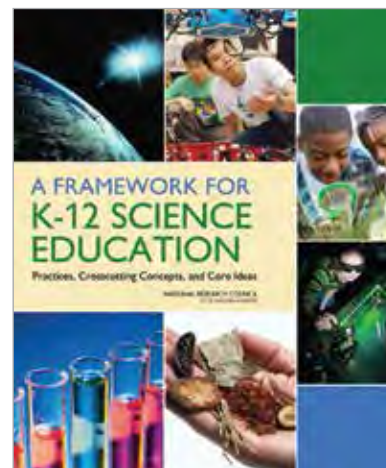
Members: \$12.57

Non-members: \$15.71

Book/E-book Set #: PKE326E2

Members: \$20.11

Non-members: \$25.14



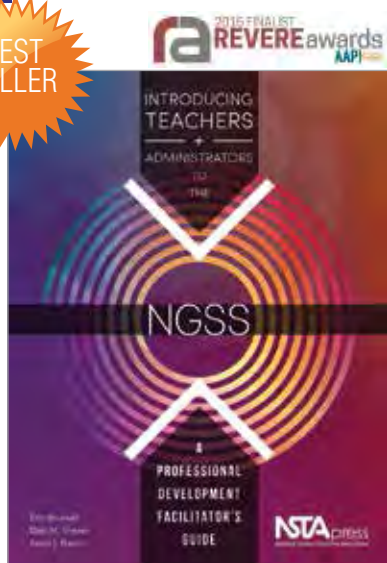
Buy the *Framework* and *The NSTA Reader's Guide* and save!

Stock #: PK326E2X2

Members: \$50.08

Non-members: \$57.86

Next Generation Science Standards (NGSS)



Science Books & Films/AAAS
Best of 2014!

Introducing Teachers and Administrators to the NGSS

A Professional Development Facilitator's Guide

Eric Brunsell, Deb M. Kneser, and Kevin J. Niemi

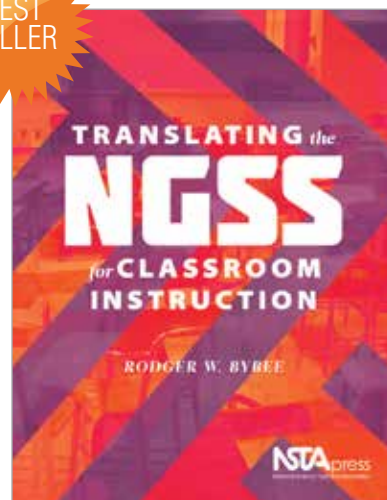
NSTA PRESS, GRADES K-12

Teachers and administrators often feel overwhelmed by putting standards into practice while coping with other changes in education. This rich resource will help educators head off “initiative fatigue.” The book’s 24 activities introduce educators to the NGSS terms, structure, and conceptual shifts; explore the practices and crosscutting concepts; help teachers work within the standards to support students challenged by traditional teaching; develop science roadmaps, essential questions, and assessments; and more.

Introducing Teachers and Administrators to the NGSS—a natural companion to *Translating the NGSS for Classroom Instruction*—is ideal for science specialists, curriculum coordinators, instructional coaches, and others who provide professional development.

© 2014; ISBN: 978-1-938946-18-9; 248 pages

Stock #: PB350X	Members: \$29.56	Non-members: \$36.95
E-book #: PKEB350X	Members: \$22.17	Non-members: \$27.71
Book/E-book Set #: PKE350X	Members: \$35.47	Non-members: \$44.34



Translating the NGSS for Classroom Instruction

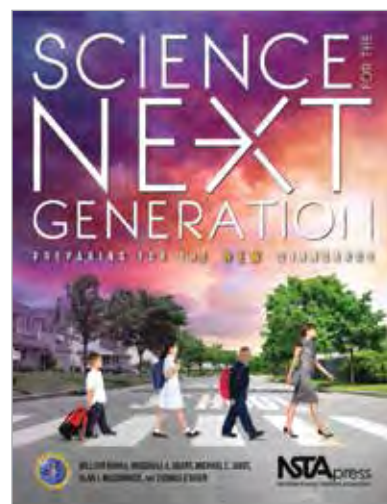
Rodger W. Bybee

NSTA PRESS, GRADES K-12

Translating the NGSS for Classroom Instruction provides essential guidance to everyone from teachers to school administrators to district and state science coordinators. Practical and timely, this book includes an introduction to *Next Generation Science Standards (NGSS)*; examples of the standards translated to classroom instruction at the elementary, middle, and high school levels; and background, directions, and activities to help adapt current units of instruction to align with the standards. Rodger Bybee notes that the success of the standards depends greatly on teachers’ ability to give students opportunities to learn the science and engineering practices, crosscutting concepts, and disciplinary core ideas of the NGSS.

© 2013; ISBN: 978-1-938946-01-1; 194 pages

Stock #: PB341X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB341X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE341X	Members: \$33.55	Non-members: \$41.94



Science Books & Films/AAAS
Best of 2014!

Science for the Next Generation

Preparing for the New Standards

William Banko, Marshall L. Grant, Michael E. Jabot, Alan J. McCormack, and Thomas O'Brien, Editors

NSTA PRESS, GRADES K-5

This multifaceted book will help elementary educators get ready for a new generation of students, the *Framework for K-12 Science Education*, and the *Next Generation Science Standards (NGSS)*. The book offers detailed explanations of what the standards mean to you, the latest related research on how children learn and classroom practices that support learning, and the importance of connecting literacy to science lessons. To realign your instructional and assessment techniques, you get seven sample 5E Instructional Model-based mini-units that demonstrate how to use the NGSS in units on physical, life, and Earth and space science. Written by experts in science and education as well as experienced teachers, *Science for the Next Generation* offers essential background, content, and practices for implementing the new standards.

© 2013; ISBN: 978-1-936959-26-6; 390 pages

Stock #: PB336X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB336X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE336X	Members: \$33.55	Non-members: \$41.94

Developing Assessments for the Next Generation Science Standards

National Research Council

National Academies Press, **GRADES K-12**

Assessments, understood as tools for tracking what and how well students have learned, play a critical role in the classroom. *Developing Assessments for the Next Generation Science Standards* develops an approach to science assessment to meet the vision of science education for the future as it has been elaborated in *A Framework for K-12 Science Education* and the *Next Generation Science Standards (NGSS)*. These documents are fairly new, and the changes they call for are recently under way, but the new assessments will be needed as soon as states and districts begin the process of implementing the NGSS and changing their approach to science.

© 2014; ISBN: 978-0-309289-51-1; 288 pages

Stock #: OP915X

Members: \$44.96

Non-members: \$49.95



Guide to Implementing the Next Generation Science Standards

National Research Council

National Research Council, **GRADES K-12**

A Framework for K-12 Science Education and the *Next Generation Science Standards (NGSS)* describe a new vision for science learning and teaching that is catalyzing improvements in classrooms across the United States. *Guide to Implementing the Next Generation Science Standards* helps district and school leaders and teachers charged with developing a plan and implementing the NGSS as they change curriculum, instruction, professional learning, policies, and assessment to address the standards. This report lays out recommendations for action around key issues, cautions about potential pitfalls, and identifies overarching principles that should guide the planning and implementation process. *Guide to Implementing the Next Generation Science Standards* will be a valuable resource for states, districts, and schools charged with planning and implementing changes to help them achieve the goal of teaching science for the 21st century.

© 2015; ISBN: 978-0-309-30512-9; 114 pages

Stock #: OP936X

Members: \$34.16

Non-members: \$37.95



A Teacher's Guide to Using the Next Generation Science Standards With Gifted and Advanced Learners

Cheryll M. Adams, Alicia Cotabish, and Debbie Dailey

National Association for Gifted Children, **GRADES K-12**

A Teacher's Guide to Using the Next Generation Science Standards With Gifted and Advanced Learners provides teachers and administrators with practical ways to build comprehensive, coherent, and rigorous science learning experiences for students from kindergarten through high school. The book gives examples for physical science; Earth and space science; life science; and engineering, technology, and applications of science. Each experience indicates the performance expectation addressed and includes a sequence of activities, implementation examples, connections to the *Common Core State Standards* for math and English language arts, and formative assessments. Chapters on specific instructional and management strategies, assessment, and professional development suggestions for implementing the standards within the classroom will be helpful for both teachers and administrators.

© 2015; ISBN: 978-1-61821-283-2; 184 pages

Stock #: OP937X

Members: \$22.46

Non-members: \$24.95





Science Books & Films/AAAS
Best of 2015!

Doing Good Science in Middle School, Expanded 2nd Edition

A Practical STEM Guide

Olaf Jorgenson, Rick Vanosdall, Vicki Massey, and Jackie Cleveland

NSTA PRESS, GRADES 6–8

Whether you're a new teacher or just need new ideas, *Doing Good Science* is a comprehensive, must-have resource. The book covers big-picture concepts such as understanding the middle school learner and exploring the nature of science. It provides 10 new and updated sample activities to develop engaging lessons integrating STEM and 5E instruction with the NGSS and *Common Core State Standards*. The authors give specific guidance on classroom management, safety, and how to use collaborative table groups and science lab notebooks. Although it's been thoroughly revised to address feedback and changing times, the new *Doing Good Science in Middle School* shares the same goal as the popular first edition: to prove that good science is compatible with noisy, bustling, insatiably curious middle schoolers.

© 2014; ISBN: 978-1-938946-07-3; 245 pages

Stock #: PB183E2	Members: \$29.56	Non-members: \$36.95
E-book #: PKEB183E2	Members: \$22.17	Non-members: \$27.71
Book/E-book Set #: PKE183E2	Members: \$35.47	Non-members: \$44.34



Science Books & Films/AAAS
Best of 2014!

The Case for STEM Education

Challenges and Opportunities

Rodger W. Bybee

NSTA PRESS, GRADES K–12

If you're concerned with science, technology, engineering, and mathematics (STEM) initiatives, this book will help you understand and implement STEM action plans. The book outlines the challenges facing STEM education, drawing lessons from the Sputnik moment of the 1950s and 1960s and contrasting contemporary STEM with earlier reforms. The author explores appropriate roles for the federal government, states, districts, and individual schools. Finally, the book offers several ideas for developing action plans for implementing STEM instruction. *The Case for STEM Education* is a must-read for national and state policy makers, state-level educators, college and university faculty who educate STEM teachers, administrators who make decisions about district and school programs, and teachers who represent STEM disciplines.

© 2013; ISBN: 978-1-936959-25-9; 116 pages

Stock #: PB337X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB337X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE337X	Members: \$28.75	Non-members: \$35.94

STEM Student Research Handbook

Darci J. Harland

NSTA PRESS, GRADES 9–12

This valuable handbook for high school science teachers and their students outlines the various stages of large-scale science research projects. To help coach students through their projects, 12 chapters cover all aspects of development—generating ideas, creating research design, writing proposals, conducting experiments, interpreting data, and presenting results. Also included are student handouts such as “Practicing Writing Hypotheses” and “Background Research Questions,” as well as an appendix with checklists, observations sheets, and sample assessment rubrics.

© 2011; ISBN: 978-1-936137-24-4; 218 pages

Stock #: PB297X	Members: \$24.76	Non-members: \$30.95
E-book #: PKEB297X	Members: \$18.57	Non-members: \$23.21
Book/E-book Set #: PKE297X	Members: \$29.71	Non-members: \$37.14



Science Books & Films/AAAS
Best of 2012!

BEST
SELLER

Everyday Engineering

Putting the E in STEM Teaching and Learning

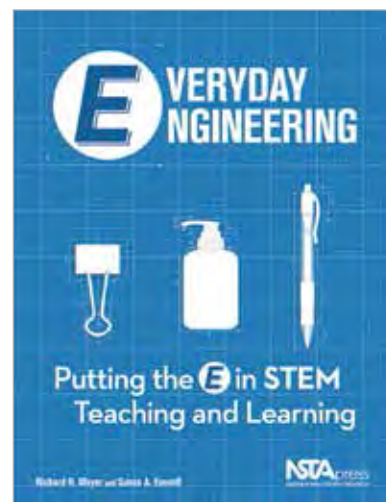
Richard H. Moyer and Susan A. Everett

An **NSTA PRESS** Journals Collection, **GRADES 6–8**

What makes a Bic click? Why do squirt guns squirt? Using this compilation of columns from NSTA's award-winning journal *Science Scope*, engage middle-schoolers in hands-on investigations of the engineering behind everyday objects. Each of the 14 activities includes a clear explanation of the science and history behind an item's development, a materials list, student data sheets, and safety suggestions. The collection is useful to classroom teachers, youth-group leaders, engineers conducting outreach activities, after-school and summer enrichment program staffs, and parents. Expose young people to the marvels of design, and you may just spark a lifelong interest in engineering.

© 2012; ISBN: 978-1-936137-19-0; 118 pages

Stock #: PB306X	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB306X	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE306X	Members: \$19.15	Non-members: \$23.94



Integrating Engineering and Science in Your Classroom

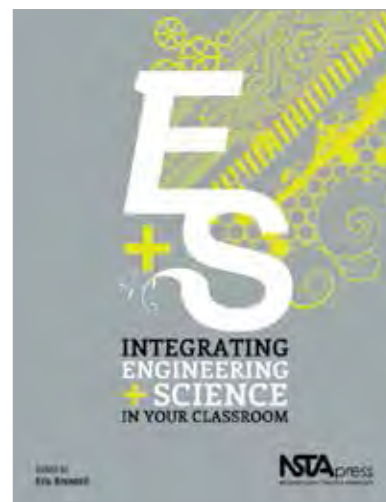
Eric Brunzell, Editor

An **NSTA PRESS** Journals Collection, **GRADES K–12**

What do light sabers, potatoes, prosthetic arms, and eggs racing at breakneck speeds have in common? All are included in the design challenges in this book, which will reinforce important skills and science content while illustrating a wide range of STEM skills and opportunities. To help you blend authentic, meaningful activities into your teaching, this volume's 30 chapters come from *Science and Children*, *Science Scope*, and *The Science Teacher*, NSTA's journals for elementary through high school. The activities apply to life and environmental science, Earth science, and physical science and work well in traditional classrooms and after-school programs. As editor Eric Brunzell promises, "By exposing students to authentic engineering activities, you can help them uncover the profession that makes the world work."

© 2012; ISBN: 978-1-936959-41-9; 219 pages

Stock #: PB332X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB332X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE332X	Members: \$28.75	Non-members: \$35.94



Science Books & Films/AAAS
Best of 2013!

Engineering Essentials for STEM Instruction

How Do I Infuse Real-World Problem Solving Into Science, Technology, and Math?

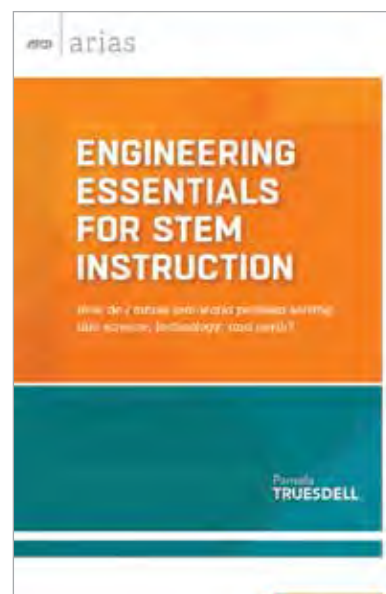
Pamela Truesdell

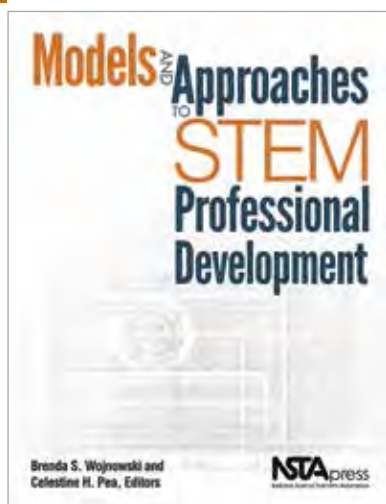
ASCD and **NSTA PRESS**, **GRADES K–12**

Learn how to create effective engineering-infused lessons that break down the barriers between science, math, and technology instruction. Pamela Truesdell highlights engineering's connection to 21st-century skills and college and career readiness, addresses the *Next Generation Science Standards*, and walks you through each step of the simple but powerful engineering design process. This is the essential tool of professional engineers and the key to engaging students in hands-on, collaborative projects that ask them to apply content-area knowledge to find solutions to real-world problems. A sample lesson, links to additional resources, and guidelines for assessment ensure you will have the essentials you need to kick off your students' exploration of engineering.

© 2014; ISBN: 978-1-416619-05-5; 56 pages

Stock #: PA017X	Members: \$10.36	Non-members: \$12.95
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Models and Approaches to STEM Professional Development

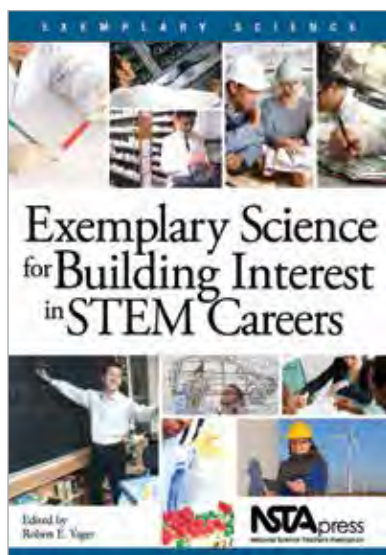
Brenda S. Wojnowski and Celestine H. Pea, Editors

NSTA PRESS, GRADES K-12

The arrival of the *Next Generation Science Standards (NGSS)* makes this the perfect time to kick-start your professional development program, and this ambitious book is the perfect source of inspiration to help you do so. Its emphasis is on developing highly effective teachers who can improve student achievement in STEM education; its focus is on research-based models underlying systemic reform efforts across the nation. The book opens with views on the history of professional development in science education, the challenges of the new standards, and related research on learning. The core highlights critical aspects of successful programs and provides insights into the needed professional development surrounding the *NGSS*. *Models and Approaches* is a vital resource for state, district, and school leaders as well as classroom teachers.

© 2013; ISBN: 978-1-936137-35-0; 222 pages

Stock #: PB322X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB322X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE322X	Members: \$33.55	Non-members: \$41.94



Exemplary Science for Building Interest in STEM Careers

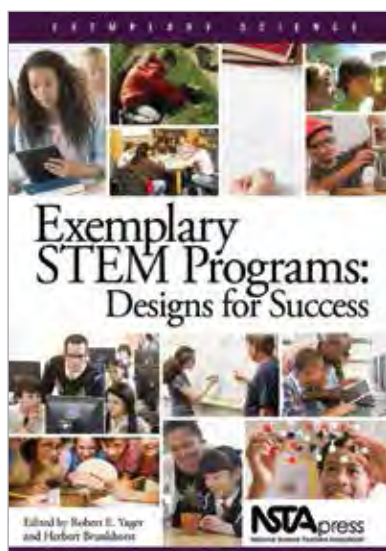
Robert E. Yager, Editor

NSTA PRESS, GRADES K-COLLEGE

This book provides examples and inspiration to spark students' interests in careers in science, technology, engineering, and mathematics. Some chapters showcase career-awareness programs. Others talk about pipeline-building projects that start as early as elementary school or that expose older students to careers via externships or service learning. The ideas and experiences described will encourage you to change the future of your students—and possibly even the world.

© 2012; ISBN: 978-1-936959-35-8; 290 pages

Stock #: PB192X8	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB192X8	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE192X8	Members: \$28.75	Non-members: \$35.94



Exemplary STEM Programs

Designs for Success

Robert E. Yager and Herbert Brunkhorst, Editors

NSTA PRESS, GRADES K-12

This book offers the inside story on 24 creative STEM programs. The chapter authors make it clear that STEM education can work for all age levels and in a variety of settings, from traditional classrooms to informal education programs. The featured programs connect with the *Next Generation Science Standards* and demonstrate successful student learning. The chapter authors provide the information and inspiration you need to develop exemplary STEM programs, whether you're a teacher seeking fresh ideas, an administrator wanting insight into other schools' initiatives, or a science coordinator charged with making your district's professional development more timely and effective.

© 2014; ISBN: 978-1-941316-03-0; 460 pages

Stock #: PB192X10	Members: \$25.56	Non-members: \$31.95
E-book #: PKEB192X10	Members: \$19.17	Non-members: \$23.96
Book/E-book Set #: PKE192X10	Members: \$30.67	Non-members: \$38.34

Extreme Science

From Nano to Galactic

M. Gail Jones, Amy R. Taylor, and Michael R. Falvo

NSTA PRESS, GRADES 6–12

From microbes to mammoths, dinosaurs to diatoms, and molecules to stars, the very large and the very small fascinate students. Capitalize on that interest and help your middle and high school biology, Earth science, chemistry, physics, and mathematics students develop quantitative evaluation with *Extreme Science*. The book's investigations build on research that documents how people learn scale and uses the 5E Model to teach types of scale, measurement, powers of ten, estimation and models of scale, surface-area-to-volume relationships, limits to size, and behaviors at different scales. A knowledge of scaling will serve as a solid framework for students to anchor further learning and allow them to make cross-curricular connections between seemingly disparate topics.

© 2009; ISBN: 978-1-933531-30-4; 356 pages

Stock #: PB237X	Members: \$10.36	Non-members: \$12.95
E-book #: PKEB237X	Members: \$7.77	Non-members: \$9.71
Book/E-book Set #: PKE237X	Members: \$12.43	Non-members: \$15.54



STEM

STEM Lesson Essentials

Integrating Science, Technology, Engineering, and Mathematics

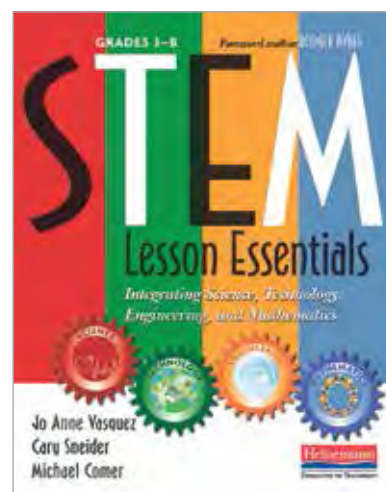
Jo Anne Vasquez, Cary Snieder, and Michael Comer

Heinemann, GRADES 3–8

STEM Lesson Essentials provides all the tools and strategies you'll need to design integrated, interdisciplinary STEM lessons and units that are relevant and exciting to your students. The book shows teachers how to begin the STEM integration journey with five guiding principles for effective STEM instruction, classroom examples of what these principles look like in action, sample activities that put all four STEM fields into practice, and lesson planning templates for STEM units. Explicit connections are made among the STEM practices, including the *Common Core State Standards* for mathematics and *A Framework for K–12 Science Education*, helping you easily recognize ways in which STEM lessons can engage students in multiple standards at the same time.

© 2013; ISBN: 978-0-325-04358-6; 196 pages

Stock #: OP909X	Members: \$26.96	Non-members: \$29.95
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Mathematics Formative Assessment

75 Practical Strategies for Linking Assessment, Instruction, and Learning

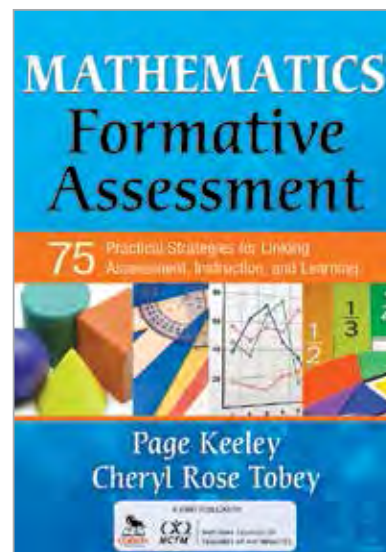
Page Keeley and Cheryl Rose Tobey

Corwin Press and NCTM, GRADES K–12

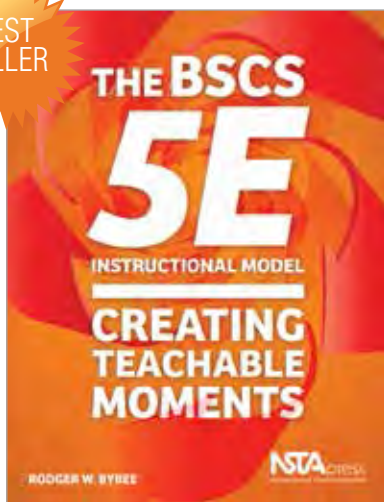
Award-winning author Page Keeley and mathematics expert Cheryl Rose Tobey apply the format of Keeley's bestselling *Science Formative Assessment* (p. 39) to mathematics. They provide 75 formative assessment strategies and show teachers how to use them to inform instructional planning and better meet the needs of all students. Research shows that formative assessment has the power to significantly improve learning, and its many benefits include stimulation of metacognitive thinking, increased student engagement, insights into student thinking, and development of a discourse community. The authors provide guidance with each technique, including usage tips and caveats, implementation examples, and suggested modifications.

© 2011; ISBN: 978-1-4129-6812-6; 256 pages

Stock #: OP905X	Members: \$33.26	Non-members: \$36.95
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BEST
SELLER



The BSCS 5E Instructional Model

Creating Teachable Moments

Rodger W. Bybee

NSTA PRESS, GRADES K-12

Imagine how satisfying it would be to have more teachable moments—times when students get so caught up that they can't wait to learn more. *The BSCS 5E Instructional Model* can help you structure and sequence lessons so you experience more teachable moments in your classroom. Created in the 1980s by a team led by author Rodger Bybee, the popular BSCS 5E Instructional Model includes five phases: *engage, explore, explain, elaborate, and evaluate*. In addition to offering a clear explanation of how to use the model, Bybee elaborates on how the model connects to the NGSS, STEM education, 21st-century skills, and real classrooms. Rooted in research but using a conversational style, *The BSCS 5E Instructional Model* will help you enjoy more of those exciting teachable moments.

© 2015; ISBN: 978-1-941316-00-9; 126 pages

Stock #: PB356X

Members: \$27.96

Non-members: \$34.95

E-book #: PKEB356X

Members: \$20.97

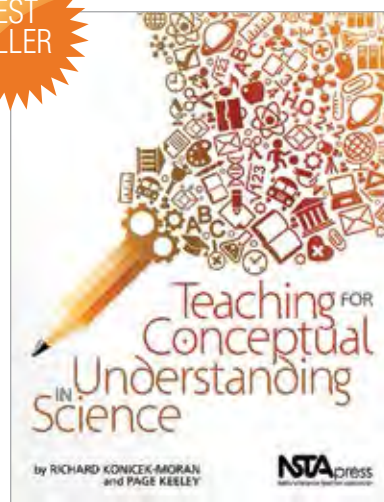
Non-members: \$26.21

Book/E-book Set #: PKE356X

Members: \$33.55

Non-members: \$41.94

BEST
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Teaching for Conceptual Understanding in Science

Richard Konicek-Moran and Page Keeley

NSTA PRESS, GRADES K-12

This book is a delight to read and a rich source of ideas to make you reconsider science teaching from a new perspective. What else would you expect from two of NSTA's best-selling authors? *Teaching for Conceptual Understanding in Science* is a collaboration between Richard Konicek-Moran, author of the *Everyday Science Mysteries* series, and Page Keeley, author of the *Uncovering Student Ideas in Science* series. The book is a fascinating combination of thinking about teaching and learning for understanding; field-tested strategies that support conceptual understanding in all grades; and personal vignettes with lessons for all educators. You may read each chapter in sequence or preview topics from the vignettes. This book will make you think about what the authors call "the major goal of science education in the 21st century": to help students understand science at the conceptual level so they can see its connections to other fields, other concepts, and their lives.

© 2015; ISBN: 978-1-938946-10-3; 248 pages

Stock #: PB359X

Members: \$28.76

Non-members: \$35.95

E-book #: PKEB359X

Members: \$21.57

Non-members: \$26.96

Book/E-book Set #: PKE359X

Members: \$34.51

Non-members: \$43.14

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PRE-K-12
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The Power of Questioning

Guiding Student Investigations

Julie V. McGough and Lisa M. Nyberg

NSTA PRESS, GRADES K-6

This pedagogical picture book is a powerful tool in a small package. The authors of *The Power of Questioning* invite you to nurture the potential for learning that grows out of children's irrepresible urge to ask questions. The book's foundation is a three-part instructional model, *Powerful Practices*, grounded in questioning, investigation, and assessment. The authors provide vivid pictures as well as links to special videos and audio recordings so you can actually hear teachers and students engage in questioning. Then, you can implement new strategies in your classroom, regardless of grade or topic. The book illustrates how to integrate the NGSS, the *Common Core State Standards*, and STEM education practices. *The Power of Questioning* is a lively source of strategies for the elementary classroom—the perfect place to take advantage of natural curiosity.

© 2015; ISBN: 978-1-938946-28-8; 64 pages

Stock #: PB358X

Members: \$15.96

Non-members: \$19.95

E-book #: PKEB358X

Members: \$11.97

Non-members: \$14.96

Book/E-book Set #: PKE358X

Members: \$19.15

Non-members: \$23.94

**AAP REVERE
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PRE-K-12
LEARNING
2016 FINALIST

EVERYDAY SCIENCE MYSTERIES

STORIES FOR INQUIRY-BASED SCIENCE TEACHING

Richard Konicek-Moran
NSTA PRESS, GRADES K-8

Everybody loves a mystery—and thousands of teachers love how the *Everyday Science Mysteries* series gets students engaged in real experimentation about science content. Author Richard Konicek-Moran uses each mystery to present opportunities for students to ask questions, form hypotheses, test ideas, and come up with explanations. Konicek-Moran engages students by grounding the stories in familiar experiences that provide a foundation for discussion. When asked how he comes up with his science mysteries, Dick says: “They are most often derived from my everyday experiences. Science is all around us, and as we go through our daily routines, it often eludes us because—as the old saying goes—“The hidden we seek, the obvious we ignore.””

This popular series is available in two different sets to fit teachers’ needs: The original four-volume series covers an array of topics in each book, and a three-volume set comprises topic-specific books for physical, life, and Earth and space science. Lessons include science concepts to explore, grade-appropriate strategies for using the stories, and explanations of how the lessons align with standards.

Book	Members: \$20.76	Non-members: \$25.95
E-book	Members: \$15.57	Non-members: \$19.46
Book/E-book Set	Members: \$24.91	Non-members: \$31.14

Yet More Everyday Science Mysteries

© 2011; ISBN: 978-1-936137-11-4; 198 pages
Stock #: PB220X4 E-book #: PKEB220X4 Book/E-book Set #: PKE220X4

Even More Everyday Science Mysteries

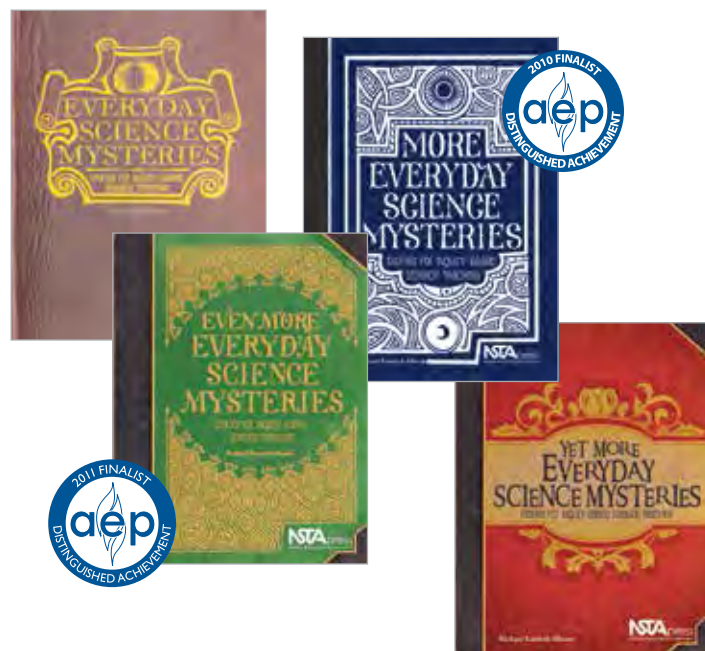
© 2010; ISBN: 978-1-935155-13-3; 186 pages
Stock #: PB220X3 E-book #: PKEB220X3 Book/E-book Set #: PKE220X3

More Everyday Science Mysteries

© 2009; ISBN: 978-1-933531-44-1; 207 pages
Stock #: PB220X2 E-book #: PKEB220X2 Book/E-book Set #: PKE220X2

Everyday Science Mysteries

© 2008; ISBN: 978-1-933531-21-2; 188 pages
Stock #: PB220X E-book #: PKEB220X Book/E-book Set #: PKE220X



Buy all four original volumes and save!

Stock #: **PK220X4**

Members: **\$78.89** Non-members: **\$98.61**

Everyday Physical Science Mysteries

© 2013; ISBN: 978-1-936959-29-7; 261 pages
Stock #: PB333X1 E-book #: PKEB333X1 Book/E-book Set #: PKE333X1

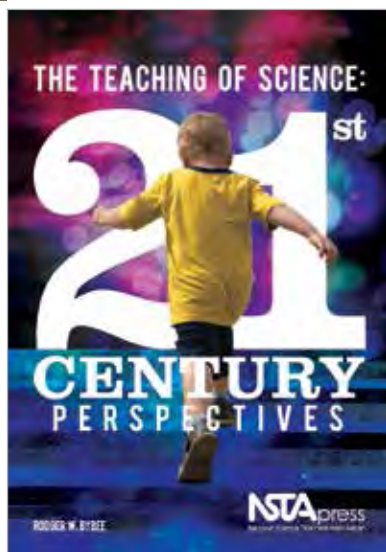
Everyday Life Science Mysteries

© 2013; ISBN: 978-1-936959-30-3; 254 pages
Stock #: PB333X2 E-book #: PKEB333X2 Book/E-book Set #: PKE333X2

Everyday Earth and Space Science Mysteries

© 2013; ISBN: 978-1-936959-28-0; 232 pages
Stock #: PB333X3 E-book #: PKEB333X3 Book/E-book Set #: PKE333X3





The Teaching of Science

21st-Century Perspectives

Rodger W. Bybee

NSTA PRESS, GRADES K-12

Renowned educator Rodger Bybee provides the perfect opportunity for science teachers, administrators, curriculum developers, and science teacher educators to reflect on the basic issues in science education today and in the coming years. He encourages readers to think about *why* they teach science and *what* is important to teach. Answering these questions, he says, enables readers to figure out *how* to teach science. He addresses topics such as the contemporary need for reform, curriculum and instruction, teaching science as inquiry, and developing 21st-century skills. With his experience as a leader in science education for the past 30 years, Bybee provides his unique perspective to help the science education community better understand the challenges of the 21st century.

© 2010; ISBN: 978-1-936137-05-3; 202 pages

Stock #: PB283X

Members: \$22.36

Non-members: \$27.95

E-book #: PKEB283X

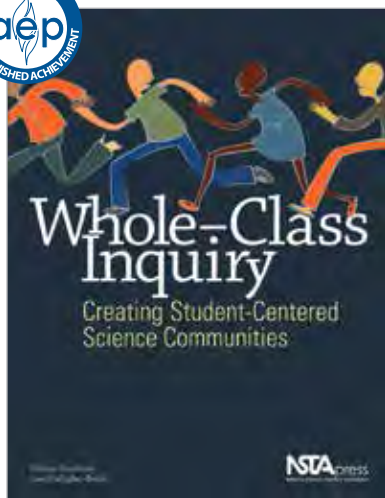
Members: \$16.77

Non-members: \$20.96

Book/E-book Set #: PKE283X

Members: \$26.83

Non-members: \$33.54



Whole-Class Inquiry

Creating Student-Centered Science Communities

Dennis Smithenry and Joan Gallagher-Bolos

NSTA PRESS, GRADES 9-12

This book is the perfect vehicle for implementing and assessing the concept of whole-class inquiry in any science classroom. It provides first-hand descriptions of Joan Gallagher-Bolos's aims, observations, and impressions, as well as analysis, as she moves her chemistry class toward the ultimate goal of whole-class inquiry. Dennis Smithenry's commentary and research affirm the value of the process. Two DVDs provide a visual record of the subtle details and methods involved in the transformation as the class completes three projects. This is a must-have package for preservice and inservice middle and high school science teachers interested in exploring, learning to use, and implementing whole-class inquiry in their own classrooms.

© 2009; ISBN: 978-1-933531-34-2; 202 pages + two DVDs

Stock #: PB235X

Members: \$19.96

Non-members: \$24.95

E-book #: PKEB235X

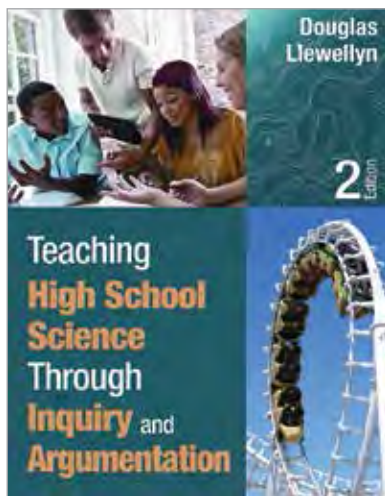
Members: \$14.97

Non-members: \$18.71

Book/E-book Set #: PKE235X

Members: \$23.95

Non-members: \$29.94



Teaching High School Science Through Inquiry and Argumentation, 2nd Edition

Douglas Llewellyn

Corwin Press, GRADES 9-12

Devoted to grades 9-12, this new edition of Douglas Llewellyn's ground-breaking text aligns the four key elements of effective science education: scientific literacy, inquiry, argumentation, and the nature of science. Fully revised, the second edition features exceptional coverage of scientific argumentation, enhanced chapters on assessment and classroom management, questioning techniques that promote the most learning, activities that emphasize making claims and citing evidence, new examples of inquiry investigations, new approaches to traditional labs, and case studies and vignettes that model exemplary science instruction. There's no better resource to help you elevate your teaching to meet the call for instructional reform.

© 2013; ISBN: 978-14522-4445-7; 280 pages

Stock #: OP906X

Members: \$37.76

Non-members: \$41.95

Science Stories You Can Count On

51 Case Studies With Quantitative Reasoning in Biology

Clyde Freeman Herreid, Nancy A. Schiller, and Ky F. Herreid

NSTA PRESS, COLLEGE

How do we know whether energy drinks really boost energy, cell phones cause cancer, or Super Bugs are going to render antibiotics ineffective? *Science Stories You Can Count On* weaves real-life questions like these into 51 case studies. The case studies are designed to engage students in 12 areas of general biology, from the scientific method to microbiology to plant forms and functions. But that's not all: The cases also promote data literacy by making graphical analysis and statistical and logical reasoning important parts of each story.

Pioneers in the use of case studies, the authors have published two other NSTA Press books: *Start With a Story* (2007) and *Science Stories: Using Case Studies to Teach Critical Thinking* (see below). You can count on this volume to help you become a marvel of classroom multitasking.

© 2014; ISBN: 978-1-938946-05-9; 550 pages

Stock #: PB353X	Members: \$34.36	Non-members: \$42.95
E-book #: PKEB353X	Members: \$25.77	Non-members: \$32.21
Book/E-book Set #: PKE353X	Members: \$41.23	Non-members: \$51.54



Science Books & Films/AAAS
Best of 2015!

Science Stories

Using Case Studies to Teach Critical Thinking

Clyde Freeman Herreid, Nancy A. Schiller, and Ky F. Herreid

NSTA PRESS, COLLEGE

Clyde Freeman Herreid, Nancy Schiller, and Ky Herreid have wisely surmised that stories put “flesh and bones” on scientific methods and provide an inside look at scientists in action. The case studies lay the groundwork for understanding science and developing critical-thinking skills. These case studies are organized into categories of history, experimental design, unusual claims, science and society, the media, and ethics. Each of the 34 case exercises comprises the “story,” often whimsically named (e.g., “Poison Ivy: A Rash Decision”) and sometimes written in dialogue; classroom discussion questions; homework assignments; web-based teacher notes; answer keys; and even PowerPoint presentations that supplement the lessons.

© 2012; ISBN: 978-1-936137-25-1; 394 pages

Stock #: PB301X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB301X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE301X	Members: \$33.55	Non-members: \$41.94



Lecture-Free Teaching

A Learning Partnership Between Science Educators and Their Students

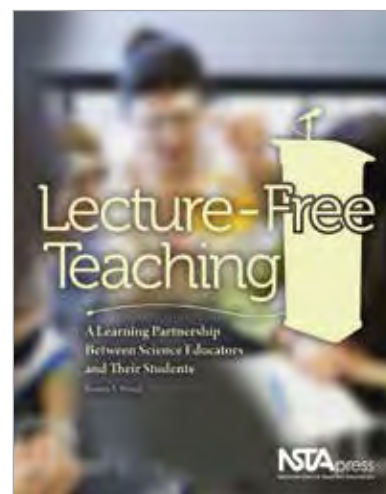
Bonnie S. Wood

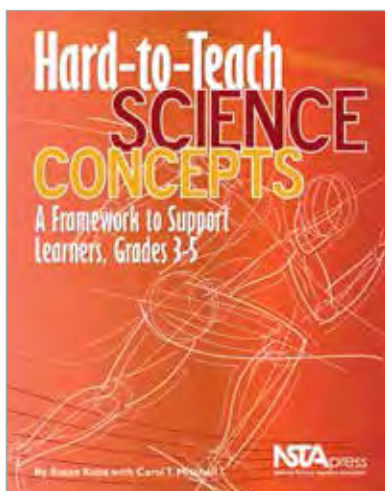
NSTA PRESS, COLLEGE

College professors who rely on teaching by routine lecturing may want to consider building “learning partnerships” as a new method for reaching students. This book outlines the implementation and benefits of such partnerships, such as dispelling students’ pre-conceptions. Author Bonnie Wood favors inquiry-based exercises, case studies, formative assessments, and other hands-on activities that support the concept of learning teams. *Lecture-Free Teaching* provides a compelling case for using valuable classroom time to engage students in activities that build comprehension.

© 2009; ISBN: 978-1-933531-32-8; 259 pages

Stock #: PB246X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB246X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE246X	Members: \$28.75	Non-members: \$35.94





Hard-to-Teach Science Concepts

A Framework to Support Learners, Grades 3–5

Susan Koba and Carol T. Mitchell

NSTA PRESS, GRADES 3–5

Susan Koba and Carol Mitchell introduce teachers to their conceptual framework as a model for successful instruction of hard-to-teach science concepts. Four actions make up the methodology: (1) Engage students about their preconceptions and address and dispel misconceptions, (2) target lessons to be learned, (3) determine appropriate strategies, and (4) use standards-based teaching that builds on student understandings. With the framework comes an explanation on how to use it, a variety of tools, and examples of application, specifically on four hard-to-teach foundational concepts: the flow of energy and matter in ecosystems, force and motion, matter and its transformation, and Earth's shape. This book is ideal for science educators of elementary and middle school preservice teachers and teachers looking for a new instructional approach to hard-to-teach science concepts.

© 2011; ISBN: 978-1-936137-15-2; 256 pages

Stock #: PB238X2

Members: \$27.16

Non-members: \$33.95

E-book #: PKEB238X2

Members: \$20.37

Non-members: \$25.46

Book/E-book Set #: PKE238X2

Members: \$32.59

Non-members: \$40.74



Designing Effective Science Instruction

What Works in Science Classrooms

Anne Tweed

NSTA PRESS and McREL, GRADES K–12

Science teachers in every grade band, from novices to veterans, and administrators who coach or develop curriculum will profit from this research-based text with practical steps to improve science instruction. Author Anne Tweed recommends a C-U-E framework—Content, Understanding, and Environment—demonstrating to educators that all three elements must be part of lesson design and implementation to successfully achieve high-quality science instruction. Providing a review of the research related to each element, strategies to be incorporated into the lesson, and tools that assess teachers' practices, *Designing Effective Science Instruction* is a must-have resource.

© 2009; ISBN: 978-1-935155-06-5; 222 pages

Stock #: PB243X

Members: \$27.96

Non-members: \$34.95

E-book #: PKEB243X

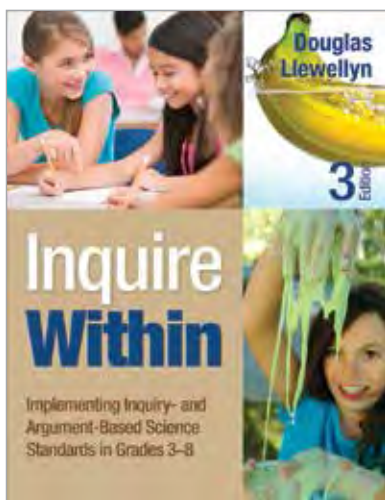
Members: \$20.97

Non-members: \$26.21

Book/E-book Set #: PKE243X

Members: \$33.55

Non-members: \$41.94



Inquire Within, 3rd Edition

Implementing Inquiry- and Argument-Based Science Standards in Grades 3–8

Douglas Llewellyn

Corwin Press, GRADES 3–8

This edition of *Inquire Within* will help you engage students in activities and explorations that draw on students' big questions and then build students' capacity to defend their claims. Always striking a balance between the *why* and the *how*, this third edition models what the new reform efforts looks like in day-to-day practice. New features cover how to teach argumentation, a key standards requirement and 21st-century career skill; adapt existing science curricula for inquiry-based learning to meet today's standards; improve students' language arts, analytic, and communication skills through inquiry-based instruction; and more.

© 2014; ISBN: 978-1-4522-9928-0; 392 pages

Stock #: OP776E3

Members: \$30.56

Non-members: \$33.95

The New Science Teacher's Handbook

What You Didn't Learn From Student Teaching

Sarah Reeves Young and Mike Roberts

NSTA PRESS, GRADES K-12

This book aims to help you become the teacher you've always aspired to be. It covers the day-to-day stumbling blocks your methods classes didn't, including organizing the jungle of science materials your predecessor left, making grading manageable, and coping with cranky parents. Each of the 12 chapters is set up to make the book fun to read. You get a story of a struggle from the authors' own classroom experience; the moral of the story; steps for success to overcome the struggle; what success looks like for you and your classes when you follow the steps; and resources for further reading. *The New Science Teacher's Handbook* will get you classroom ready while it reassures you that you're not alone as you begin your journey toward becoming a master teacher.

© 2013; ISBN: 978-1-936959-49-5; 163 pages

Stock #: PB342X	Members: \$25.56	Non-members: \$31.95
E-book #: PKEB342X	Members: \$19.77	Non-members: \$24.71
Book/E-book Set #: PKE342X	Members: \$31.63	Non-members: \$39.54



Science Books & Films/AAAS
Best of 2014!

Rise and Shine

A Practical Guide for the Beginning Science Teacher

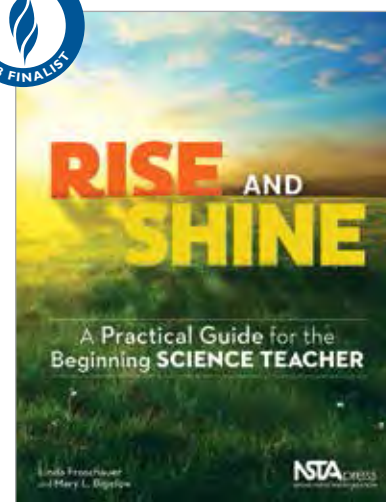
Linda Froschauer and Mary L. Bigelow

NSTA PRESS, GRADES K-12

Rise and Shine provides a friendly support system for new science teachers in their first days, months, and years in the classroom. The easy-to-read book offers plenty of widely applicable techniques for managing the classroom, maintaining discipline, and working with parents. It also covers important science-specific topics such as laboratory setup, classroom safety, and initiating inquiry. Sprinkled throughout is candid advice from seasoned science teachers who offer both useful strategies and warm reassurances. *Rise and Shine* is designed to help preservice teachers, those in the first few years of teaching (regardless of grade level), and those who may be entering a new situation within the teaching field. A wealth of supporting resources and online extensions can be found at www.nsta.org/riseandshine.

© 2012; ISBN: 978-1-936137-29-9; 188 pages

Stock #: PB308X	Members: \$26.36	Non-members: \$32.95
E-book #: PKEB308X	Members: \$19.77	Non-members: \$24.71
Book/E-book Set #: PKE308X	Members: \$31.63	Non-members: \$39.54



Science Books & Films/AAAS
Best of 2013!

Becoming a Responsive Science Teacher

Focusing on Student Thinking in Secondary Science

Daniel Levin, David Hammer, Andrew Elby, and Janet Coffey

NSTA PRESS, GRADES 9-12

This book may transform your approach to classroom teaching. It shows how you can shift from the traditional method—presenting material that you hope students will hear and retain—to what the authors call “responsive listening”—attuning your teaching to the substance of students’ reactions to your lessons and helping them learn how to learn science. The book offers a philosophical framework illustrated by five real-life case studies (four of which are captured on videos available for free on the NSTA website). The case studies help you practice recognizing, interpreting, and responding to the vital nuances of your own students’ conceptions (regardless of how accurate they may be) in real time. This book is ideal for teacher educators as well as current and preservice teachers.

© 2013; ISBN: 978-1-936959-05-1; 214 pages

Stock #: PB323X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB323X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE323X	Members: \$28.75	Non-members: \$35.94



Science Books & Films/AAAS
Best of 2013!

New Teacher Welcome Pack: Elementary School (K–4)

New teachers will love this assortment of bestselling books that offer an incomparable survival resource when you need a quick and fresh lesson or activity for the classroom. These hand-picked selections are *The New Science Teacher's Handbook*; *More Picture-Perfect Science Lessons*; *Teaching Science Through Trade Books*; *Uncovering Student Ideas in Science, Volume 1*; *Activities Linking Science With Math, K–4*; and *Everyday Science Mysteries*. The set is delivered in an NSTA nylon briefcase with handles and a shoulder strap.

Stock #: MA055XT4

Members: \$123.96

Non-members: \$154.95



New Teacher Welcome Pack: Middle School (5–8)

This pack of bestselling books for middle school teachers consists of six great selections: *The New Science Teacher's Handbook*; *Help! I'm Teaching Middle School Science*; *Help! I'm Teaching Middle School Science*; *Tried and True*; *Uncovering Student Ideas in Science, Volume 2*; *Doing Good Science in Middle School, Expanded 2nd Edition*; and *More Brain-Powered Science*. The set is delivered in an NSTA nylon briefcase with handles and a shoulder strap.

Stock #: MA055X58

Members: \$123.96

Non-members: \$154.95

New Teacher Welcome Pack: High School (9–12)

This set for high school teachers includes an assortment of best-sellers: *The New Science Teacher's Handbook*; *STEM Student Research Handbook*; *Brain-Powered Science*; *How to ... Write to Learn Science*; *Becoming a Responsive Science Teacher*; and *Scientific Argumentation in Biology*. The set is delivered in an NSTA nylon briefcase with handles and a shoulder strap.

Stock #: MA055XHS

Members: \$123.96

Non-members: \$154.95



Models-Based Science Teaching

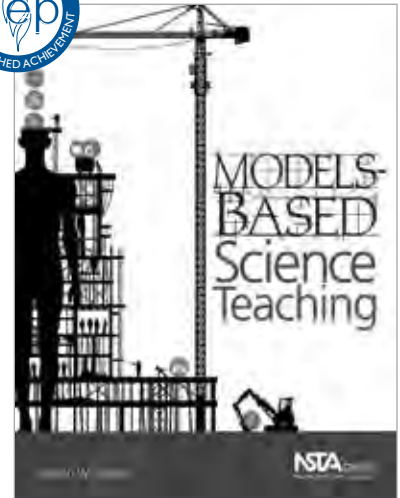
Steven W. Gilbert

NSTA PRESS, GRADES K-12

Methods professors, their students, and inservice teachers who are interested in expanding their thinking about the nature of science and how it can be better incorporated into school science instruction should read *Models-Based Science Teaching*. Author Steven Gilbert asserts that all learning involves the construction of mental models, defined as “simplified representations of what we think we know.” Gilbert’s comprehensive coverage of the topic begins with a philosophical context for modeling and continues with key chapters such as “Building Models in the Classroom.” Discussion questions and recommended resources and readings come with each chapter. His suggested teaching approach supports the central tenet of the nature of science—nothing is absolutely knowable or provable—and he demonstrates how this approach will provide more meaning to the processes and products of inquiry and discovery, research, and experimentation.

© 2011; ISBN: 978-1-936137-23-7; 204 pages

Stock #: PB299X	Members: \$21.56	Non-members: \$26.95
E-book #: PKEB299X	Members: \$16.17	Non-members: \$20.21
Book/E-book Set #: PKE299X	Members: \$25.87	Non-members: \$32.34



Association Media & Publishing 2012 Gold EXCEL Award Winner!

Questions, Claims, and Evidence

The Important Place of Argument in Children’s Science Writing

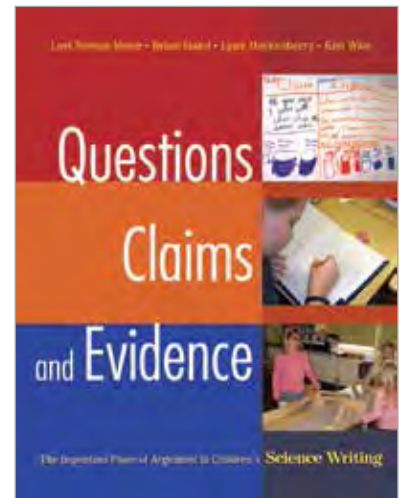
Lori Norton-Meier, Brian Hand, Lynn Hockenberry, and Kim Wise

Heinemann Books and **NSTA PRESS, GRADES K-6**

Questions, Claims, and Evidence presents a new approach to science teaching that engages students fully by linking literacy and inquiry. It transforms experiments from direction-following and note-taking into chances to pose and answer questions that interest students.

© 2008; ISBN: 978-0-325-01727-3; 192 pages

Stock #: PA010X	Members: \$24.76	Non-members: \$30.95
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What’s Your Evidence?

Engaging K-5 Students in Constructing Explanations in Science

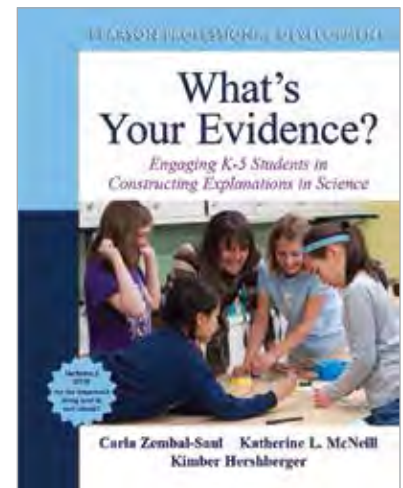
Carla L. Zembal-Saul, Katherine L. McNeill, and Kimber Hershberger

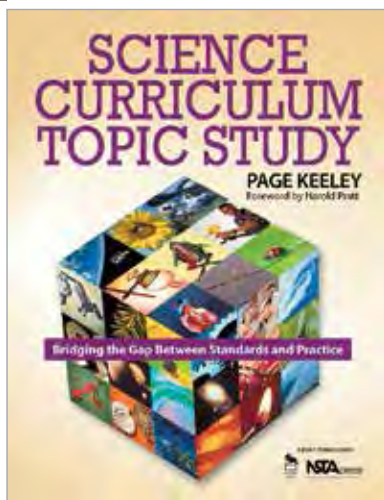
Pearson, **GRADES K-5**

This resource presents teachers with an effective framework that breaks down the complex practice of scientific explanation into four components—claim, evidence, reasoning, and rebuttal. The model provides teachers with a concrete roadmap for enhancing students’ conceptual understanding and fostering their ability to think and communicate more scientifically. The book includes step-by-step directions for presenting the framework to students; creating learning tasks that connect scientific explanation writing to lessons; providing curricular scaffolds (that fade over time) to support students in their writing; critiquing explanations and providing students with feedback; developing scientific explanation assessment tasks; and using the information from assessment tasks to inform instruction.

© 2013; ISBN: 978-0-13-211726-5; 192 pages

Stock #: OP908X	Members: \$34.16	Non-members: \$37.95
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Science Curriculum Topic Study

Bridging the Gap Between Standards and Practice

Page Keeley

Corwin Press and **NSTA PRESS, GRADES K-12**

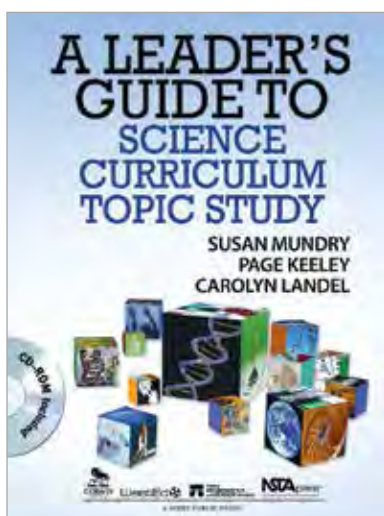
Make the connection between science standards, teacher practice, and improved student achievement. This book offers a systematic professional development strategy that brings together science standards and research with curriculum, instruction, and assessment. It contains 147 Curriculum Topic Study (CTS) guides in 11 categories representing the major domains of science. Worksheets guide the application of the CTS process to curriculum, instruction, and assessment; a quick-reference guide to the major standards and research documents is also included.

© 2005; ISBN: 978-1-41290-892-4; 294 pages

Stock #: PA004X

Members: \$35.96

Non-members: \$44.95



A Leader's Guide to Science Curriculum Topic Study

Susan Mundry, Page Keeley, and Carolyn Landel

Corwin Press and **NSTA PRESS, GRADES K-COLLEGE**

Administrators will benefit from this powerful professional development approach to improving teacher understanding of K-12 science teaching and learning. The Curriculum Topic Study (CTS) process helps teachers improve their practice by linking standards and research to content, curriculum, instruction, and assessment. Keyed to the core book *Science Curriculum Topic Study*, this volume provides everything needed to facilitate the CTS process, including multiple designs for half-day and full-day workshops; information on professional learning communities; and one-on-one instructional coaching, facilitation, group processing, and materials management strategies. A CD with handouts, PowerPoint slides, and templates is also included.

© 2009; 978-1-41297-817-0; 320 pages

Stock #: PA012X

Members: \$38.36

Non-members: \$47.95



Learning and Teaching Scientific Inquiry

Research and Applications

James Jadrich and Crystal Bruxvoort

NSTA PRESS, GRADES K-8

This volume will embolden science teacher educators, curriculum specialists, professional development facilitators, and K-8 teachers to teach inquiry with greater confidence and deeper understanding. The authors assert that scientific inquiry is best taught using models in science rather than focusing on the activities of scientists. Additional emphasis is placed on cognitive science research, providing invaluable insight into how students learn and how instructors should teach. Educators will find extensive examples, practice problems, activities, and lesson ideas that apply research findings to practical scenarios for the classroom.

© 2011; ISBN: 978-1-936137-22-0; 236 pages

Stock #: PB300X

Members: \$23.96

Non-members: \$29.95

E-book #: PKEB300X

Members: \$17.97

Non-members: \$22.46

Book/E-book Set #: PKE300X

Members: \$28.75

Non-members: \$35.94

Front-Page Science

Engaging Teens in Science Literacy

Wendy Saul, Angela Kohnen, Alan Newman, and Laura Pearce

NSTA PRESS, GRADES 9–12

What can you teach students now that will help them make sense of their world 15 years after graduation? That's the question *Front-Page Science* helps you answer. With a learn-by-doing methodology borrowed from science journalists, the book offers an engaging way to launch a lifetime of science literacy. First, you help students formulate questions related to current issues in science and technology. Then they do research and interview experts, write and fact-check news stories, and submit them for review to an editor. Supporting the book is a free website (teach4scijourn.org) that provides downloadable lesson plans and teacher suggestions. *Front-Page Science* gives students the investigative skills they need to think critically today about fast-changing scientific issues and to succeed tomorrow as citizens of the world.

© 2012; ISBN: 978-1-936137-14-5; 197 pages

Stock #: PB302X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB302X	Members: \$15.57	Non-members: \$19.46
Book/E-book Set #: PKE302X	Members: \$24.91	Non-members: \$31.14



Science Books & Films/AAAS
Best of 2013!

Teaching Strategies

Teaching Science With Interactive Notebooks

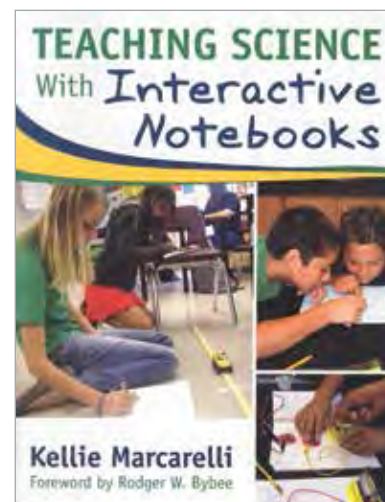
Kellie Marcarelli

Corwin Press, GRADES K–12

Science educators who want to add interactive notebooking to their classroom strategies will love this volume from an enthusiastic practitioner who provides a step-by-step process for putting the strategy in place. The author covers execution, time management, grading, and use of the 5E Instructional Model. Packed with examples from actual student notebooks, this guide explains the features that make interactive notebooks more effective tools than conventional notebooks. Teachers find this popular methodology helps students record and analyze observations, reflect on their learning, and self-assess their work. Outcomes also noted are development of students' communication skills, cognitive organization skills, and sense of responsibility for their own learning.

© 2010; ISBN: 978-1-4129-5403-7; 192 pages

Stock #: OP893X	Members: \$32.36	Non-members: \$35.95
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Science Notebooks, Second Edition

Writing About Inquiry

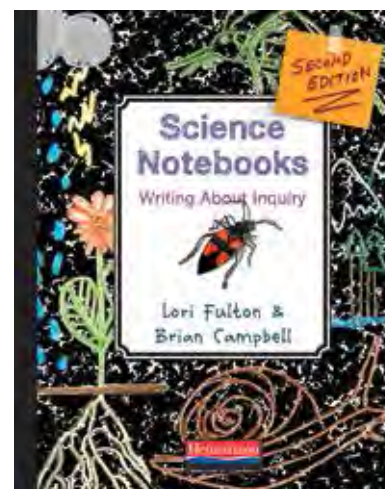
Lori Fulton and Brian Campbell

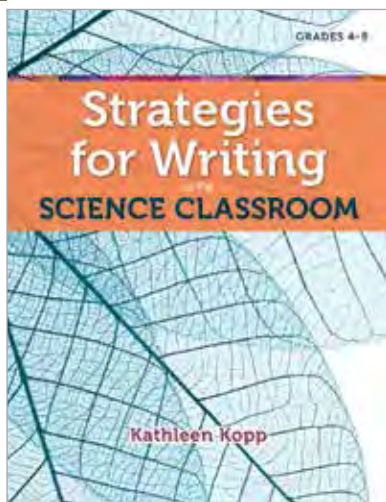
Heinemann, GRADES K–5

The first edition of *Science Notebooks* inspired teachers to use science notebooks to help students reveal and develop their thinking about scientific concepts, engage in the work of scientists and engineers, and exercise language skills. The authors make this edition even more valuable by showing how notebooks support implementation of the *Next Generation Science Standards* and the *Common Core State Standards* for English language arts. The authors have added new material to every chapter, including strategies to scaffold science notebook instruction; discussion of how science notebooks help students develop explanations and arguments based on evidence; approaches for collecting and analyzing notebooks for formative assessment; and new interviews with scientists and engineers that spotlight the use of notebooks in their work. Student samples and classroom vignettes from a variety of settings illustrate the transformative effect of notebooks on students' scientific thinking as well as their literacy skills.

© 2014; ISBN: 978-0-325-05659-3; 136 pages

Stock #: OP914X	Members: \$19.76	Non-members: \$21.95
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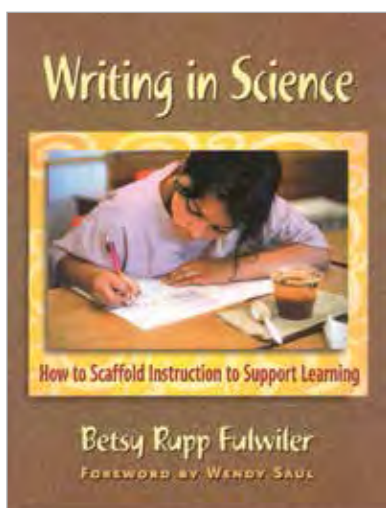


Strategies for Writing in the Science Classroom

Kathleen Kopp
Maupin House, **GRADES 4–8**

Writing is a valuable learning tool that can help students learn and understand science content. Teaching it, however, can be challenging for content-area teachers now under pressure from the *Common Core State Standards'* refocused attention on reading and writing. With step-by-step directions, rubrics, student examples, templates, technology tips, and ideas for differentiation, Kathleen Kopp goes beyond journals and reports to show how science teachers can use writing to develop critical-thinking skills, improve understanding of scientific concepts, and assess students' progress. Her writing strategies support the *Common Core*, and science teachers can easily incorporate these strategies into any unit of study.

© 2013; ISBN: 978-1-937412-01-2; 92 pages
Stock #: OP913X Members: \$17.96 Non-members: \$19.95

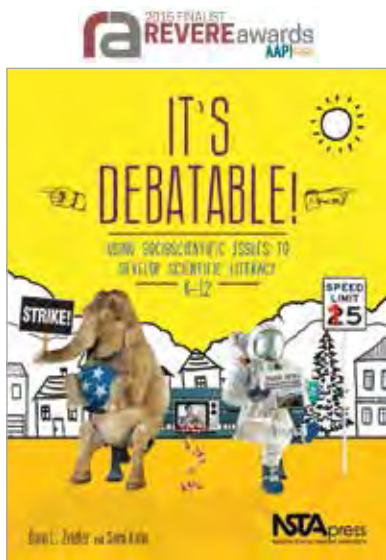


Writing in Science

How to Scaffold Instruction to Support Learning
Betsy Rupp Fulwiler
Heinemann, **GRADES K–5**

In the science classroom, writing is an important vehicle for describing thought processes and the evidence that supports that reasoning. *Writing in Science* provides grades K–5 teachers with proven methods and guidelines for using science notebooks to develop students' conceptual knowledge and expository writing skills. Author Betsy Rupp Fulwiler packs this book with illustrations, entries from science notebooks with annotated remarks about instruction and formative assessment, examples and focus questions, and writing frameworks and special assessment protocols to help analyze notebook entries and provide constructive feedback. Her methods are intended for a diverse group of students, including English language learners. They meet inquiry-based science goals, support writing instruction across content areas, and have been implemented in Seattle Public Schools (among other districts).

© 2007; ISBN: 978-0-325-01070-0; 202 pages
Stock #: OP898X Members: \$27.86 Non-members: \$30.95



It's Debatable!

Using Socioscientific Issues to Develop Scientific Literacy, K–12
Dana L. Zeidler and Sami Kahn
NSTA Press, **GRADES K–12**

Should local governments lower speed limits to reduce traffic fatalities? Should pharmaceutical companies be allowed to advertise prescription drugs directly to consumers? These are the kinds of real-world questions students can explore using the Socioscientific Issues Framework at the core of *It's Debatable!* Practical and content-rich, this book encourages scientific literacy by giving students practice in research, analysis, and argumentation and by confronting just how messy the questions raised by science (and pseudoscience) can be.

It's Debatable! starts by introducing the Socioscientific Issues Framework and how it fits with the NGSS. The book provides seven units targeted to all grade levels. The authors even tell you how to develop your own curriculum. The result will help you give students a context for learning about science in ways that are meaningful and relevant to their lives.

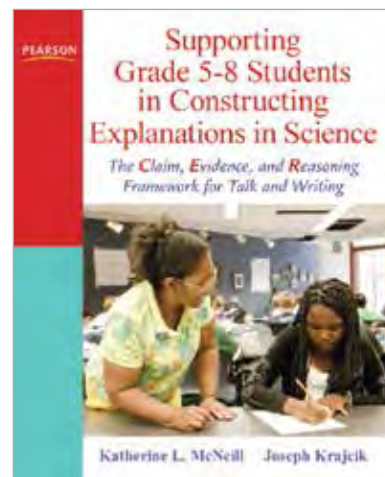
© 2014; ISBN: 978-1-938946-00-4; 304 pages
Stock #: PB347X Members: \$30.36 Non-members: \$37.95
E-book #: PKEB347X Members: \$22.77 Non-members: \$28.46
Book/E-book Set #: PKE347X Members: \$36.43 Non-members: \$45.54

Supporting Grade 5–8 Students in Constructing Explanations in Science

The Claim, Evidence, and Reasoning Framework for Talk and Writing
Katherine L. McNeill and Joseph Krajcik
Pearson, **GRADES 5–8**

Supporting Grade 5–8 Students in Constructing Explanations in Science gives teachers tools to successfully incorporate scientific explanation in their classrooms. This book and DVD set provides an instructional framework that breaks down scientific explanation into four components—claim, evidence, reasoning, and rebuttal—and examples of what this practice looks like when successfully implemented. The chapters guide teachers through presenting the framework, creating learning tasks that connect scientific writing to lessons, providing curricular scaffolds, critiquing explanations and providing feedback, developing assessment tasks, and using the information to inform instruction.

© 2011; ISBN: 978-0-13-7043-45-3; 280 pages, including DVD
Stock #: OP910X Members: \$34.16 Non-members: \$37.95



5 Practices for Orchestrating Productive Task-Based Discussions in Science

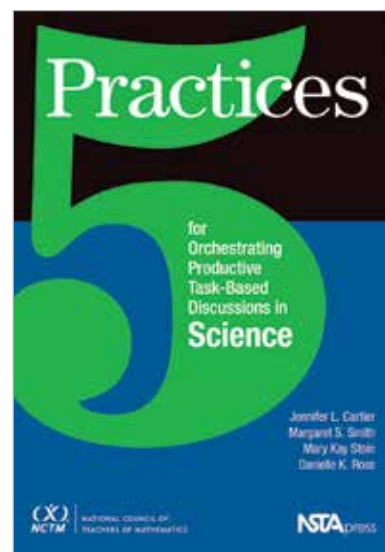
Jennifer L. Cartier, Margaret S. Smith, Mary Kay Stein, and Danielle K. Ross
National Council of Teachers of Mathematics (NCTM) and **NSTA PRESS, GRADES K–12**

Robust classroom discussions are essential for providing students with opportunities to engage in science practices while learning content. The authors show how teachers can plan lessons to encourage students to not only learn content but also use disciplinary practices. This volume outlines the practices teachers need for facilitating discussions:

- Anticipate what strategies students will use to solve a problem.
- Monitor their work as they approach the problem in class.
- Select students whose strategies are worth discussing in class.
- Sequence those students' presentations to maximize their potential to increase learning.
- Connect the strategies and ideas in a way that helps students understand the science learned.

This book gives teachers a road map of things they can do before and during discussions, and the practices have the potential to help teachers orchestrate discussions that are responsive to students and the discipline.

© 2013; ISBN: 978-0-87353-745-2; 130 pages
Stock #: PA016X Members: \$23.96 Non-members: \$29.95

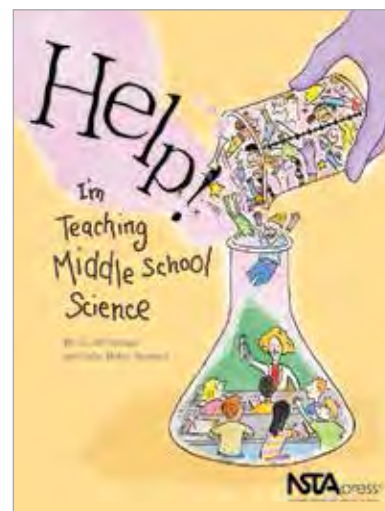


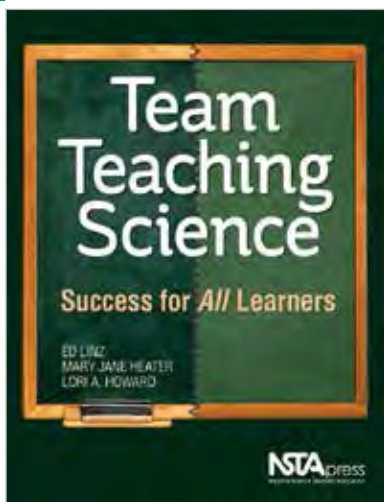
Help! I'm Teaching Middle School Science

C. Jill Swango and Sally Boles Steward
NSTA PRESS, GRADES 6–8

Like a personal survival guide, this nontechnical manual offers how-to advice that teachers can use to teach the way middle schoolers learn best. Topics cover what to do on the first day of school, preparing safe and effective lab lessons, managing the classroom, and working with in-school teams as well as parents. Helpful resources include reproducible field trip permission forms; lab report formats; measurement and safety quizzes; and low-cost recipes for salt crystals, fun putty, and more.

© 2003; ISBN: 978-0-87355-225-7; 133 pages
Stock #: PB170X Members: \$15.96 Non-members: \$19.95
E-book #: PKEB170X Members: \$11.97 Non-members: \$14.96
Book/E-book Set #: PKE170X Members: \$19.15 Non-members: \$23.94





Team Teaching Science

Success for All Learners

Ed Linz, Mary Jane Heater, and Lori A. Howard

NSTA PRESS, GRADES K-12

The authors of *Team Teaching Science* find truth in the old adage “Two heads are better than one.” This guide for developing successful team teaching partnerships that maximize student learning is aimed at preservice and inservice special education teachers, K-12 science teachers, and methods professors in science education programs who want to address special needs issues. Background information on science teaching and team teaching and six chapters on how to team teach specific topics make up the heart of this book. Highlighted are the basic elements of collaboration and co-teaching strategies, as well as lots of practical advice. For those teachers tackling team teaching, this text is a handy resource with lots of answers.

© 2011; ISBN: 978-1-936137-10-7; 162 pages

Stock #: PB294X	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB294X	Members: \$7.17	Non-members: \$8.96
Book/E-book Set #: PKE294X	Members: \$11.47	Non-members: \$14.34



Including Students With Disabilities in Advanced Science Classes

Lori A. Howard and Elizabeth A. Potts

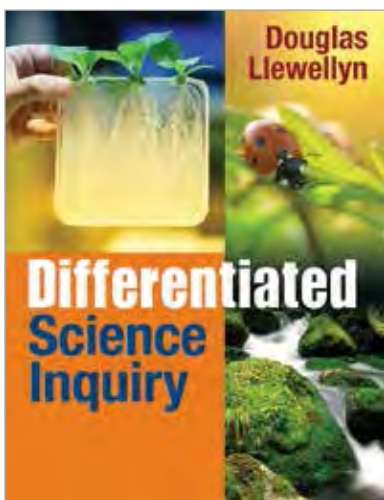
NSTA PRESS, GRADES 9-12

This book offers realistic guidance for helping students with disabilities succeed in advanced science classes. Eight straightforward chapters provide a strong foundation in special education terms and laws; working with the IEP team; classroom considerations regarding behavior, instruction, labs, and assistive technology; and end-of-year testing. This teacher-friendly book is filled with examples and provides practical advice for good instruction so experienced science teachers can help *all* learners.

© 2013; ISBN: 978-1-936959-27-3; 131 pages

Stock #: PB339X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB339X	Members: \$15.57	Non-members: \$19.46
Book/E-book Set #: PKE339X	Members: \$24.91	Non-members: \$31.14

Science Books & Films/AAAS
Best of 2013!



Differentiated Science Inquiry

Douglas Llewellyn

Corwin Press, **GRADES K-12**

Differentiation is an approach that provides instruction alternatives to accommodate students' differing learning styles. This volume by bestselling author Douglas Llewellyn provides new insight and strategies, using this methodology along with science inquiry for creating opportunities for all students to become more engaged. His fresh ideas and practical tools to implement differentiated science inquiry will please teachers and particularly students as they find more motivation and control over meeting their personal learning needs. Using practical lessons across all science disciplines and real-life scenarios, this book offers a strong rationale for teachers to add these differentiated inquiry strategies to their daily instruction.

© 2011; ISBN: 978-1-412975-03-2; 168 pages

Stock #: OP899X	Members: \$30.56	Non-members: \$33.95
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Teaching Science to English Language Learners

Building on Students' Strengths

Ann S. Rosebery and Beth Warren, Editors

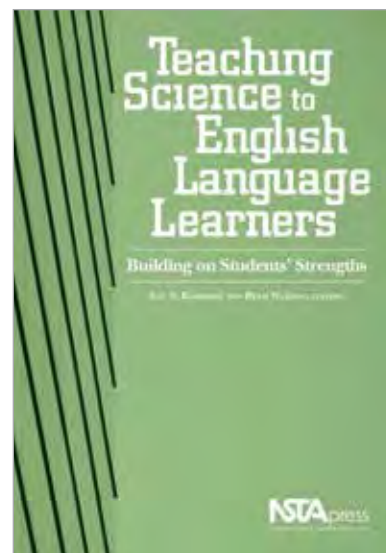
NSTA PRESS, GRADES K-8

Can a student's cultural background support learning in science? Or is concentrating on the specialized vocabulary of science the best way to help English language learners understand science? This book addresses these and other pressing questions you face when working with students whose linguistic and cultural backgrounds are different from your own.

Teaching Science to English Language Learners combines research with classroom vignettes and teachers' perspectives. Chapter authors strive to support your efforts to see diversity as a resource rather than an obstacle. Topics include building on what students know and recognizing students' strengths, teaching vocabulary for learning, and using students' cultural resources.

© 2008; ISBN: 978-1-93353-125-0; 199 pages

Stock #: PB218X	Members: \$23.16	Non-members: \$28.95
E-book #: PKEB218X	Members: \$17.37	Non-members: \$21.71
Book/E-book Set #: PKE218X	Members: \$27.79	Non-members: \$34.74



Science for English Language Learners

K-12 Classroom Strategies

Ann K. Fathman and David T. Crowther, Editors

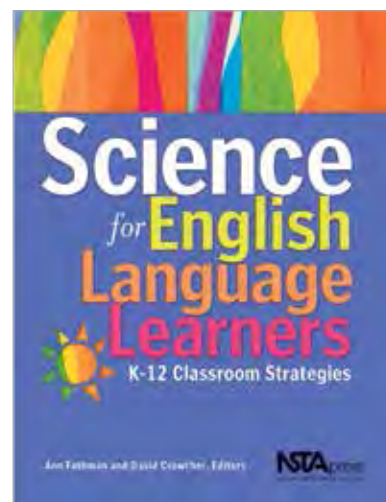
NSTA PRESS, GRADES K-12

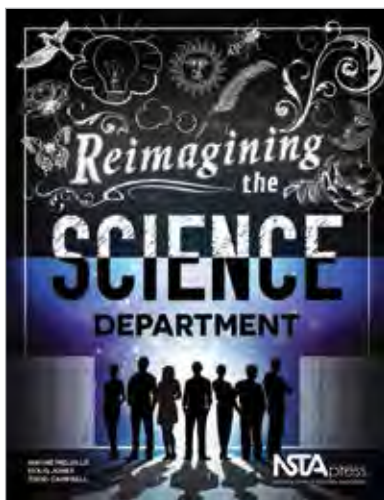
If you work with linguistically and culturally diverse students, you will benefit from the foundation this book provides for teaching both science and language. *Science for English Language Learners* brings you the best practices from the fields of science education and English language teaching, integrating the two.

The book covers principles and practices that science and English teaching share; strategies for planning, teaching, assessing, and extending learning; how to design lessons (with model lessons); and context and research, including an overview of science and English as a second language standards, instructional practices, and ways to integrate science with language and literacy. Each chapter is cowritten by experienced science and language educators who coordinate their approaches to teaching English language learners.

© 2006; ISBN: 978-0-87355-253-0; 252 pages

Stock #: PB194X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB194X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE194X	Members: \$28.75	Non-members: \$35.94





Reimagining the Science Department

Wayne Melville, Doug Jones, and Todd Campbell

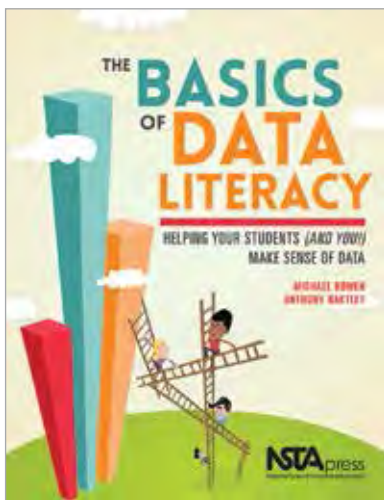
NSTA PRESS, GRADES 6–12

What if you could change the department-level factors that don't support teaching and learning? Explore answers to this fascinating question and many more with *Reimagining the Science Department*. In five thoughtful chapters, the book invites you to reassess past and current practices in science departments as you rethink the future for teachers and students in your own science classrooms. Although the text offers rich historical perspective, you'll come away with sensible strategies—bolstered by practitioner vignettes and related research—that your entire department can put to work right away.

Reimagining the Science Department is a must-read resource for chairs and those who aspire to become chairs, but it's also useful for school administrators and school board members who are committed to developing a department in which the practices of science are taught for the benefit of all students.

© 2015; ISBN: 978-1-938946-32-5; 118 pages

Stock #: PB357X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB357X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE357X	Members: \$28.75	Non-members: \$35.94



The Basics of Data Literacy

Helping Your Students (and You!) Make Sense of Data

Michael Bowen and Anthony Bartley

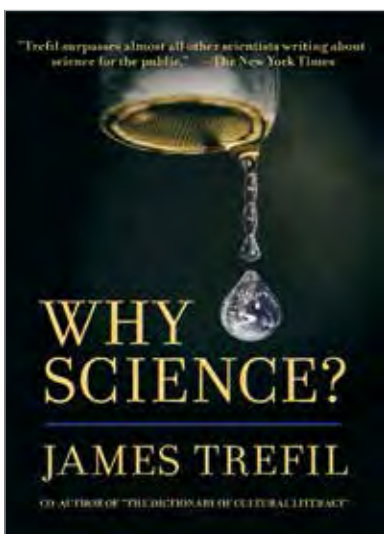
NSTA PRESS, GRADES 6–12

Here's the ideal book for teachers with no statistics background. Written in an informal style with easy-to-grasp examples, *The Basics of Data Literacy* teaches you how to help your students understand, collect, summarize, and analyze statistics inside and outside the classroom. The book's 10 chapters provide an introduction to types of variables and data, ways to structure and interpret data tables, simple statistics, and survey basics. The appendixes include hands-on activities tailored to middle and high school investigations. Because it's so central to many of the ideas in the *Next Generation Science Standards*, the ability to work with data is an important science skill for both you and your students. This accessible book will help you get over feeling intimidated as your students learn to evaluate messy data.

© 2014; ISBN: 978-1-938946-03-5; 171 pages

Stock #: PB343X	Members: \$26.36	Non-members: \$32.95
E-book #: PKEB343X	Members: \$19.77	Non-members: \$24.71
Book/E-book Set #: PKE343X	Members: \$31.63	Non-members: \$39.54

Science Books & Films/AAAS
Best of 2014!



Why Science?

James Trefil

Teachers College Press and **NSTA PRESS, GRADES K–COLLEGE**

The concepts that bestselling author James Trefil explores range from understanding natural selection to grasping Maxwell's equations governing electricity and magnetism, from recognizing that the surface of the Earth is constantly in flux to knowing the basic concepts of physics and chemistry.

© 2008; ISBN: 978-0-8077-4830-5; 209 pages

Stock #: PA009X	Members: \$18.36	Non-members: \$22.95
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What Are They Thinking?

Promoting Elementary Learning Through Formative Assessment

Page Keeley

An **NSTA PRESS** Journals Collection, **GRADES PREK-5**

What Are They Thinking? is a compendium of 30 “Formative Assessment Probes” columns from NSTA’s elementary journal *Science and Children*. Each column provides a sample probe—a set of interesting questions that root out commonly held (and often mistaken) ideas. Students’ answers will help you figure out how to guide them from where they are conceptually to where they need to be.

Teacher notes tell you how to encourage evidence-based discussion and monitor students’ progress. Topics range from life cycles to where water goes when it evaporates. A bonus feature: For each column, Page Keeley, the award-winning author of NSTA’s bestselling *Uncovering Student Ideas in Science* series (pp. 40–41), has added a set of study group questions.

© 2014; ISBN: 978-1-938946-25-7; 226 pages

Stock #: PB348X

Members: \$30.36

Non-members: \$37.95

E-book #: PKEB348X

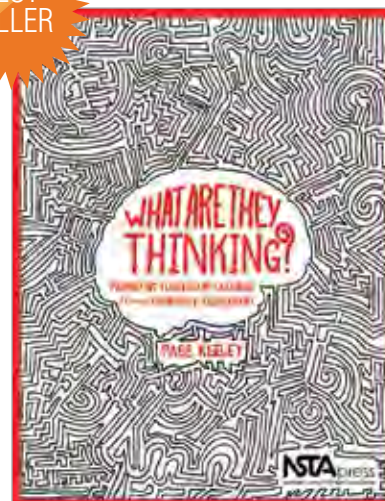
Members: \$24.67

Non-members: \$28.46

Book/E-book Set #: PKE348X

Members: \$39.47

Non-members: \$49.34



Science Books & Films/AAAS
Best of 2015!

Science Formative Assessment, Volume 1, Second Edition

75 Practical Strategies for Linking Assessment, Instruction, and Learning

Page Keeley

Corwin Press and **NSTA PRESS**, **GRADES K-12**

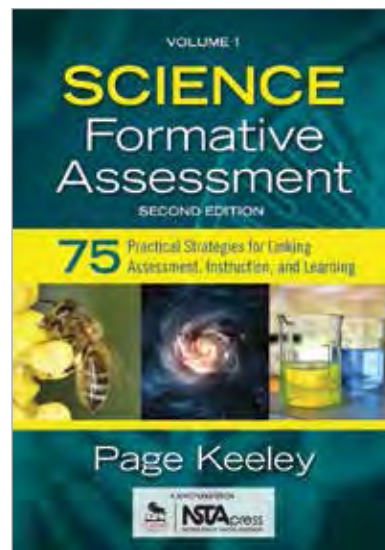
Formative assessment informs the design of learning opportunities that take students from their existing ideas of science to the ideas and practices that support conceptual understanding. Page Keeley wrote *Science Formative Assessment* to help educators weave formative assessment into instruction and learning. In the second edition of the bestselling first volume, she provides new examples, links the strategies to current research and standards, and shows how these techniques can be used across other disciplines. The formative assessment classroom techniques (FACTs) include descriptions of how each FACT promotes learning and informs instruction, implementation guidance, modifications for different learners, and more.

© 2016; ISBN: 978-1-483352-17-6; 384 pages

Stock #: PA011X1E2

Members: \$29.56

Non-members: \$36.95



Science Formative Assessment, Volume 2

50 New Strategies for Linking Assessment, Instruction, and Learning

Page Keeley

Corwin Press and **NSTA PRESS**, **GRADES K-12**

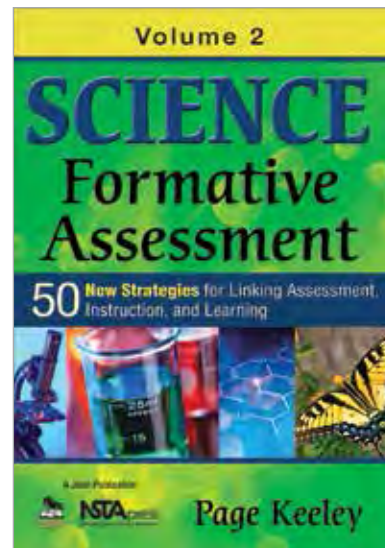
This book shows how to use assessment to inform instruction and learning in the science classroom. In the first volume, Page Keeley shared 75 techniques that help K–12 teachers determine students’ understanding of key concepts and design learning opportunities that will deepen students’ mastery of content and standards. Volume 2 presents 50 new strategies linked to the NGSS. These assessments can be used with any science curriculum and include a description of how each technique promotes learning; considerations for design and implementation, such as required materials, timing, modeling the technique, and grouping students; modifications for different types of students or purposes; caveats for using each technique; and ways the techniques can be used in other content areas.

© 2015; ISBN: 978-1-452270-25-8; 256 pages

Stock #: PA011X2

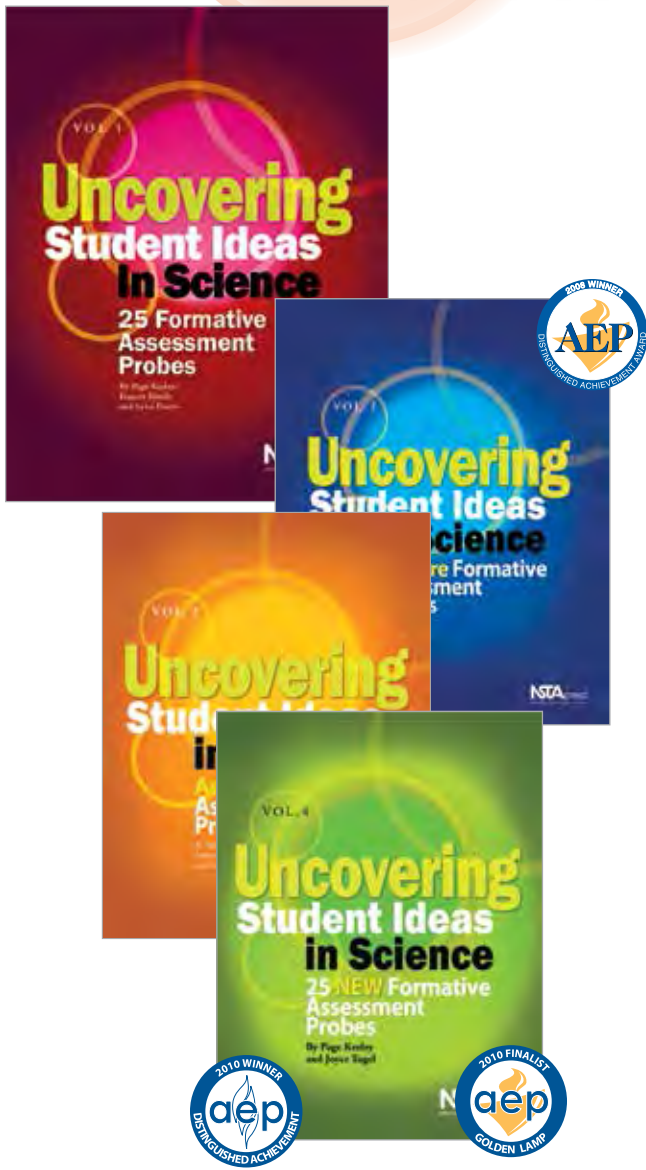
Members: \$27.96

Non-members: \$34.95





Uncovering Student Ideas in Science



Page Keeley is the driving force behind the *Uncovering Student Ideas in Science* series and the author of more than a dozen bestselling books—including *Science Formative Assessment, Vol. 1* and *Vol. 2* and *Mathematics Formative Assessment* (with Cheryl Rose Tobey). She began writing assessment probes in the early 1990s after being inspired by the article “Teaching for Conceptual Change—Confronting Children’s Experience,” by Bruce Watson and Dick Konicek. Page provides consulting services to school districts and organizations throughout the country and is a frequent speaker on formative assessment and teaching for conceptual change.

Page provides consulting services to school districts and organizations throughout the country and is a frequent speaker on formative assessment and teaching for conceptual change.

Page Keeley
NSTA PRESS, GRADES K–12

Book	Members: \$25.56	Non-members: \$31.95
E-book	Members: \$19.17	Non-members: \$23.96
Book/E-book Set	Members: \$30.67	Non-members: \$38.34

Volume 1

25 Formative Assessment Probes
Francis Eberle and Lynn Farrin, Coauthors

© 2005; ISBN: 978-0-87355-255-4; 193 pages
Stock #: PB193X1 E-book #: PKEB193X1 Book/E-book Set #: PKE193X1

Volume 2

25 More Formative Assessment Probes
Francis Eberle and Joyce Tugel, Coauthors

© 2007; ISBN: 978-0-87355-273-8; 194 pages
Stock #: PB193X2 E-book #: PKEB193X2 Book/E-book Set #: PKE193X2

Volume 3

Another 25 Formative Assessment Probes
Francis Eberle and Chad Dorsey, Coauthors

© 2008; ISBN: 978-1-933531-24-3; 198 pages
Stock #: PB193X3 E-book #: PKEB193X3 Book/E-book Set #: PKE193X3

Volume 4

25 New Formative Assessment Probes
Joyce Tugel, Coauthor

© 2009; ISBN: 978-1-935155-01-0; 184 pages
Stock #: PB193X4 E-book #: PKEB193X4 Book/E-book Set #: PKE193X4

Buy these four volumes together and save!

Stock #: PK193X4
Members: \$97.13 Non-members: \$121.41

Buy all 10 *Uncovering* books—including the newest title on p. 11—plus *What Are They Thinking?* (p. 39), and get a free laptop bag!

Stock #: PKUSIX11 Members: \$289.90 Non-members: \$362.38

Tens of thousands of teachers have taken advantage of author Page Keeley's *Uncovering Student Ideas in Science* series to reveal students' preconceptions through the use of probes. Each of the first four volumes provides 25 formative assessment probes with easy-to-follow steps for uncovering and addressing students' ideas by promoting learning through conceptual change instruction. Probes in these volumes cover topics such as physical, life, and Earth and space science; the nature of science; and unifying themes. In addition to these wide-ranging books, the series also includes four topic-specific volumes—*Astronomy*; *Life Science, Volume 1*; and *Physical Science, Volume 1* and *Volume 2*—and one dedicated to grades K–2. *Primary Science, Volume 1* uses minimal (and simple) text and visual representations of familiar objects, phenomena, or ideas.

These popular and invaluable books include teacher materials that explain science content, identify links to national standards, and suggest grade-appropriate ways to present materials so that students learn the concepts accurately. K–12 teachers, as well as professional development coordinators and college science and preservice faculty, will find these resources essential and exciting.

Uncovering Student Ideas in Astronomy

45 New Formative Assessment Probes

Cary Sneider, Coauthor

© 2012; ISBN: 978-1-936137-38-1; 255 pages

Stock #: PB307X	Members: \$30.36	Non-members: \$37.95
E-book #: PKEB307X	Members: \$22.77	Non-members: \$28.46
Book/E-book Set #: PKE307X	Members: \$36.43	Non-members: \$45.54

Uncovering Student Ideas in Life Science, Volume 1

25 New Formative Assessment Probes

© 2011; ISBN: 978-1-936137-17-6; 162 pages

Stock #: PB291X1	Members: \$25.56	Non-members: \$31.95
E-book #: PKEB291X1	Members: \$19.17	Non-members: \$23.96
Book/E-book Set #: PKE291X1	Members: \$30.67	Non-members: \$38.34

Uncovering Student Ideas in Primary Science, Volume 1

25 New Formative Assessment Probes for Grades K–2

© 2013; ISBN: 978-1-936959-51-8; 123 pages

Stock #: PB335X1	Members: \$25.56	Non-members: \$31.95
E-book #: PKEB335X1	Members: \$19.17	Non-members: \$23.96
Book/E-book Set #: PKE335X1	Members: \$30.67	Non-members: \$38.34

Uncovering Student Ideas in Physical Science, Volume 1

45 New Force and Motion Assessment Probes

Rand Harrington, Coauthor

© 2010; ISBN: 978-1-935155-18-8; 214 pages

Stock #: PB274X1	Members: \$30.36	Non-members: \$37.95
E-book #: PKEB274X1	Members: \$22.77	Non-members: \$28.46
Book/E-book Set #: PKE274X1	Members: \$36.43	Non-members: \$45.54

Uncovering Student Ideas in Physical Science, Volume 2

39 New Electricity and Magnetism Formative Assessment Probes

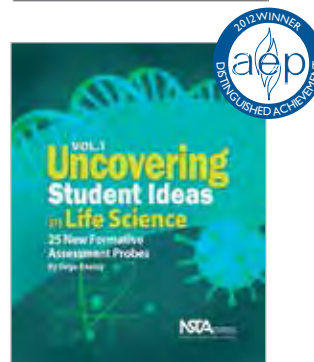
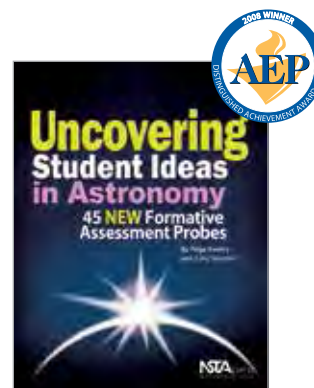
Rand Harrington, Coauthor

© 2014; ISBN: 978-1-936137-37-4; 190 pages

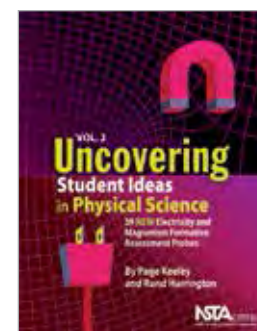
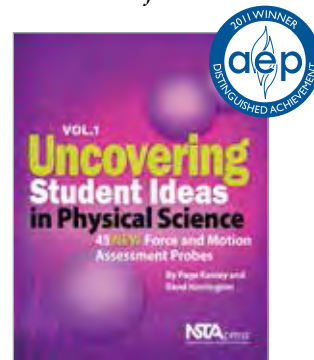
Stock #: PB274X2	Members: \$30.36	Non-members: \$37.95
E-book #: PKEB274X2	Members: \$22.77	Non-members: \$28.46
Book/E-book Set #: PKE274X2	Members: \$36.43	Non-members: \$45.54

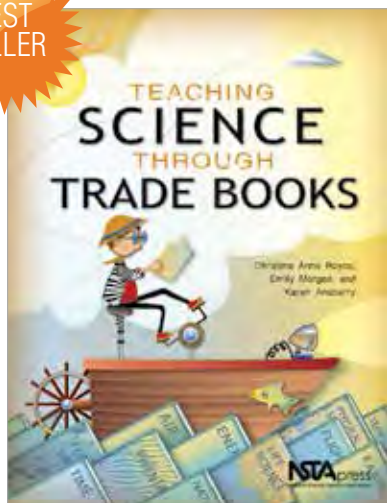
Buy both volumes of *Uncovering Student Ideas in Physical Science* and save!

Stock #: PK274X2 Members: \$57.68 Non-members: \$72.11



Science Books & Films/AAAS
Best of 2015!





Science Books & Films/AAAS
Best of 2013!

Teaching Science Through Trade Books

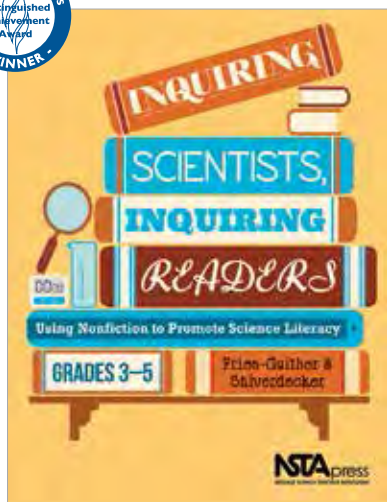
Christine Anne Royce, Emily Morgan, and Karen Ansberry

An **NSTA PRESS** Journals Collection, **GRADES K-6**

Engage reluctant scientists (through books) while also enticing struggling readers (through science). The key is this collection of popular “Teaching Through Trade Books” columns from NSTA’s award-winning journal *Science and Children*. By using children’s books to pique students’ interest, you can effectively—and efficiently—combine science teaching with reading instruction. The three veteran teachers who pen the regular column have handpicked 50 of their favorites, updated them, and added new student activity pages. Each lesson includes a targeted K–3 activity and a grade 4–6 activity. If you’ve always liked the “Teaching Through Trade Books” columns or are a fan of the award-winning *Picture-Perfect Science Lessons*, you’ll love the convenience of having these ready-to-teach lessons in one handy volume. **See the *Picture-Perfect Science* series and related products on pages 44–47.**

© 2012; ISBN: 978-1-936959-13-6; 326 pages

Stock #: PB315X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB315X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE315X	Members: \$33.55	Non-members: \$41.94



Science Books & Films/AAAS
Best of 2013!

Inquiring Scientists, Inquiring Readers

Using Nonfiction to Promote Science Literacy, Grades 3–5

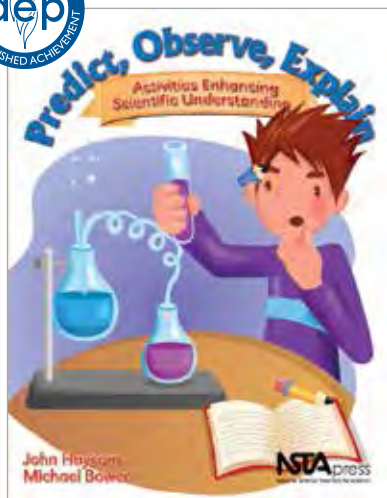
Jessica Fries-Gaither and Terry Shiverdecker

NSTA PRESS, GRADES 3-5

Here’s proof that it’s possible to integrate literacy into elementary science instruction without sacrificing quality. *Inquiring Scientists, Inquiring Readers* shows how to engage students in reading nonfiction texts, discussing science concepts, and writing to understand and share information. Several aspects of the book set its approach apart. It draws on a variety of nonfiction text sets, such as field guides, reference books, and narrative expository texts. Instead of individual lessons, the authors recommend a learning-cycle format that incorporates hands-on investigations, readings, directed discussion, and problem solving. Its 10 units cover life, physical, and Earth and space science—from “Drip-Drop Detectives: Exposing the Water Cycle” to “Beaks and Biomes: Understanding Adaptation in Migrating Organisms.” Inquiry based and teacher friendly, this book will change the way you think about engaging your students in science and literacy.

© 2013; ISBN: 978-1-936959-10-5; 304 pages

Stock #: PB325X	Members: \$30.36	Non-members: \$37.95
E-book #: PKEB325X	Members: \$22.77	Non-members: \$28.46
Book/E-book Set #: PKE325X	Members: \$36.43	Non-members: \$45.54



Predict, Observe, Explain

Activities Enhancing Scientific Understanding

John Haysom and Michael Bowen

NSTA PRESS, GRADES 7-12

This research-based book provides more than 100 student activities to learn about scientific concepts through the use of Predict, Observe, Explain sequences. This powerful classroom strategy, field-tested by hundreds of teachers, is designed to foster student inquiry and challenge preconceptions that students bring to the classroom. Accompanying the activities are worksheets, scientific explanations of the phenomena being studied, a summary of student responses obtained during the field tests, a synopsis of the relevant research findings, and a list of required materials.

© 2010; ISBN: 978-1-935155-23-2; 320 pages

Stock #: PB281X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB281X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE281X	Members: \$33.55	Non-members: \$41.94

A Head Start on Science

Encouraging a Sense of Wonder

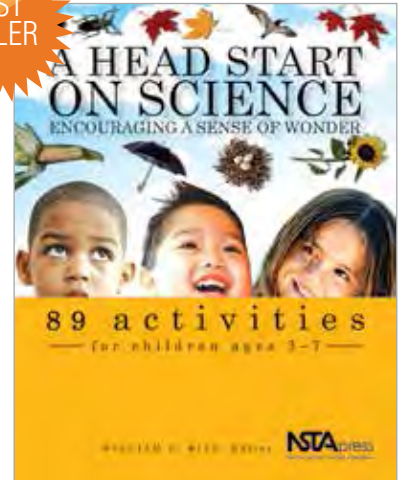
William C. Ritz, Editor

NSTA PRESS, GRADES PREK-2

A Head Start on Science is a treasure trove of 89 hands-on science activities designed specifically for children ages three to six. The activities are grouped into seven stimulating topic areas: the five senses, weather, physical science, critters, water and water mixtures, seeds, and nature walks. Each activity ends with a reproducible Family Science Connection—in both English and Spanish—so the whole family can share a learning experience.

© 2007; ISBN: 978-1-933531-02-1; 344 pages

Stock #: PB208X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB208X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE208X	Members: \$28.75	Non-members: \$35.94



Start Young!

Early Childhood Science Activities

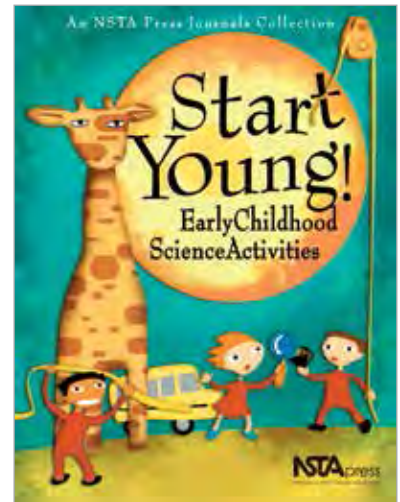
Shannan McNair, Editor

An **NSTA PRESS** Journals Collection, **GRADES PREK-2**

Start Young! offers a wealth of easy-to-do educational activities specifically designed for everyday use when teaching the littlest scientists. Included are two dozen articles compiled from *Science and Children*, NSTA's award-winning journal for elementary school teachers. A chapter of helpful background on the latest thinking about effective ways to introduce science in early childhood offers additional insights.

© 2006; ISBN: 978-0-87355-268-4; 174 pages

Stock #: PB197X	Members: \$11.96	Non-members: \$14.95
E-book #: PKEB197X	Members: \$8.97	Non-members: \$11.21
Book/E-book Set #: PKE197X	Members: \$14.35	Non-members: \$17.94



Mixing It Up

Integrated, Interdisciplinary, Intriguing Science in the Elementary Classroom

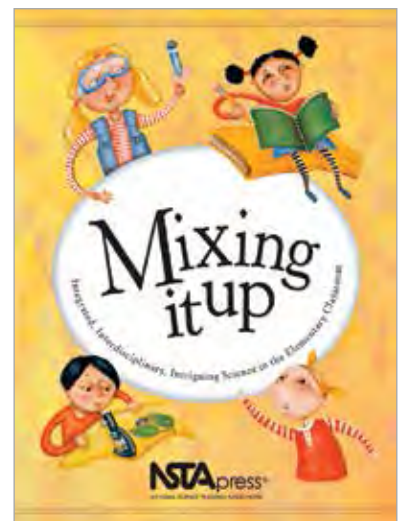
Susan Koba, Editor

An **NSTA PRESS** Journals Collection, **GRADES K-6**

This lively collection of teacher-tested ways to blend science with math, language arts, and more comprises 25 practical articles from the NSTA journal *Science and Children*. Included are lesson plans and idea starters using interdisciplinary, integrated, thematic, and combination approaches. Articles are also categorized by grade level and by national standards addressed.

© 2003; ISBN: 978-0-87355-231-8; 184 pages

Stock #: PB175X	Members: \$11.96	Non-members: \$14.95
E-book #: PKEB175X	Members: \$8.97	Non-members: \$11.21
Book/E-book Set #: PKE175X	Members: \$14.35	Non-members: \$17.94



TEACHING THE Picture-

Integrating Reading, Science, and Inquiry

Never before has it been this easy to interest students in reading and science. *Picture-Perfect Science Lessons, Expanded 2nd Edition*, winner of an *Association Media & Publishing EXCEL Award*, and its companion volumes, *More Picture-Perfect Science Lessons* and *Even More Picture-Perfect Science Lessons* (also an *EXCEL Award* winner), combine the appeal of children’s picture books with standards-based science content. The bestselling series contains lessons, complete with student pages and assessments, that use picture books to guide science instruction. Teachers will love the convenience of our accompanying Collections—including the children’s trade books cited in all three of the *Picture-Perfect* books. We also offer ready-to-use ClassPacks, which include all of the materials needed to make performing the classroom-tested lessons even easier.

Picture-Perfect Science Lessons, Expanded 2nd Edition

Using Children’s Books to Guide Inquiry, 3–6

Karen Ansberry and Emily Morgan

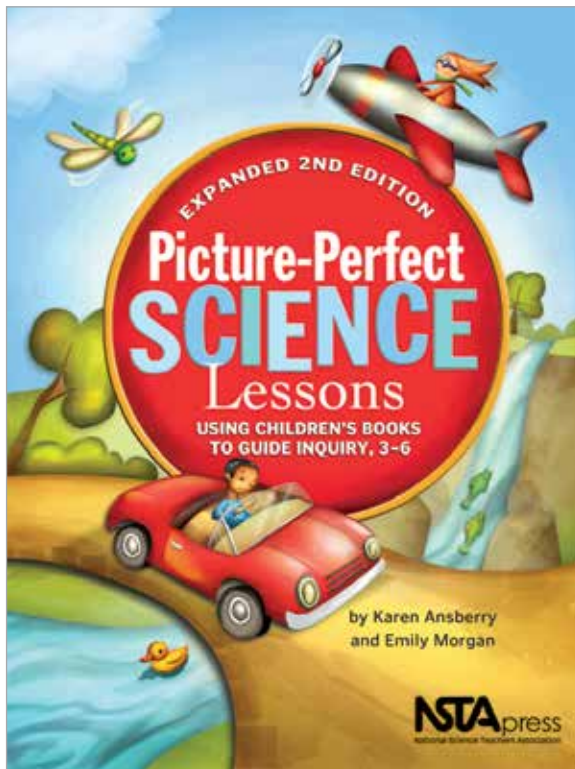
NSTA PRESS, GRADES 3–6

More Picture-Perfect Science Lessons

Using Children’s Books to Guide Inquiry, K–4

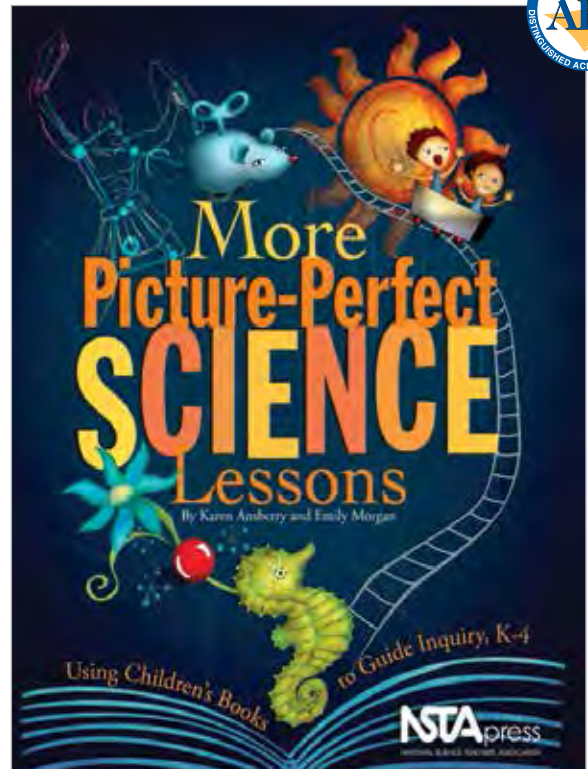
Karen Ansberry and Emily Morgan

NSTA PRESS, GRADES K–4



© 2010; ISBN: 978-1-935155-16-4; 403 pages

Stock #: PB186E2	Members: \$33.56	Non-members: \$41.95
E-book #: PKEB186E2	Members: \$25.17	Non-members: \$31.46
Book/E-book Set #: PKE186E2	Members: \$40.27	Non-members: \$50.34



© 2007; ISBN: 978-1-933531-12-0; 238 pages

Stock #: PB186X2	Members: \$33.56	Non-members: \$41.95
E-book #: PKEB186X2	Members: \$25.17	Non-members: \$31.46
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Perfect WAY

in One Complete Package



Even More Picture-Perfect Science Lessons

Using Children's Books to Guide Inquiry, K-5

Emily Morgan and Karen Ansberry

NSTA PRESS, GRADES K-5

© 2013; ISBN: 978-1-935155-17-1; 302 pages

Stock #: PB186X3

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*Science Books & Films/AAAS
Best of 2014!*

Learn how to use *Picture-Perfect Science* in your classroom, and show others how to as well! You can learn more directly from authors Emily Morgan and Karen Ansberry through NSTA's author presentations (see p. 77 for more information). NSTA also offers a *Picture-Perfect Science* Training Guide Kit (see p. 87) to help you and your colleagues begin using this bestselling program in your school.



Karen Ansberry



Emily Morgan

Brain-Powered Science

Teaching and Learning With Discrepant Events

Thomas O'Brien

NSTA PRESS, GRADES 5-12

Engaging students' natural curiosity in science just got easier. The *Brain-Powered Science* series features 68 hands-on inquiry activities based on the science of a "discrepant event." Author **Thomas O'Brien** describes a discrepant event as an experiment or demonstration in which the outcome is not what students expect. He uses these events to motivate learners to reconsider preconceived notions and focus on what has actually occurred. Each activity, bound to surprise and challenge, begins with a question such as, "What can a chocolate chip cookie tell you about the Earth's resources and the importance of environmental conservation?" or, "How can water and a penny demonstrate the power of mathematics and molecular theory?" K-12 preservice and inservice teachers can use this bestselling series as the framework for a professional development program or as a supplement to conventional science teaching methods. Each chapter includes an introduction, an explanation of science concepts used, a materials list, teacher debriefing tools, safety notes, and additional internet resources.



"I like the way this book has simple, inexpensive activities that lead the reader into understanding the bigger picture. This presentation is so unique that I do not think there is another book available that provides the same information in a better way. The resources he offers are a gold mine."

—Janice Crowley, science department chair, Wichita (Kansas) Collegiate Upper School, and 2009 Siemens National AP Teacher of the Year



Brain-Powered Science

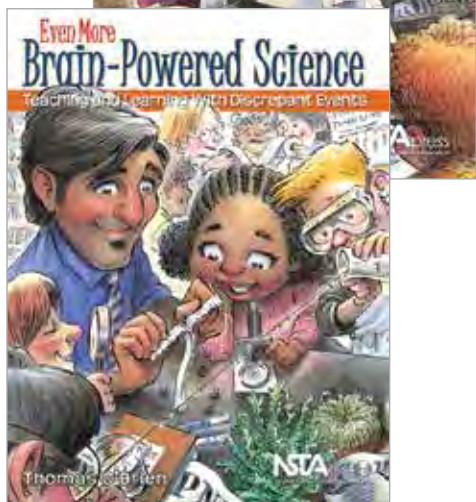
© 2010; ISBN: 978-1-935155-10-2; 386 pages

Stock #: PB271X	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB271X	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE271X	Members: \$19.15	Non-members: \$23.94

More Brain-Powered Science

© 2011; ISBN: 978-1-936137-18-3; 330 pages

Stock #: PB271X2	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB271X2	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE271X2	Members: \$19.15	Non-members: \$23.94



Even More Brain-Powered Science

© 2011; ISBN: 978-1-936137-21-3; 294 pages

Stock #: PB271X3	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB271X3	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE271X3	Members: \$19.15	Non-members: \$23.94

Buy all three volumes together and save!

Stock #: PK271X3 Members: \$45.49 Non-members: \$55.88

Science Fair Warm-Up

Learning the Practice of Scientists

John Haysom

NSTA PRESS, GRADES 5–12

Enjoy dread-free science fairs with help from the curriculum materials in this series. Three grade-appropriate student editions offer original investigations on topics ranging from paper helicopters to Archimedes pumps to acid rain. Underpinning the investigations are problem-solving exercises to help students develop the inquiry skills to carry the projects through. The separate Teachers Guide provides detailed lesson plans and advice for adapting all the student material to your classes' needs.

Thoroughly field-tested, the books save you time while helping you meet your teaching goals. The student editions are organized to grow more challenging with each book and encourage independent study as students gain experience. The series is based on the constructivist view that makes students responsible for their own learning and aligns with science standards and *A Framework for K–12 Science Education*. *Science Fair Warm-Up* will prepare your students and you for science fair success. But even if you don't have a science fair in your future, the material can help make your students more proficient with scientific research.

© 2013; ISBN: 978-1-936959-20-4; 71 pages (Grades 5–8)

Stock #: PB328X4	Members: \$10.36	Non-members: \$12.95
E-book #: PKEB328X4	Members: \$7.77	Non-members: \$9.71
Book/E-book Set #: PKE328X4	Members: \$12.43	Non-members: \$15.54

© 2013; ISBN: 978-1-936959-21-1; 65 pages (Grades 7–10)

Stock #: PB328X3	Members: \$10.36	Non-members: \$12.95
E-book #: PKEB328X3	Members: \$7.77	Non-members: \$9.71
Book/E-book Set #: PKE328X3	Members: \$12.43	Non-members: \$15.54

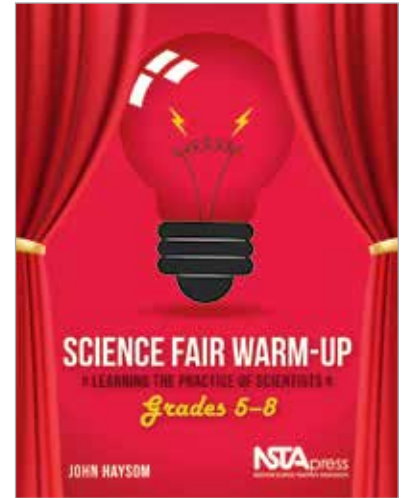
© 2013; ISBN: 978-1-936959-22-8; 75 pages (Grades 8–12)

Stock #: PB328X1	Members: \$10.36	Non-members: \$12.95
E-book #: PKEB328X1	Members: \$7.77	Non-members: \$9.71
Book/E-book Set #: PKE328X1	Members: \$12.43	Non-members: \$15.54

© 2013; ISBN: 978-1-936959-23-5; 69 pages (Teachers Guide)

Stock #: PB328X2	Members: \$12.76	Non-members: \$15.95
E-book #: PKEB328X2	Members: \$9.57	Non-members: \$11.96
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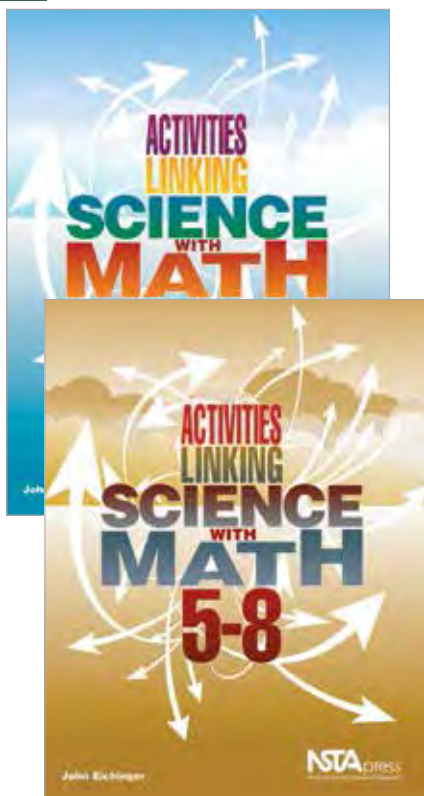
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Activities Linking Science With Math

John Eichinger

NSTA PRESS, GRADES K-4 and 5-8

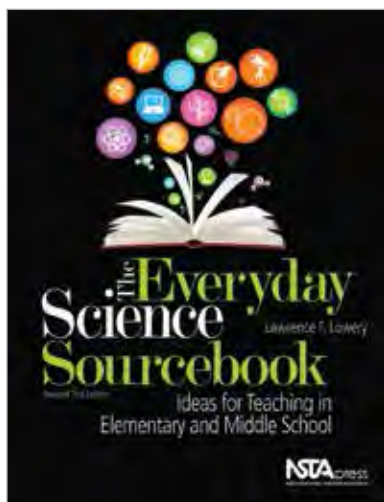
With volumes for both elementary and middle school teachers, *Activities Linking Science With Math* is a hands-on guide for connecting science instruction with other areas of study—visual arts, social sciences, language arts, and especially math. Each book provides 20 engaging and academically rigorous lessons with lists of needed materials, step-by-step procedures, discussion questions, and assessment techniques. The activities, which allow students to explore and discover through their own observations and conclusions, align with the standards for both science and math. Topics include general science, physical science, chemistry, Earth science, and life science.

© 2009; ISBN: 978-1-933531-42-7; 212 pages (Grades K-4)

Stock #: PB236X	Members: \$23.16	Non-members: \$28.95
E-book #: PKEB236X	Members: \$17.37	Non-members: \$21.71
Book/E-book Set #: PKE236X	Members: \$27.79	Non-members: \$34.74

© 2009; ISBN: 978-1-933531-43-4; 223 pages (Grades 5-8)

Stock #: PB236X2	Members: \$23.16	Non-members: \$28.95
E-book #: PKEB236X2	Members: \$17.37	Non-members: \$21.71
Book/E-book Set #: PKE236X2	Members: \$27.79	Non-members: \$37.64



The Everyday Science Sourcebook, Revised 2nd Edition

Ideas for Teaching in Elementary and Middle School

Lawrence F. Lowery

NSTA PRESS, GRADES K-8

Think of this book as Inspiration Central. Fully updated, this new edition of *The Everyday Science Sourcebook* is structured like a thesaurus. Look up a topic in the index, note the reference number, and then use that number to find related activities. For example, looking up *meteorology* can lead you to notes on the Earth's temperature. From there, you'll see entries on how students can make a liquid thermometer, graph air temperatures, and measure the conversion of solar energy to heat energy. *The Everyday Science Sourcebook* will provide a springboard for ideas every time you need to fill a gap in your curriculum, add a fresh element to your lessons, or extend and enrich hands-on activities.

© 2012; ISBN: 978-1-936959-09-9; 537 pages

Stock #: PB320X	Members: \$34.36	Non-members: \$42.95
E-book #: PKEB320X	Members: \$25.77	Non-members: \$32.21
Book/E-book Set #: PKE320X	Members: \$41.23	Non-members: \$51.54



Argument-Driven Inquiry in Biology

Lab Investigations for Grades 9–12

Victor Sampson, Patrick Enderle, Leanne Gleim, Jonathon Grooms, Melanie Hester, Sherry Southerland, and Kristin Wilson

NSTA PRESS, GRADES 9–12

Argument-Driven Inquiry in Biology is your source for information and instructional materials. The book starts by introducing you to the stages of argument-driven inquiry, including question identification, data analysis, argument development, double-blind peer review, and report revision. The 27 field-tested labs cover molecules and organisms, ecosystems, heredity, and biological evolution. Supporting both the NGSS and the *Common Core State Standards*, the investigations are more authentic than traditional labs and enable students to practice how to read, write, speak, and use math in the context of science.

© 2014; ISBN: 978-1-938946-20-2; 418 pages

Stock #: PB349X1	Members: \$35.96	Non-members: \$44.95
E-book #: PKEB349X1	Members: \$26.97	Non-members: \$33.71
Book/E-book Set #: PKE349X1	Members: \$43.15	Non-members: \$53.94

Student Lab Manual for Argument-Driven Inquiry in Biology

Victor Sampson, Patrick Enderle, Leanne Gleim, Jonathon Grooms, Melanie Hester, Sherry Southerland, and Kristin Wilson

NSTA PRESS, GRADES 9–12

The bestselling *Argument-Driven Inquiry in Biology* (above) includes 27 field-tested labs that help students learn important content and scientific practices. The labs cover molecules and organisms, ecosystems, heredity, and biological evolution. *Student Lab Manual for Argument-Driven Inquiry in Biology* has everything students need to fully engage in the activities, and you may find it convenient to give a copy to each student to save time at the photocopier. This book makes it easy for students to get started with their investigations.

© 2016; ISBN: 978-1-68140-014-3; 256 pages

Stock #: PB349X1S	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB349X1S	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE349X1S	Members: \$19.15	Non-members: \$23.94

Bundled sets of 10 also available!

Stock #: PK349X1S10 Members: \$143.64 Non-Members: \$179.55

Argument-Driven Inquiry in Life Science

Lab Investigations for Grades 6–8

Patrick J. Enderle, Ruth Bickel, Leanne Gleim, Ellen Granger, Jonathon Grooms, Melanie Hester, Ashley Murphy, Victor Sampson, and Sherry A. Southerland

NSTA PRESS, GRADES 6–8

If you want to bring argument-driven inquiry to your middle school life science classes, this book will help you get started. The book provides 20 field-tested labs to help students learn how to read, write, speak, and use math in the context of science. Students design their own methods, develop models, collect and analyze data, and critique information. The labs cover topics related to molecules and organisms, ecosystems, biological evolution, and heredity.

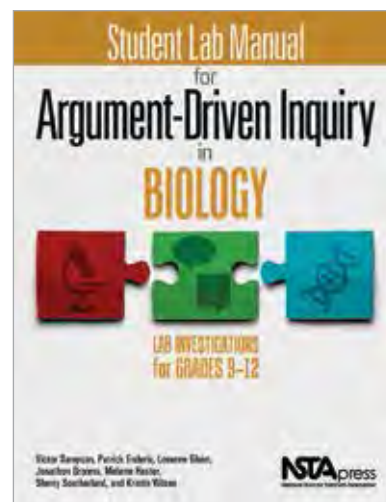
This book follows the same formula as *Argument-Driven Inquiry* for chemistry (p. 62) and biology. Labs include student pages, teacher notes, and checkout questions. The labs are versatile enough to introduce a topic or to conclude a unit by having students apply what they've learned. The authors know the importance of connecting the investigations to standards and providing the information and materials you need in one useful resource.

© 2015; ISBN: 978-1-938946-24-0; 386 pages

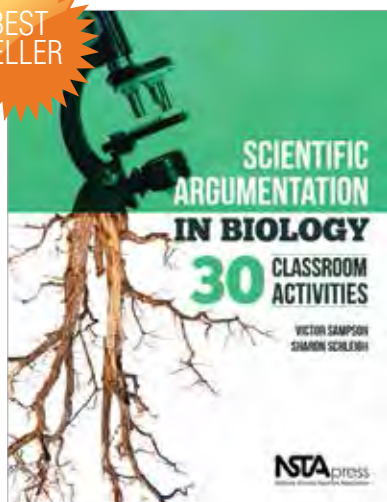
Stock #: PB349X3	Members: \$35.96	Non-members: \$44.95
E-book #: PKEB349X3	Members: \$26.97	Non-members: \$33.71
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Scientific Argumentation in Biology

30 Classroom Activities

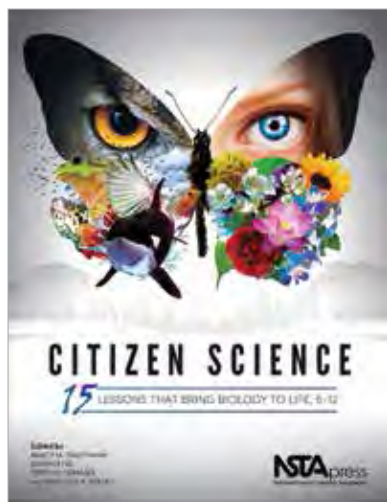
Victor Sampson and Sharon Schleigh

NSTA PRESS, GRADES 6–12

Scientific Argumentation in Biology combines theory, practice, and biological content. This book starts by giving you solid background in why students need to be able to go beyond expressing mere opinions when making research-related biology claims. Then it provides 30 field-tested activities your students can use when learning to propose, support, and evaluate claims; validate or refute them on the basis of scientific reasoning; and craft complex written arguments. Detailed teacher notes suggest specific ways to use the activities to enrich and supplement (not replace) what you're doing in class already. You'll find *Scientific Argumentation* to be an ideal way to help your students learn standards-based content, improve their practices, and develop scientific habits of mind.

© 2013; ISBN: 978-1-936137-27-5; 382 pages

Stock #: PB304X	Members: \$31.96	Non-members: \$39.95
E-book #: PKEB304X	Members: \$23.97	Non-members: \$29.96
Book/E-book Set #: PKE304X	Members: \$38.35	Non-members: \$47.94



Citizen Science

15 Lessons That Bring Biology to Life, 6–12

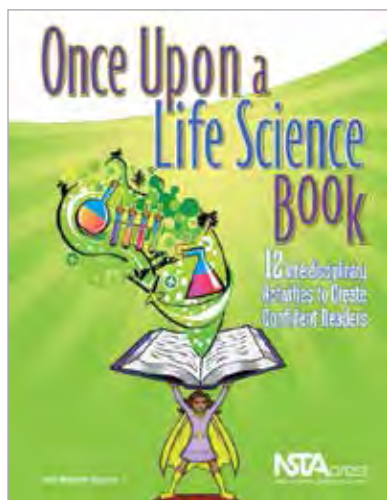
Nancy M. Trautmann, Jennifer Fee, Terry M. Tomasek, and NancyLee R. Bergey, Editors

NSTA PRESS, GRADES 6–12

Help your students build meaningful connections through public collaboration in scientific research—also known as citizen science. This inspiring book gives you real-life case studies of classes that engaged in citizen science and learned authentic scientific practices and the habits of mind associated with scientific reasoning. The 15 stimulating lessons help build data collection and analysis into your teaching. The lessons are flexible enough to serve as the framework for student investigations in any setting—urban or rural, with or without access to field or lab facilities. *Citizen Science* enables you to use independent inquiry to teach both content and process skills—and make your citizen scientists part of a rapidly growing movement.

© 2013; ISBN: 978-1-936959-08-2; 224 pages

Stock #: PB344X	Members: \$25.56	Non-members: \$31.95
E-book #: PKEB344X	Members: \$19.17	Non-members: \$23.96
Book/E-book Set #: PKE344X	Members: \$30.67	Non-members: \$38.34



Once Upon a Life Science Book

12 Interdisciplinary Activities to Create Confident Readers

Jodi Wheeler-Toppen

NSTA PRESS, GRADES 6–8

Time-strapped middle school teachers will appreciate this interdisciplinary approach to teaching reading instruction and life science. With 12 inquiry-based science lessons that build student knowledge of content *and* improve reading skills, author Jodi Wheeler-Toppen teaches topics such as the cell cycle, genetics, and food chains. Using accessibly written science readings along with strategies such as comprehension coding, chunking, and identifying text signals, teachers can successfully improve students' learning in two disciplines.

© 2010; 978-1-935155-09-6; 161 pages

Stock #: PB275X	Members: \$18.36	Non-members: \$22.95
E-book #: PKEB275X	Members: \$13.77	Non-members: \$17.21
Book/E-book Set #: PKE275X	Members: \$22.03	Non-members: \$27.54

Hard-to-Teach Biology Concepts, Revised 2nd Edition

Designing Instruction Aligned to the NGSS

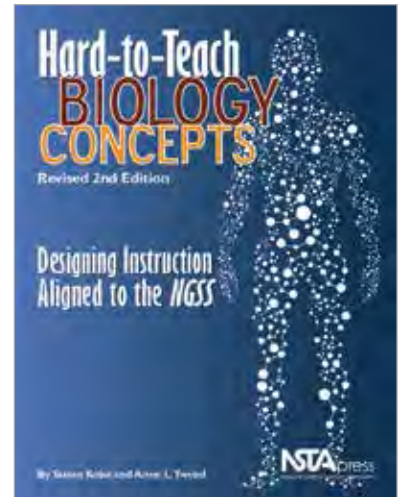
Susan Koba and Anne L. Tweed

NSTA PRESS, GRADES 9–12

Many foundational concepts in biology are notoriously difficult to teach. The challenge grows tougher when you add the need to connect to the *Next Generation Science Standards (NGSS)*. *Hard-to-Teach Biology Concepts* provides an Instructional Planning Framework that helps you understand students' learning needs, incorporate appropriate strategies, and interpret the framework and teaching tools through the lens of *NGSS*. Contributing authors show how they use the framework to teach four *NGSS* disciplinary core ideas: growth and development of organisms, ecosystems, heredity, and biological evolution. Veteran and new teachers can use the framework to develop students' conceptual understanding based on what works best for student and teacher.

© 2014; ISBN: 978-1-938946-48-6; 352 pages

Stock #: PB238E2	Members: \$28.76	Non-members: \$35.95
E-book #: PKEB238E2	Members: \$21.57	Non-members: \$26.96
Book/E-book Set #: PKE238E2	Members: \$34.51	Non-members: \$43.14



Science Books & Films/AAAS
Best of 2015!

Diagnosis for Classroom Success

Making Anatomy and Physiology Come Alive

Nicole H. Maller

NSTA PRESS, GRADES 9–12

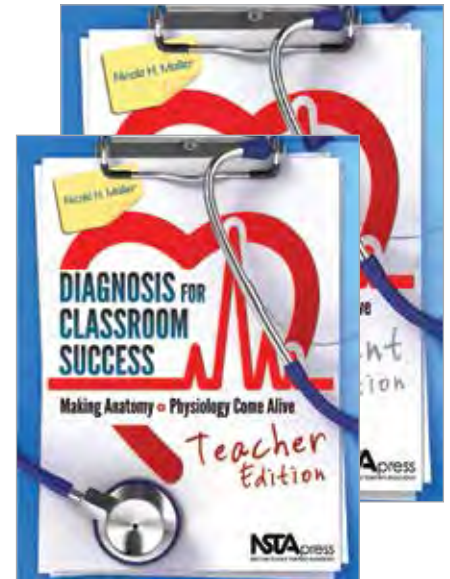
Your students arrive for their first day of hospital duty and meet four patients, each with a different mystery ailment. How can your teams of student-physicians come up with the correct diagnoses? The attention-grabbing narrative and role-plays are the basis of *Diagnosis for Classroom Success*. This curriculum gets students involved in inquiry-based science as it acquaints them with major body systems, sickle cell anemia, HIV, pregnancy, and diabetes. The Student Edition guides students while they examine medical records, form hypotheses, and conduct simulated lab tests. The Teacher Edition (which includes the Student Edition) spells out the book's relevance to *A Framework for K–12 Science Education* and provides rubrics, answer keys, and prep tips to use before, during, and after the lessons.

© 2013; ISBN: 978-1-936959-52-5; 244 pages (Teacher Edition)

Stock #: PB338XT	Members: \$23.16	Non-members: \$28.95
E-book #: PKEB338XT	Members: \$17.37	Non-members: \$21.71
Book/E-book Set #: PKE338XT	Members: \$27.79	Non-members: \$34.74

© 2013; ISBN: 978-1-936959-50-1; 96 pages (Student Edition)

Stock #: PB338XS	Members: \$11.96	Non-members: \$14.95
E-book #: PKEB338XS	Members: \$8.97	Non-members: \$11.21
Book/E-book Set #: PKE338XS	Members: \$14.35	Non-members: \$17.94





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PRE K-12 LEARNING
2016 FINALIST

Solar Science

Exploring Sunspots, Seasons, Eclipses, and More

Dennis Schatz and Andrew Fraknoi

NSTA PRESS, GRADES 5–8

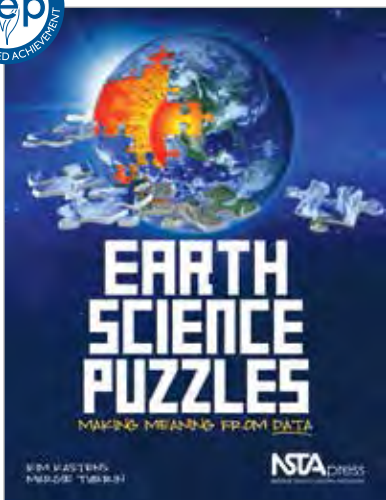
This resource will help you get students ready for August 21, 2017—the day when millions of North Americans will have the chance to witness a total solar eclipse. But the book’s usefulness won’t end when the eclipse does! *Solar Science* offers more than three dozen hands-on, inquiry-based activities on many fascinating aspects of solar astronomy, such as the Sun’s motions and the measuring of time and seasons in our daily lives.

The authors are experts in astronomy and science education who know how to prompt students to work like scientists by asking questions, doing experiments, comparing notes, and refining and reporting results. The book contains ideas for writing projects; math examples; and connections to music, art, fiction, and history. It supports the three-dimensional learning encouraged by the NGSS and connects to the *Common Core State Standards*.

Solar Science is ideal for teachers, informal science educators, youth group leaders, curriculum specialists, and teacher trainers. You can use these activities one at a time, as the basis of a stand-alone unit on the Sun, or as a comprehensive curriculum.

© 2016; ISBN: 978-1-941316-07-8; 360 pages

Stock #: PB403X	Members: \$31.96	Non-members: \$39.95
E-book #: PKEB403X	Members: \$23.97	Non-members: \$29.96
Book/E-book Set #: PKE403X	Members: \$38.35	Non-members: \$47.94



Earth Science Puzzles

Making Meaning From Data

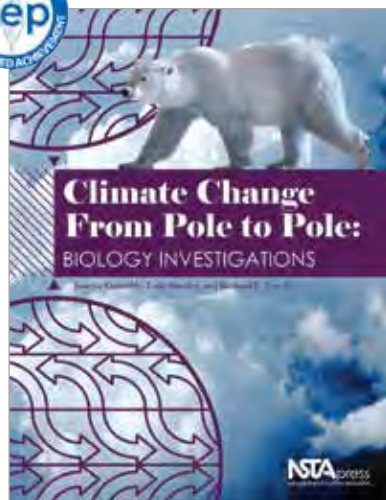
Kim Kastens and Margie Turrin

NSTA PRESS, GRADES 8–12

Teachers of Earth and environmental sciences in grades 8–12 will embrace this book centered on six “data puzzles” that foster critical-thinking skills in students and support science and math learning. *Earth Science Puzzles* presents professionally gathered Earth science data—including graphs, maps, tables, images, and narratives—and asks students to step into scientists’ shoes using temporal, spatial, and quantitative reasoning to draw inferences. Teachers will appreciate that each puzzle is supported by an extensive Pedagogical Content Knowledge document with background information, required skills, common misconceptions, answers to student questions, and a bank of resources to further examine topics. Watersheds, estuaries, earthquakes, paleoclimate, hydrothermal vents, and weather forecasting are all covered.

© 2010; ISBN: 978-1-935155-15-7; 186 pages

Stock #: PB286X	Members: \$22.36	Non-members: \$27.95
E-book #: PKEB286X	Members: \$16.77	Non-members: \$20.96
Book/E-book Set #: PKE286X	Members: \$26.83	Non-members: \$33.54



Climate Change From Pole to Pole

Biology Investigations

Juanita Constible, Luke Sandro, Richard E. Lee, Jr.

NSTA PRESS, GRADES 9–COLLEGE

This book offers timely, relevant, biology-based case studies and background information on how to teach the science of climate change. The six painstakingly researched and field-tested activities, which build on four content chapters, give students the opportunity to solve real-life scientific problems using guiding questions, graphs and data tables, short reading assignments, and independent research.

© 2008; ISBN: 978-1-933531-23-6; 238 pages

Stock #: PB225X	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB225X	Members: \$11.97	Non-members: \$14.96
Book/E-book Set #: PKE225X	Members: \$19.15	Non-members: \$23.94

Bringing Outdoor Science In

Thrifty Classroom Lessons

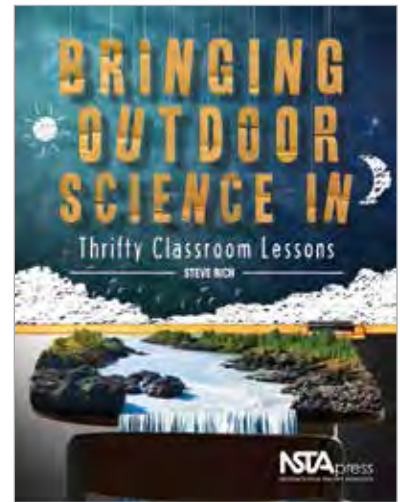
Steve Rich

NSTA PRESS, GRADES K-8

When it's just not possible to take students out to explore the natural world, bring the natural world in. Clearly organized and easy to use, this helpful guide contains more than 50 lessons in six units: greening the school; insects; plants; rocks and soils; Earth's water; and weather, the solar system, and air pollution. A handy matrix outlines correlations to national standards. All lessons include objectives, materials lists, procedures, reproducible data sheets, ideas for adapting to different grade levels, discussion questions, and next steps. Bonus features: Almost all of the needed materials are inexpensive or even free (such as leaves and rocks). And if you do get the chance to venture outdoors, the lessons will work there, too. By using this follow-up to the popular *Outdoor Science: A Practical Guide* (see below), you can introduce students to everything from bug zoos to the Sun and stars without ever needing to put on a jacket.

© 2012; ISBN: 978-1-936959-04-4; 164 pages

Stock #: PB314X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB314X	Members: \$15.57	Non-members: \$19.46
Book/E-book Set #: PKE314X	Members: \$24.91	Non-members: \$31.14



Outdoor Science

A Practical Guide

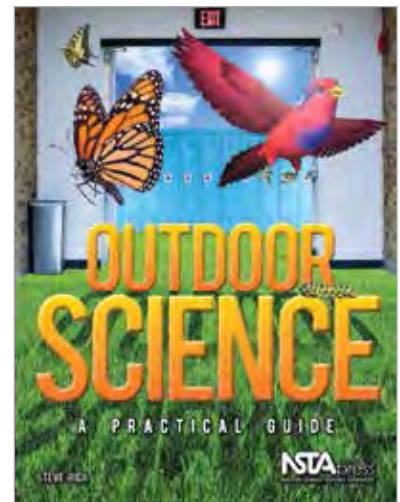
Steve Rich

NSTA PRESS, GRADES 3-8

Elementary and middle school educators can create outdoor learning spaces to use from year to year with *Outdoor Science*. Author Steve Rich provides suggestions for establishing stimulating outdoor classrooms for students with little extra effort or resources. The simple, inexpensive lessons satisfy national standards in the areas of life, Earth, and environmental sciences and offer interdisciplinary activities in math, social studies, and language arts. Additionally, Rich offers ideas for increasing community involvement and funding to help teachers develop outdoor classrooms. This book is perfect for urban, suburban, or rural school settings—and there isn't a permission slip in sight.

© 2010; ISBN: 978-1-935155-12-6; 140 pages

Stock #: PB272X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB272X	Members: \$15.57	Non-members: \$19.46
Book/E-book Set #: PKE272X	Members: \$24.91	Non-members: \$31.14



Inside-Out

Environmental Science in the Classroom and the Field, Grades 3-8

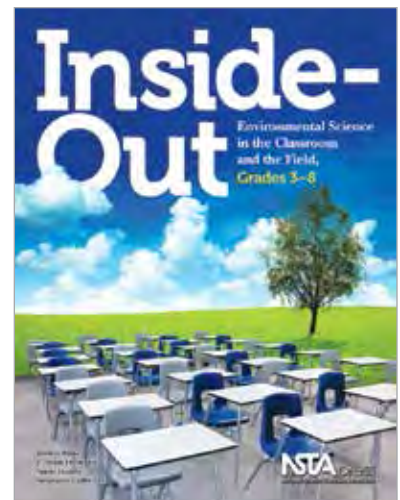
Robert W. Blake Jr., J. Adam Frederick, Sarah Haines, and Stephanie Colby Lee

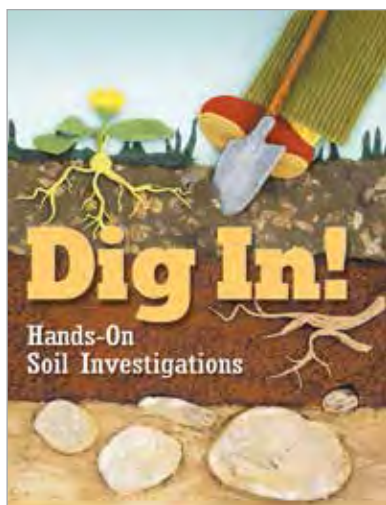
NSTA PRESS, GRADES 3-8

Field-based and classroom activities make up this resource for elementary and middle school teachers who want to give their students experiences with the natural world. Using direct observation and inquiry, the authors offer multidisciplinary learning opportunities. The well-developed lessons cover topics such as water, physical geography, soil, topography, nutrients and energy, and biodiversity—and include primers to help teachers refresh their own content knowledge. Numerous web resources help teachers overcome the challenges of engaging students in inquiry projects and field-based learning experiences.

© 2010; 978-1-935155-11-9; 165 pages

Stock #: PB273X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB273X	Members: \$16.87	Non-members: \$19.46
Book/E-book Set #: PKE273X	Members: \$26.99	Non-members: \$33.74





Dig In!

Hands-On Soil Investigations

Natural Resources Conservation Service, USDA, and **NSTA PRESS, GRADES K-4**

Treat students to a different sort of “digging into dirt” with this practical book. Students study soil formation, habitats and land use, animals that depend on soil, plants that grow in soil, soil science, and soil conservation. Teacher-tested lesson plans offer helpful background, assessment methods, and suggestions for further exploration.

© 2001; ISBN: 978-0-87355-189-2; 129 pages

Stock #: PB159X	Members: \$19.16	Non-members: \$23.95
E-book #: PKEB159X	Members: \$14.37	Non-members: \$17.96
Book/E-book Set #: PKE159X	Members: \$22.99	Non-members: \$28.74



Buzz Into Action

The Insect Curriculum Guide for Grades K-4

Hop Into Action

The Amphibian Curriculum Guide for Grades K-4

David Alexander

NSTA PRESS, GRADES K-4

Introduce young learners to the joy of environmental science with two books from David Alexander. Each book provides lesson plans with detailed objectives, background information, step-by-step procedures, reproducible activity sheets, and assessments.

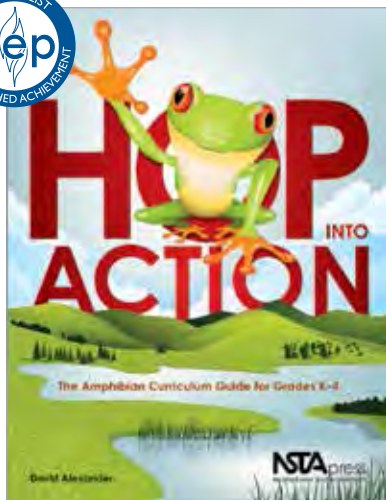
Buzz Into Action is a cross-disciplinary curriculum guide to help children learn about the world’s most abundant and accessible group of animals. You can put the 20 hands-on lessons to work individually or as a complete curriculum, in the field or in the classroom. *Hop Into Action* equips children with tools to appreciate and protect amphibians and their environments. Through 20 investigations that involve scientific inquiry and knowledge building, this innovative book engages students in environmental academics, conservation, and community.

© 2012; ISBN: 978-1-936959-12-9; 171 pages (*Buzz Into Action*)

Stock #: PB319X	Members: \$12.76	Non-members: \$15.95
E-book #: PKEB319X	Members: \$9.57	Non-members: \$11.96
Book/E-book Set #: PKE319X	Members: \$15.31	Non-members: \$19.14

© 2010; ISBN: 978-1-936137-07-7; 132 pages (*Hop Into Action*)

Stock #: PB287X	Members: \$12.76	Non-members: \$15.95
E-book #: PKEB287X	Members: \$9.57	Non-members: \$11.96
Book/E-book Set #: PKE287X	Members: \$15.31	Non-members: \$19.14



Project Earth Science

NSTA PRESS, GRADES 5–10

Book:	Members: \$26.36	Non-members: \$32.95
E-book:	Members: \$19.77	Non-members: \$24.71
Book/E-book Set:	Members: \$31.63	Non-members: \$39.54

Geology, Revised 2nd Edition

Paul D. Fullagar and Nancy W. West

This updated edition covers plate tectonics and how it causes volcanoes, earthquakes, and other geological phenomena. The standards-based activities help uncover students' preconceptions while demonstrating big concepts such as the Earth's physical evolution and its dynamic processes. The lessons are carefully explained in language accessible to students and teachers and are accompanied by brief overviews, lists of materials needed, questions to consider, background information, classroom management tips, and integration possibilities.

© 2011; ISBN: 978-1-936137-30-5; 248 pages

Stock #: PB298X1 E-book #: PKEB298X1 Book/E-book Set #: PKE298X1

Astronomy, Revised 2nd Edition

Geoff Holt and Nancy W. West

This second edition spotlights ways to teach students about everything from why Earth has seasons to what a light-year is. This book features an inquiry-based approach to material that is often taught at an observation-knowledge level. Teachers will appreciate the newly added sections within each activity that focus on differentiated learning, assessment, and supplemental resources. As an added bonus, there is a section for teachers on potential student preconceptions that contains questions designed to help draw students into discussion.

© 2011; ISBN: 978-1-936137-33-6; 174 pages

Stock #: PB298X2 E-book #: PKEB298X2 Book/E-book Set #: PKE298X2

Physical Oceanography, Revised 2nd Edition

Alfredo L. Aretxabaleta, Gregg R. Brooks, and Nancy W. West

Physical Oceanography immerses students in activities that focus on water, the substance that covers nearly three-quarters of Earth's surface. Eighteen ready-to-use, teacher-tested classroom activities and supplemental readings offer explorations and straightforward explanations to foster intuitive understanding of key science concepts. Students cover topics such as the structure of water molecules, saltwater and freshwater mixing, and tidal forces as they create waves, dissolve substances, float eggs, and more.

© 2011; ISBN: 978-1-936959-02-0; 258 pages

Stock #: PB298X3 E-book #: PKEB298X3 Book/E-book Set #: PKE298X3

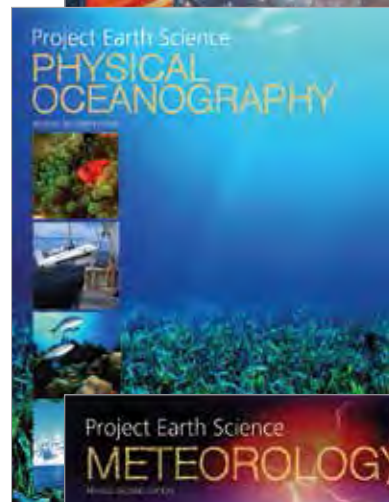
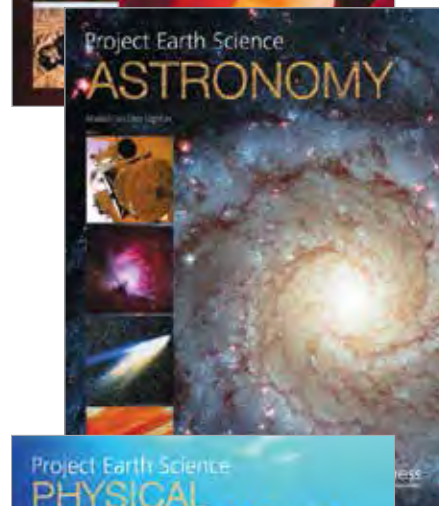
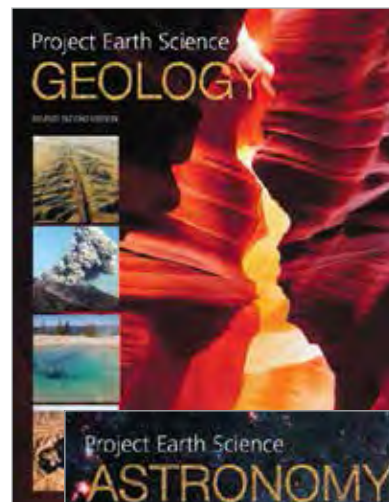
Meteorology, Revised 2nd Edition

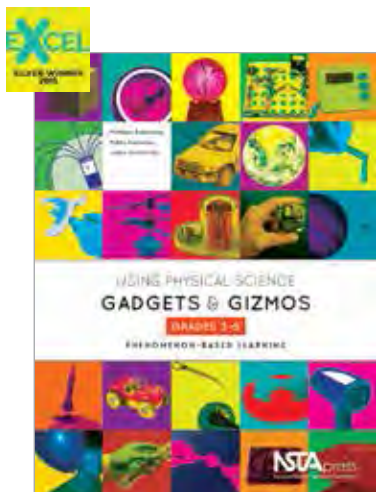
William R. Veal and Robert A. Cohen

Meteorology involves students in activities that focus on the origin and composition of Earth's atmosphere, factors that contribute to weather, and the concept of air masses and how they interact to produce weather. The 19 hands-on activities and corresponding readings include making clouds and hail; building weather maps; and investigating the causes of smog, ozone depletion, and acid rain. Whether exploring basic principles or following real-world examples, students will agree that discovering how weather works can be fun!

© 2011; ISBN: 978-1-936959-98-3; 312 pages

E-book #: PKEB298X4





Science Books & Films/AAAS
Best of 2015!

Using Physical Science Gadgets and Gizmos, Grades 3–5 and 6–8

Using Physics Gadgets and Gizmos, Grades 9–12

Phenomenon-Based Learning

Matthew Bobrowsky, Mikko Korhonen, and Jukka Kohtamäki

NSTA PRESS, GRADES 3–12

What teacher—or student—can resist books with titles like these? The *Gadgets and Gizmos* books feature water rockets, Drinking Birds, Dropper Poppers, Boomwhackers, Flying Pigs, and more. The grade-appropriate experiments let students explore a variety of phenomena involving pressure and force, thermodynamics, light and color, resonance, buoyancy, two-dimensional motion, gravity, and more.

The phenomenon-based learning (PBL) approach is as educational as the demonstrations are attention-grabbing. Instead of putting the theory before the application, PBL encourages students to first experience *how* gadgets work and then grow curious enough to find out *why*. The result: Your students learn physics by doing what real scientists do. (For information about hands-on materials for these books, visit Arbor Scientific at www.arborsci.com/using-physics-gadgets-and-gizmos-grades-9-12, www.arborsci.com/nsta-kit-middle-school, and www.arborsci.com/nsta-elementary-school-kit-1 and www.arborsci.com/nsta-elementary-school-kit-2.)

© 2014; ISBN: 978-1-936959-38-9; 103 pages (Grades 3–5)

Stock #: PB345X3 E-book #: PKEB345X3 Book/E-book Set #: PKE345X3

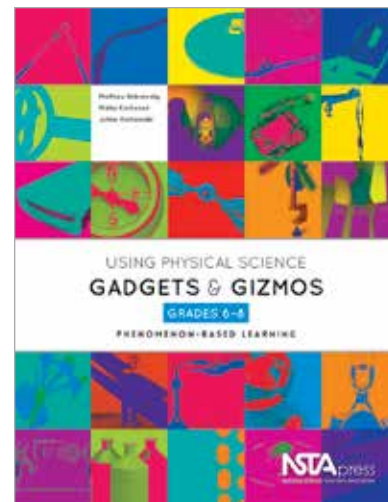
© 2014; ISBN: 978-1-936959-37-2; 120 pages (Grades 6–8)

Stock #: PB345X2 E-book #: PKEB345X2 Book/E-book Set #: PKE345X2

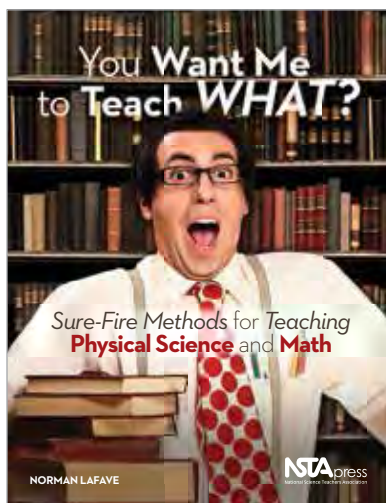
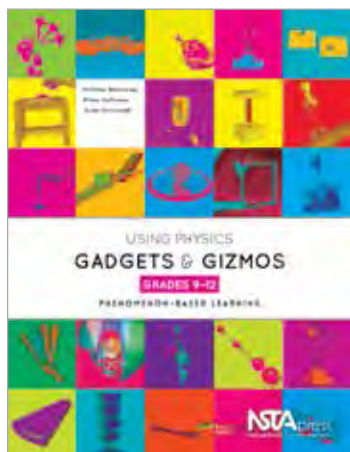
© 2014; ISBN: 978-1-936959-36-5; 169 pages (Grades 9–12)

Stock #: PB345X1 E-book #: PKEB345X1 Book/E-book Set #: PKE345X1

Book:	Members: \$25.56	Non-members: \$31.95
E-book:	Members: \$19.17	Non-members: \$23.96
Book/E-book Set:	Members: \$30.67	Non-members: \$38.34



Science Books & Films/AAAS
Best of 2014!



Science Books & Films/AAAS
Best of 2013!

You Want Me to Teach What?

Sure-Fire Methods for Teaching Physical Science and Math

Norman LaFave

NSTA PRESS, GRADES 9–12

If you feel shaky about teaching upper-level science and math, follow this book's tried-and-tested methods, which you can integrate into your teaching from your first day. *You Want Me to Teach What?* concentrates on techniques for approaching a variety of problems and enhancing your teaching skills in science and math. It covers student psychology, classroom management, planning, instruction, problem-solving techniques, and more. You'll find a wealth of sensible guidance—whether you're a preservice education major wanting to teach physical science, geometry, or algebra; a new teacher looking for practical methods to integrate into your instruction; or an experienced teacher in search of ways to improve in the classroom.

© 2012; ISBN: 978-1-936959-01-3; 185 pages

Stock #: PB313X	Members: \$18.36	Non-members: \$22.95
E-book #: PKEB313X	Members: \$13.77	Non-members: \$17.21
Book/E-book Set #: PKE313X	Members: \$22.03	Non-members: \$27.54

Teaching Energy Across the Sciences, K–12

Jeffrey Nordine, Editor

NSTA PRESS, GRADES K–12

It's a simple fact: Students will learn about energy more effectively if teachers present it more consistently in all grades and across all scientific disciplines. This book gives you the strategies and tools you need to help your students understand energy as a concept that cuts across all sciences. The result will be a clear lens for interpreting how energy works in many contexts, both inside and outside the classroom.

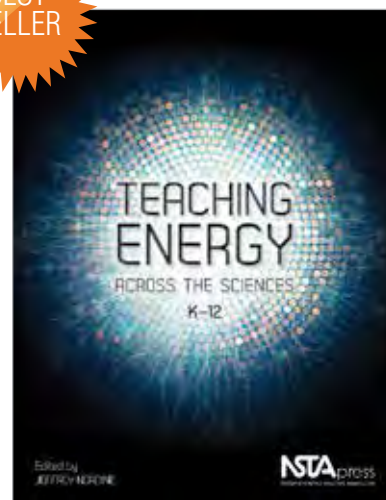
Teaching Energy Across the Sciences, K–12 is accessible to teachers with varying science backgrounds. After a foreword by Helen Quinn, the book's three main sections cover these essential topics:

- Understanding why energy is such an important concept, what students need to know, and how to bring the concept in line with the *Next Generation Science Standards (NGSS)*
- Using five central ideas about energy to teach the subject consistently across the life, physical, and Earth and space sciences, as well as in all grades
- Providing the professional development and systemic support teachers need to adopt this book's approaches

"The NGSS firmly assert that we can no longer accept teaching energy in a way that does not show students how energy ideas are connected," editor Jeff Nordine writes. Simply and clearly, this book shows you how to make those vital connections.

© 2016; ISBN: 978-1-941316-01-6; 216 pages

Stock #: PB401X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB401X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE401X	Members: \$33.55	Non-members: \$41.94



Take-Home Physics

65 High-Impact, Low-Cost Labs

Take-Home Chemistry

50 Low-Cost Activities to Extend Classroom Learning

Michael Horton

NSTA PRESS, GRADES 9–12

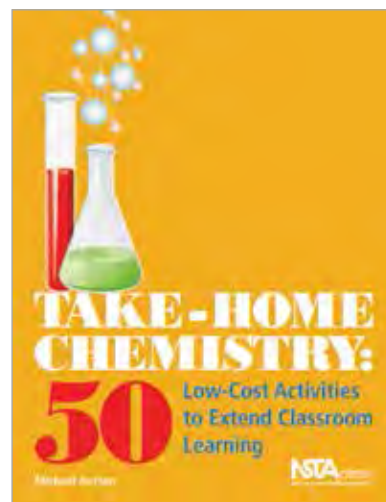
The *Take-Home* volumes offer dozens of nationally tested, inquiry-based labs for students to perform—safely—at home. *Physics* uses ordinary household items to tackle motion and kinematics; forces and energy; waves, sound, and light; and electricity and magnetism. The *Chemistry* exercises involve skills such as measuring, graphing, calculating, and extrapolating graphs. Students improve their higher-level thinking, reinforce basic process skills, practice discovery, and bridge classroom learning with real-world application.

© 2009; ISBN: 978-1-935155-05-8; 295 pages (Physics)

Stock #: PB240X	Members: \$23.96	Non-members: \$29.95
E-book #: PKEB240X	Members: \$17.97	Non-members: \$22.46
Book/E-book Set #: PKE240X	Members: \$28.75	Non-members: \$35.94

© 2011; ISBN: 978-1-936137-39-8; 244 pages (Chemistry)

Stock #: PB240X2	Members: \$22.36	Non-members: \$27.95
E-book #: PKEB240X2	Members: \$16.77	Non-members: \$20.96
Book/E-book Set #: PKE240X2	Members: \$26.83	Non-members: \$33.54



Stop Faking It!

Finally Understanding Science So You Can Teach It

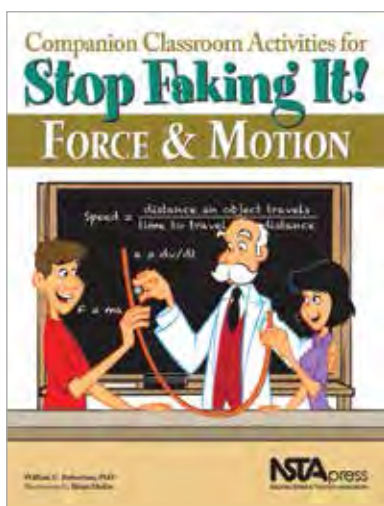


Bill Robertson—author of the award-winning NSTA Press *Stop Faking It!* series—has had a multifaceted career in science. He's a former college physics instructor; researcher in cognitive science; and developer of curricula for BSCS, the U.S. Space Foundation, and the Wild Goose Company. He also reviews and edits science materials, presents teacher workshops across the country, and writes a monthly column for NSTA's member journal *Science and Children*. Robertson earned a master's degree in physics from the University of Illinois and a PhD in science education from the University of Colorado.

All *Stop Faking It!* books are illustrated by **Brian Diskin**.

Stop Faking It! Series Book Pricing

Book:	Members: \$15.96	Non-members: \$19.95
E-book:	Members: \$11.97	Non-members: \$14.96
Book/E-Book Set:	Members: \$19.15	Non-members: \$23.94



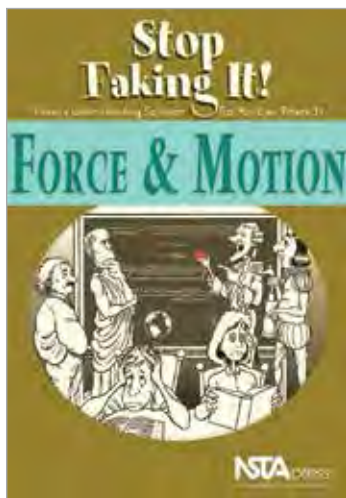
Companion Classroom Activities for *Stop Faking It! Force & Motion*

NSTA PRESS, GRADES 5-9

Never has it been so easy for educators to learn to teach physical science with confidence. Science teachers, homeschoolers, and parents will find this volume an ideal supplement to author Bill Robertson's earlier book on force and motion—or a valuable resource on its own. The lessons and easy-to-understand explanations can be used as introductions to or refreshers for basic physical science concepts. The hands-on activities cater to busy teachers—providing objectives, materials lists, and step-by-step instructions—and allow students to investigate, discuss, and apply physical science concepts to everyday situations. Robertson's wit and humor are sure to keep students and teachers entertained while they tackle topics such as acceleration, speed, and gravity. Also included are student pages and evaluation questionnaires.

© 2011; ISBN: 978-1-936137-28-2; 212 pages

Stock #: PB295X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB295X	Members: \$15.57	Non-members: \$19.46
Book/E-book Set #: PKE295X	Members: \$24.91	Non-members: \$31.14



Force & Motion

NSTA PRESS, GRADES 3-8

Intimidated by inertia? Frightened by forces? You're not alone—and help is at hand. The *Stop Faking It!* series is perfect for science teachers, homeschoolers, parents wanting to help with homework—anyone who needs a jargon-free way to learn the background for teaching middle school physical science with confidence. Combining easy-to-understand explanations with activities using commonly found equipment, this book will lead you through Newton's laws to the physics of space travel. The book is as entertaining as it is informative. Best of all, the author understands the needs of adults who want concrete examples, hands-on activities, clear language, diagrams—and yes, a certain amount of empathy.

© 2002; ISBN: 978-0-87355-209-7; 100 pages

Stock #: PB169X1	E-book #: PKEB169X1	Book/E-book Set #: PKE169X1
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Buy both books on this page and save!

Stock #: PK295X

Members: \$36.72 Non-members: \$45.90



More Chemistry Basics

With Michael S. Kralik and Ann Cutler

NSTA PRESS, GRADES 5–12

Bill Robertson reviews the fundamentals, introduces additional chemistry concepts, such as special reactions and half-lives, and expands on many previously discussed ideas, including electron energy levels and why we can't know exactly what electrons are doing and where they are.

© 2010; ISBN: 978-1-933531-47-2; 153 pages

Stock #: PB169X9 E-book #: PKEB169X9 Book/E-book Set #: PKE169X9

Chemistry Basics

With Michael S. Kralik

NSTA PRESS, GRADES 5–12

Do the words *periodic table* send chills down your spine? Are you anxious about atomic structure? Confounded by chemical equations? With *Chemistry Basics*, you will learn not just that atoms behave in certain ways, but why they do so; not just how to balance chemical equations, but why you would want to; and so much more.

© 2007; ISBN: 978-0-87355-239-4; 112 pages

Stock #: PB169X8 E-book #: PKEB169X8 Book/E-book Set #: PKE169X8

Air, Water, & Weather

NSTA PRESS, GRADES 3–8

This book covers air pressure, the Coriolis force, density, why hot air doesn't rise by itself, and why heating air doesn't necessarily cause it to expand.

© 2005; ISBN: 978-0-87355-238-7; 134 pages

Stock #: PB169X6 E-book #: PKEB169X6 Book/E-book Set #: PKE169X6

Light

NSTA PRESS, GRADES 3–8

This volume uses ray, wave, and particle models of light to explain the basics of reflection and refraction, optical instruments, polarization of light, and interference and diffraction.

© 2003; ISBN: 978-0-87355-215-8; 115 pages

Stock #: PB169X3 E-book #: PKEB169X3 Book/E-book Set #: PKE169X3

Energy

NSTA PRESS, GRADES 3–8

Included are easy-to-grasp explanations of work, kinetic energy, potential energy, and the transformation of energy, plus energy as it relates to simple machines, heat energy, temperature, and heat transfer.

© 2002; ISBN: 978-0-87355-214-1; 114 pages

Stock #: PB169X2 E-book #: PKEB169X2 Book/E-book Set #: PKE169X2

Sound

NSTA PRESS, GRADES 3–8

Starting with the cause of sound and how it travels, learn how musical instruments work, how sound waves add and subtract, how the human ear works, and why inhaling helium changes the sound of your voice.

© 2003; ISBN: 978-0-87355-216-5; 107 pages

Stock #: PB169X4 E-book #: PKEB169X4 Book/E-book Set #: PKE169X4

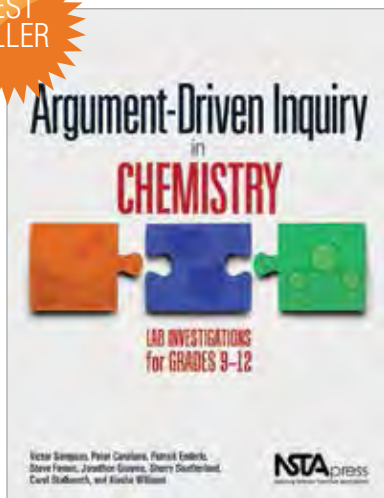
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Members: \$125.86

Non-members: \$157.32

BEST
SELLER



Argument-Driven Inquiry in Chemistry

Lab Investigations for Grades 9–12

Victor Sampson, Peter Carafano, Patrick Enderle, Steve Fannin, Jonathon Grooms, Sherry A. Southerland, Carol Stallworth, and Kiesha Williams

NSTA PRESS, GRADES 9–12

Transform your chemistry labs with this guide to argument-driven inquiry. Designed to be more authentic than traditional laboratory activities, the investigations give students the opportunity to work the way scientists do. They learn to identify questions, develop models, collect and analyze data, generate arguments, and critique and revise reports. The 30 field-tested labs cover a broad range of topics related to chemical reactions and matter's structure and properties. The book contains introduction labs to acquaint students with new content and application labs to try out a theory, law, or unifying concept.

Veteran teachers wrote this easy-to-use book that connects with today's standards. All labs include reproducible student pages, teacher notes, and checkout questions. If you've wanted to try an argument-driven approach to chemistry, this book will provide both the information and instructional materials you need to get started. (*Student Lab Manual for Argument-Driven Inquiry in Chemistry* is available on p. 14.)

© 2014; ISBN: 978-1-938946-22-6; 530 pages

Stock #: PB349X2	Members: \$35.96	Non-members: \$44.95
E-book #: PKEB349X2	Members: \$26.97	Non-members: \$33.71
Book/E-book Set #: PKE349X2	Members: \$43.15	Non-members: \$53.94



Gourmet Lab

The Scientific Principles Behind Your Favorite Foods

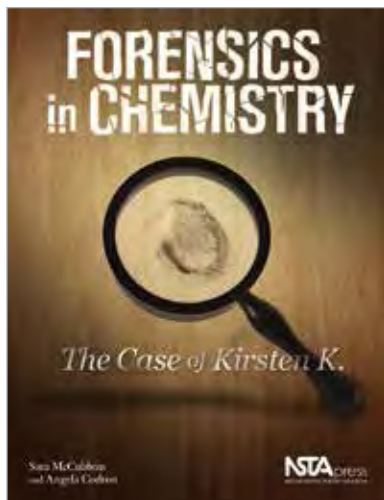
Sarah Reeves Young

NSTA PRESS, GRADES 6–12

Fifteen hands-on, inquiry-based experiments challenge students to—safely—take on the role of scientist and chef as they boil, bake, and toast their way into a better understanding of science concepts from chemistry, biology, and physics. While cooking foods such as pancakes and butterscotch, students have the opportunity to learn about physical changes in states of matter, acids and bases, biochemistry, and molecular structure. The teachers' pages include standards addressed in each lab, a vocabulary list, safety protocols, materials required, procedures, data analysis, a student questions answer key, and conclusions and connections.

© 2011; ISBN: 978-1-936137-08-4; 344 pages

Stock #: PB290X	Members: \$27.96	Non-members: \$34.95
E-book #: PKEB290X	Members: \$20.97	Non-members: \$26.21
Book/E-book Set #: PKE290X	Members: \$33.55	Non-members: \$41.94



Forensics in Chemistry

The Case of Kirsten K.

Sara McCubbins and Angela Codron

NSTA PRESS, GRADES 9–12

How did Kirsten K.'s body wind up at the bottom of a lake—and what do wedding cake ingredients, soil samples, radioactive decay, bone age, blood stains, bullet matching, and drug lab evidence reveal about whodunit? These mysteries help teachers present standard chemistry topics—kinetic molecular theory, stoichiometry, half-lives, and more—in a unique context. This book uses forensic evidence as the foundation for a series of hands-on labs, and the narrative shows why chemistry concepts are relevant and how they are connected. Chapters provide case information, content, teacher guides, student materials, rubrics, answer keys, and more.

© 2012; ISBN: 978-1-936137-36-7; 177 pages

Stock #: PB305X	Members: \$20.76	Non-members: \$25.95
E-book #: PKEB305X	Members: \$15.57	Non-members: \$19.46
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NSTA Guide to Planning School Science Facilities, 2nd Edition

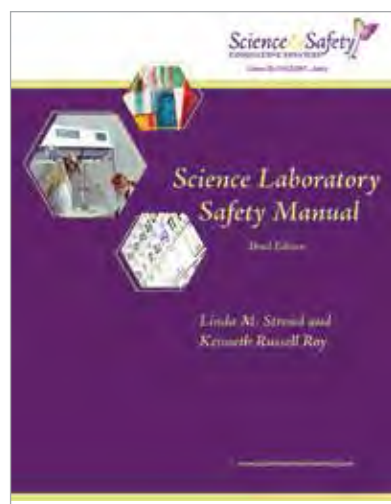
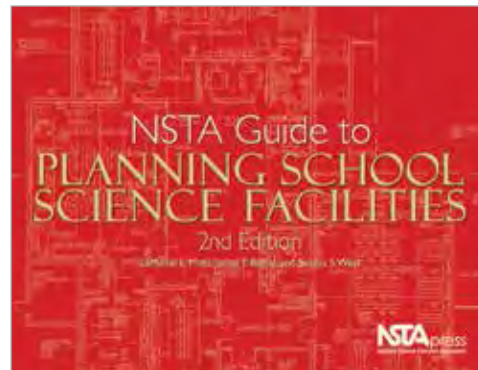
LaMoine L. Motz, James T. Biehle, and Sandra S. West

NSTA PRESS, GRADES K-12

Science-learning spaces are different from general-purpose classrooms. This is the definitive resource for every school that seeks safe, effective science space without costly, time-consuming mistakes. New to this edition is a chapter on “green” schools, including ideas on how to use the entire grounds to encourage environmental responsibility in students. The revised guide covers practical information on laboratory and general room design, budget priorities, space considerations, and stages of planning; current trends in science education and safety, accessibility, and legal guidelines; and an updated science facilities audit.

© 2007; ISBN: 978-1-933531-08-3; 148 pages

Stock #: PB149E2	Members: \$15.96	Non-members: \$19.95
E-book #: PKEB149E2	Members: \$11.97	Non-members: \$14.96
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Science Laboratory Safety Manual, Third Edition

Linda M. Stroud and Kenneth Russell Roy

Science & Safety Consulting Services, GRADES K-COLLEGE

Embracing legal safety standards and better professional practices is essential for safer science engagement and investigations. *Science Laboratory Safety Manual, Third Edition* will provide science teachers, school administrators, science safety facilitators and consultants, district administrative personnel, parents, and others with strategies for safer science investigations.

Written by Kenneth Russell Roy and Linda M. Stroud—internationally recognized safety specialists with dedication to the science education community—this manual includes an understanding and familiarity of the legal requirements and nuances vital to the proper administration of any school science program. This valuable book will help make school laboratories and classrooms the secure and safe environments they need to be.

© 2015; ISBN: 978-0-9788796-1-7; 408 pages

Stock #: OP879E3	Members: \$88.16	Non-members: \$97.95
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The NSTA Ready-Reference Guide to Safer Science, Volumes 1, 2, and 3

Kenneth Russell Roy

An **NSTA PRESS** Journals Collection, **GRADES 5-8** and **9-12**

You can never know too much about practicing safer science. Get up-to-date information about best practices and legal standards from three volumes of *The NSTA Ready-Reference Guide to Safer Science*. Each is a collection of easy-to-read and practical essays—chock-full of safety information, anecdotes, and advisories you can use every day.

© 2007; ISBN: 978-1-933531-28-1; 156 pages (Vol. 1, Grades 5-8)

Stock #: PB215X	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB215X	Members: \$7.17	Non-members: \$8.96
Book/E-book Set #: PKE215X	Members: \$11.47	Non-members: \$14.34

© 2012; ISBN: 978-1-936959-06-8; 184 pages (Vol. 2, Grades 5-8)

Stock #: PB215X2	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB215X2	Members: \$7.17	Non-members: \$8.96
Book/E-book Set #: PKE215X2	Members: \$11.47	Non-members: \$14.34

© 2012; ISBN: 978-1-936959-31-0; 170 pages (Vol. 3, Grades 9-12)

Stock #: PB215X3	Members: \$9.56	Non-members: \$11.95
E-book #: PKEB215X3	Members: \$7.17	Non-members: \$8.96
Book/E-book Set #: PKE215X3	Members: \$11.47	Non-members: \$14.34



Association Media & Publishing 2008 EXCEL Award Winner!

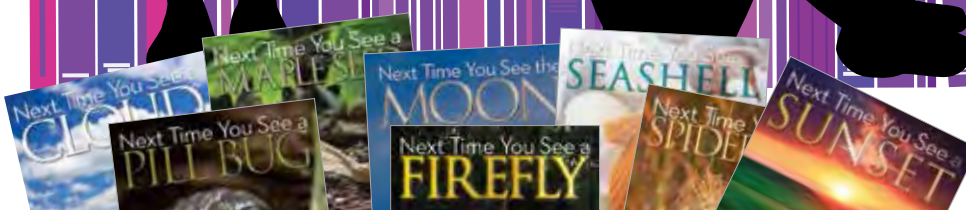


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Stock #: PK215X3

Members: \$27.25 Non-members: \$34.06

NSTA Kids



Library editions are also available!

Members: \$15.16 Non-members: \$18.95

Next Time You See

Awaken a sense of wonder in a child with the *Next Time You See* series. Rather than providing science facts to memorize, the books' engaging text and eye-catching photography inspire elementary-age children to experience the enchantment of everyday phenomena in the natural world. Free supplementary activities are available on the NSTA website for teachers who want to go one step further. Specially designed to be experienced with an adult—whether a parent, teacher, or friend—*Next Time You See* books serve as a reminder that you don't have to look far to find something remarkable in nature.

- Next Time You See a Cloud**
ISBN: 978-1-941316-32-0; Stock #: PB329X8L
- Next Time You See a Firefly**
ISBN: 978-1-938946-16-5; Stock #: PB329X3L
- Next Time You See a Maple Seed**
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- Next Time You See the Moon**
ISBN: 978-1-938946-49-3; Stock #: PB329X5L
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ISBN: 978-1-938946-27-1; Stock #: PB329X1L
- Next Time You See a Spiderweb**
ISBN: 978-1-941316-31-3; Stock #: PB329X7L
- Next Time You See a Sunset**
ISBN: 978-1-938946-26-4; Stock #: PB329X2L

Book	Members: \$10.36	Non-members: \$12.95
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Buy all 8 *Next Time You See* books—including the newest title on page 9—and save!

Stock # (paperback): PK329X8	Members: \$78.74	Non-members: \$98.42
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Next Time You See a Spiderweb

If you know children who say “Tck!” when they spot a spider, this irresistible book will make them say “Ooh!” instead. *Next Time You See a Spiderweb* describes how these skilled creatures weave nature’s most clever traps—their webs. It shows how spiders snare their prey with messy tangled webs and intricate orb webs. Readers will learn how spiders spin sticky silk without getting stuck themselves. Children and adults alike will want to take *Next Time You See a Spiderweb* with them when they go on their next nature walk.

© 2015; ISBN: 978-1-938946-34-9; 32 pages; Lexile: 1080L

Stock #: PB329X7 E-book #: PKEB329X7 Book/E-book Set #: PKE329X7

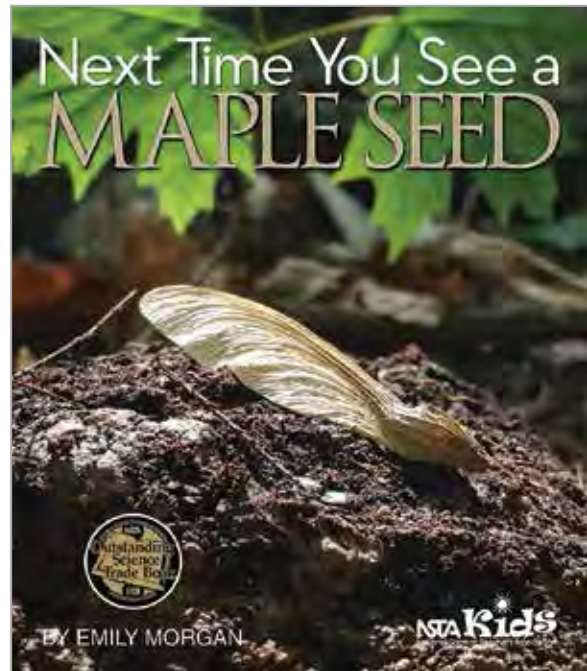
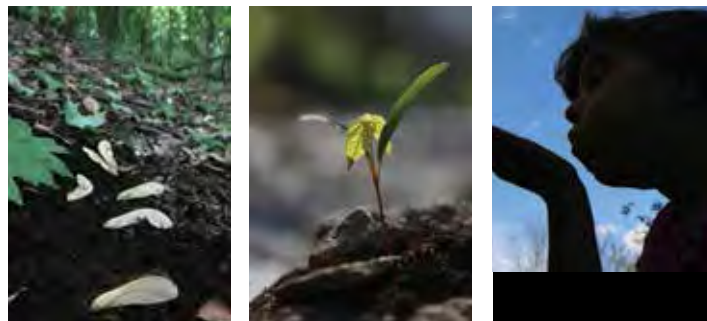


Next Time You See a Maple Seed

It’s fun to toss maple seeds up in the air and watch them twirl down to the ground like nature’s own helicopters. This book offers a close look at these marvels of aerial engineering, including the seeds’ real name (no, not *whirlybird*), the work they do for maple trees, and how to uncover the tiny trees waiting to grow from the spinning seedlings.

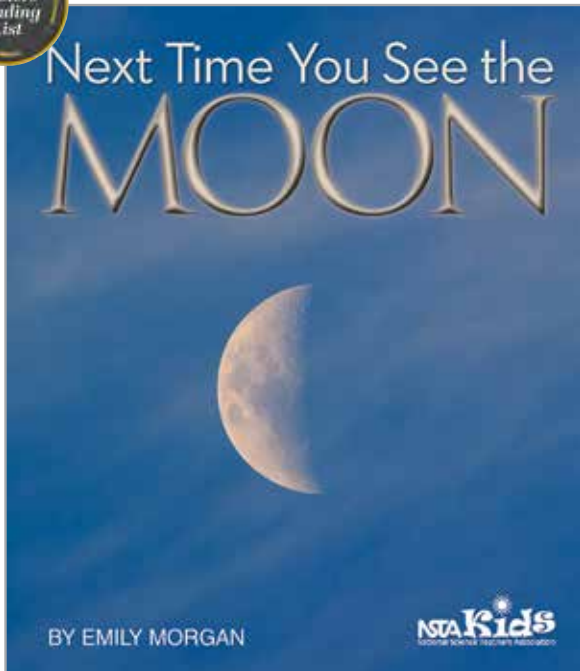
© 2014; ISBN: 978-1-938946-35-6; 32 pages; Lexile: 1040L

Stock #: PB329X6 E-book #: PKEB329X6 Book/E-book Set #: PKE329X6



About the Author

Emily Morgan is an author-educator who knows how to connect with children both intellectually and emotionally. A former elementary and middle school teacher, she cowrites the series *Picture-Perfect Science* and the “Teaching Through Trade Books” column in *Science and Children*, NSTA’s elementary-level journal.



Next Time You See the Moon

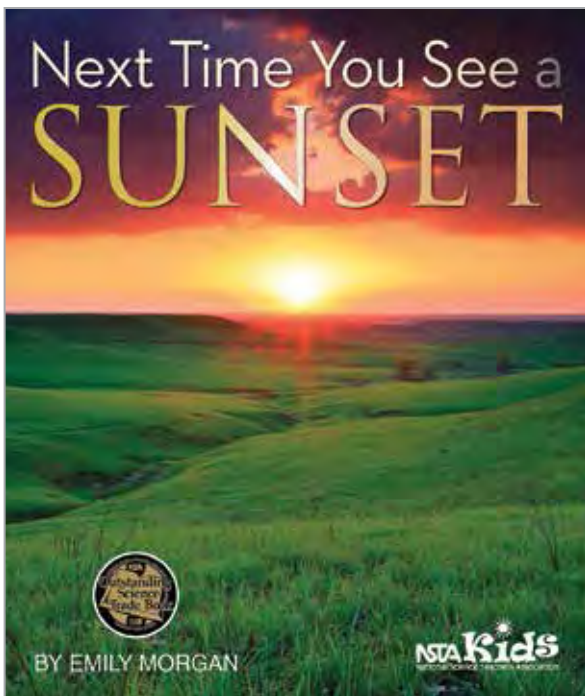
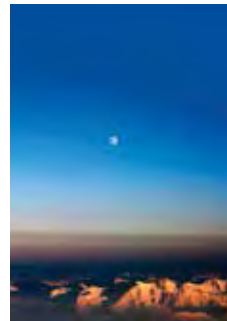
This fascinating book will stay with children every time they gaze up at the night sky. Through vivid pictures and engaging explanations, children will learn about many of the Moon's mysteries: why it looks like a silvery crescent one time and a chalk-white ball a few nights later, where it gets its light, and how scientists can predict the Moon's shape on your birthday a thousand years from now. Pack this book with a flashlight and blanket on a clear night, and you'll have an evening outing you'll never forget.

© 2014; ISBN: 978-1-938946-33-2; 32 pages; Lexile: 940L

Stock #: PB329X5

E-book #: PKEB329X5

Book/E-book Set #: PKE329X5



Next Time You See a Sunset

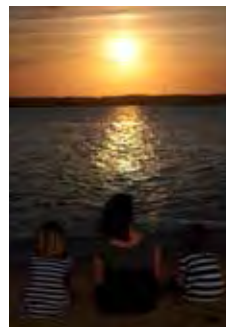
"Next time you see a sunset, stop and sit down for a while." This book's tempting opening line invites children and adults to take in a daily phenomenon with fresh eyes. Together they can learn to appreciate the spinning of the Earth, the progress of day into night, and the reasons for the spectacular colors and shadows that accompany so many sunrises and sunsets.

© 2013; ISBN: 978-1-936959-16-7; 32 pages; Lexile: 880L

Stock #: PB329X2

E-book #: PKEB329X2

Book/E-book Set #: PKE329X2





Next Time You See a Pill Bug

If curious children look closely, just under a nearby rock they'll spot a roly-poly pill bug. This book invites children and adults to gently pick the bug up and watch as it rolls into a ball and unrolls to take a walk. The better you get to know this tiny creature that's a cousin to lobsters and crabs, sheds its crusty skin, and tickles your hand with its 14 (count 'em!) wiggly legs, the more your fascination will grow.

© 2013; ISBN: 978-1-936959-17-4; 32 pages; Lexile: 900L
 Stock #: PB329X4 E-book #: PKEB329X4 Book/E-book Set #: PKE329X4



Spanish editions now available!

La próxima vez que veas una cochinilla (Next Time You See a Pill Bug)

Emily Morgan; Translated by Alicia B. Fuentes

© 2016; ISBN: 978-1-68140-289-5; 32 pages; e-ISBN: 978-1-68140-290-1
 Stock #: PB329X4SP Members: \$10.36 Non-members: \$12.95
 E-book #: PKEB329X4SP Members: \$8.42 Non-members: \$9.71
 Book/E-book Set #: PKE329X4SP Members: \$13.47 Non-members: \$16.84

La próxima vez que veas una puesta del sol (Next Time You See a Sunset)

Emily Morgan; Translated by Alicia B. Fuentes

© 2016; ISBN: 978-1-68140-282-6; 32 pages; e-ISBN: 978-1-68140-284-0
 Stock #: PB329X2SP Members: \$10.36 Non-members: \$12.95
 E-book #: PKEB329X2SP Members: \$8.42 Non-members: \$9.71
 Book/E-book Set #: PKE329X2SP Members: \$13.47 Non-members: \$16.84

La próxima vez que veas la luna (Next Time You See the Moon)

Emily Morgan; Translated by Alicia B. Fuentes

© 2016; ISBN: 978-1-68140-286-4; 32 pages; e-ISBN: 978-1-68140-287-1
 Stock #: PB329X5SP Members: \$10.36 Non-members: \$12.95
 E-book #: PKEB329X5SP Members: \$8.42 Non-members: \$9.71
 Book/E-book Set #: PKE329X5SP Members: \$13.47 Non-members: \$16.84





Next Time You See a Firefly

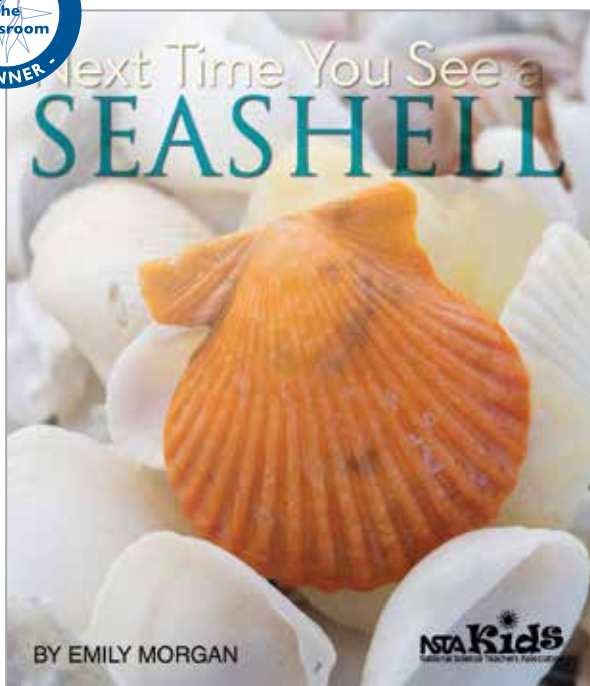
Share this book with a child, and together you'll see twinkling fireflies with new eyes. It explains why fireflies flash and how they live secret lives underground before coming out to fill the evening with their glimmers of light. You'll also discover why, if you catch a firefly, you must let it go: Fireflies have a lot to do!

© 2013; ISBN: 978-1-936959-18-1; 32 pages; Lexile: 890L

Stock #: PB329X3

E-book #: PKEB329X3

Book/E-book Set #: PKE329X3



Next Time You See a Seashell

This book tells the amazing story behind seashells: how they are grown by mollusks, used for protection and camouflage, and full of clues about all they've been through. Children are naturally intrigued by seashells and will find them even more fascinating when they discover that these beautiful objects come from slimy, snailly creatures.

© 2013; ISBN: 978-1-936959-15-0; 32 pages; Lexile: 810L

Stock #: PB329X1

E-book #: PKEB329X1

Book/E-book Set #: PKE329X1



Mrs. Carter's Butterfly Garden

Steve Rich

NSTA KIDS, GRADES K-3

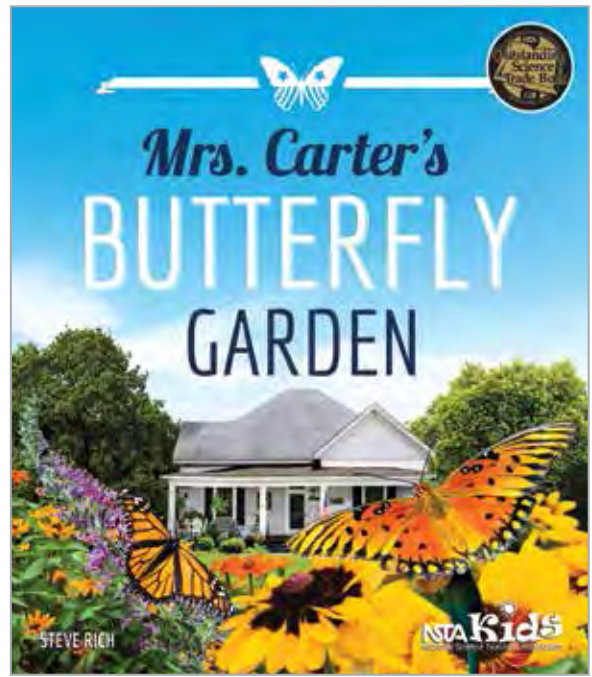
Inform and inspire young naturalists with this book about a very special butterfly garden. *Mrs. Carter's Butterfly Garden* is the story of how former First Lady Rosalynn Carter started a front yard project that grew into a butterfly-friendly trail through her hometown of Plains, Georgia. Learn from Mrs. Carter's example why it's good for people when butterflies have welcoming spaces and how kids can create their own butterfly gardens at home or school.

© 2015; ISBN: 978-1-941316-08-5; 32 pages; Lexile: AD 1120L

Stock #: PB352X1

E-book #: PKEB352X1

Book/E-book Set #: PKE352X1



Book	Members: \$10.36	Non-members: \$12.95
E-book	Members: \$8.42	Non-members: \$9.71
Book/E-book Set	Members: \$13.47	Non-members: \$16.84

My School Yard Garden

Steve Rich

NSTA KIDS, GRADES K-3

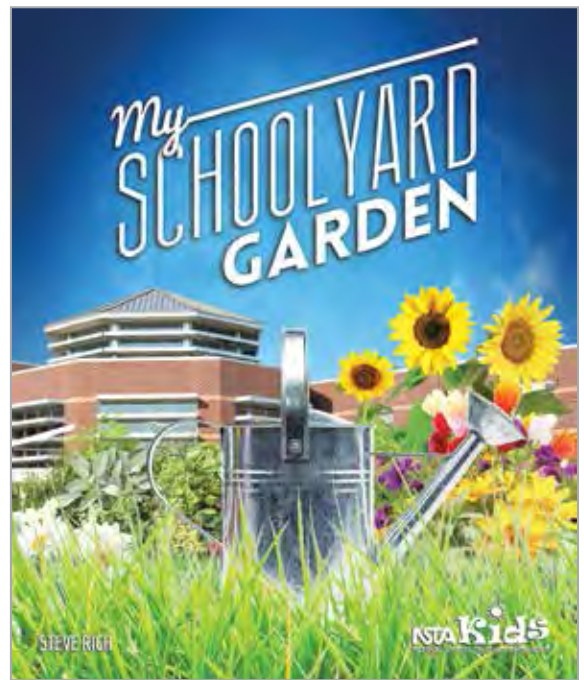
This colorful book takes students on a ramble through a school yard garden—past the seeding beds, along the compost bin, and over to the birdhouse and birdbath. Along the way, children learn what insects, animals, and plants need to thrive and discover the fun of observing and recording it all. *My School Yard Garden* proves you can learn a lot from a garden, no matter where it grows.

© 2015; ISBN: 978-1-938946-21-9; 32 pages; Lexile: AD 1110L

Stock #: PB352X2

E-book #: PKEB352X2

Book/E-book Set #: PKE352X2



About the Author
 Steve Rich writes based on his experiences as a teacher, state science specialist, nature enthusiast, and father. He holds degrees in agriculture and education and wrote the NSTA Press books *Outdoor Science: A Practical Guide* and *Bringing Outdoor Science In: Thrifty Classroom Lessons* (both on p. 55).



The *I Wonder Why* series was written to ignite the curiosity of children in grades K–6 while encouraging them to become avid readers. These books explore the marvels of light, color, machines, sound, and other phenomena related to physical science. Included in each volume is a Parent/Teacher Handbook with coordinating activities. The *I Wonder Why* series is written by an award-winning science educator and published by NSTA Kids, a division of NSTA Press.

Lawrence F. Lowery

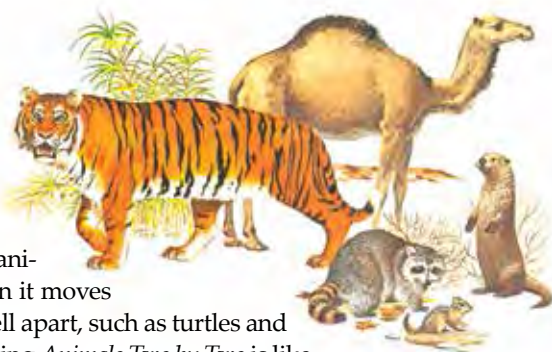
Book	Members: \$9.56	Non-members: \$11.95
E-book	Members: \$7.77	Non-members: \$8.96
Book/E-book Set	Members: \$12.43	Non-members: \$15.54



Animals Two by Two

NSTA KIDS, GRADES K-3

Children who love playing I Spy will have fun reading this book. To give kids practice identifying similarities and differences, the book starts by pairing easy-to-distinguish animals, such as zebras and horses. Then it moves on to duos that are more difficult to tell apart, such as turtles and tortoises and seals and sea lions. Reading *Animals Two by Two* is like taking a walk through the zoo with an eagle-eyed friend testing you about the differences between a frog and a toad or a mole and a vole!



© 2015; ISBN: 978-1-941316-28-3; 36 pages; Lexile: 570L
 Stock #: PB330X20 E-book #: PKEB330X20 Book/E-book Set #: PKE330X20



Clouds, Rain, Clouds Again

NSTA KIDS, GRADES K-6

The soothing narrative of this book encourages young readers to observe the many kinds of clouds, from thin wisps to puffy air castles to dark thunder ships. Then it raises the natural questions: Where do clouds get water? Why does it rain? Where do puddles go? The answers offer an easy-to-grasp picture of the water cycle while instilling curiosity about weather and science.

© 2013; ISBN: 978-1-938946-12-7; 36 pages; Lexile: 590L
 Stock #: PB330X7 E-book #: PKEB330X7 Book/E-book Set #: PKE330X7

About the Author

Lawrence F. Lowery taught in the Oakland, California, public schools before becoming a professor of science education at the University of California, Berkeley. He has more than 40 years' experience creating science activities and programs, developing curricula, and writing articles and books, including NSTA Press's publication *The Everyday Science Sourcebook*.

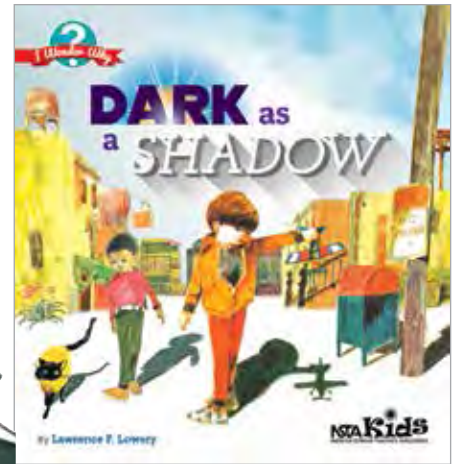
Dark as a Shadow

NSTA KIDS, GRADES K-6

Time for shadow play! After reading about how light and objects interact to create shadows, young children won't be able to resist twisting, wiggling, bending, and shaking to see the phenomenon for themselves. To add to the enjoyment, *Dark as a Shadow* is written in lively rhymes, making it even more fun to learn the science behind why shadows change length throughout the day and disappear in the dark.

© 2014; ISBN: 978-1-941316-06-1; 36 pages; Lexile: 580L

Stock #: PB330X15 E-book #: PKEB330X15 Book/E-book Set #: PKE330X15



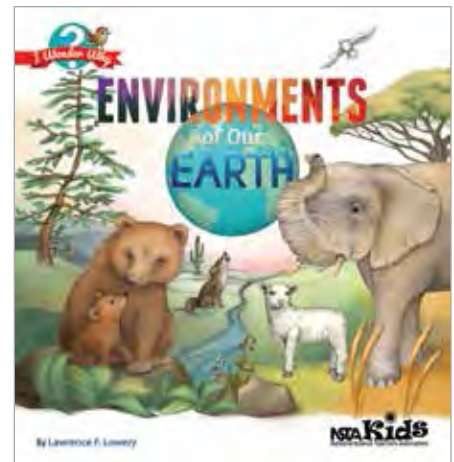
Environments of Our Earth

NSTA KIDS, GRADES K-6

Like a world tour between the covers of a book, *Environments of Our Earth* guides curious children through six types of regions that are shaped by rainfall—or the lack of it. The journey starts in dense tropical rainforests and timberlands, travels through grassy savannas and prairies, and ends with dry steppes and deserts. Readers can explore regional differences and rainfall's amazing effect on plants, animals, and people.

© 2013; ISBN: 978-1-938946-15-8; 32 pages; Lexile: 970L

Stock #: PB330X10 E-book #: PKEB330X10 Book/E-book Set #: PKE330X10



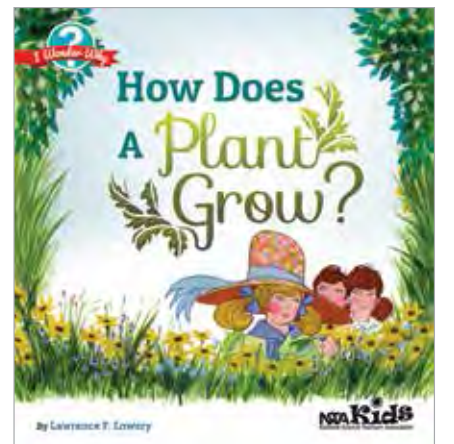
How Does a Plant Grow?

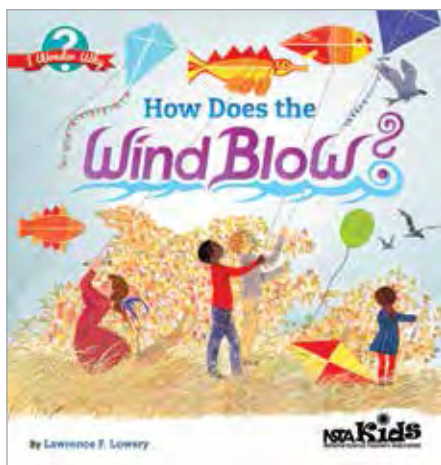
NSTA KIDS, GRADES K-6

Young readers are sure to be intrigued by the wide variety of shapes, sizes, and functions in flowers, fruit trees, and all sorts of other flora. *How Does a Plant Grow?* will inspire children to be newly alert to the many wonders of the plant world, from how seeds sprout to why leaves turn to the light to what makes tendrils grow tall.

© 2013; ISBN: 978-1-936959-47-1; 36 pages; Lexile: 420L

Stock #: PB330X3 E-book #: PKEB330X3 Book/E-book Set #: PKE330X3





How Does the Wind Blow?

NSTA KIDS, GRADES K-6

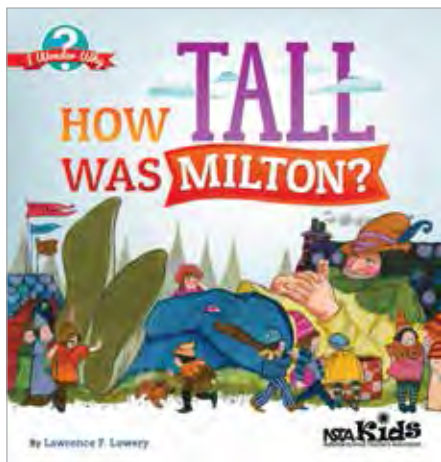
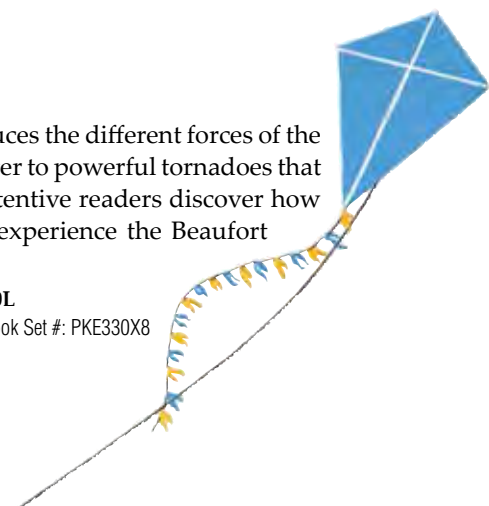
In text that flows like poetry, this book introduces the different forces of the wind, from gentle breezes that make flags flutter to powerful tornadoes that can hoist a house. As the book progresses, attentive readers discover how wind can be measured and even indirectly experience the Beaufort wind scale meteorologists use.

© 2013; ISBN: 978-1-938946-13-4; 36 pages; Lexile: 630L

Stock #: PB330X8

E-book #: PKEB330X8

Book/E-book Set #: PKE330X8



How Tall Was Milton?

NSTA KIDS, GRADES K-6

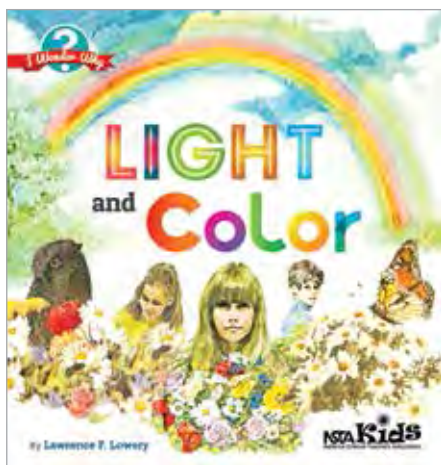
In this fairy tale, it takes a village to figure out the height of a friendly giant. The townspeople's earnest, yet humorous, attempts to gauge just how big Milton is convey the importance of standard units of measurement. The story even accounts for the real-life origin of such funny-sounding units as feet.

© 2013; ISBN: 978-1-936959-43-3; 36 pages; Lexile: 550L

Stock #: PB330X2

E-book #: PKEB330X2

Book/E-book Set #: PKE330X2



Light and Color

NSTA KIDS, GRADES K-6

This book unfolds as a series of observations about light, including where it comes from, how it bounces off of people and objects, and what we mean when we say the colors of a rainbow are the colors in light. Informal experiments prompt young scientists to learn by doing, and impressionistic drawings bring the mysteries of light and color to life. By the end, students will have a useful foundation to learn about energy, wavelengths, and the electromagnetic spectrum.

© 2014; ISBN: 978-1-938946-51-6; 36 pages; Lexile: 590L

Stock #: PB330X12

E-book #: PKEB330X12

Book/E-book Set #: PKE330X12

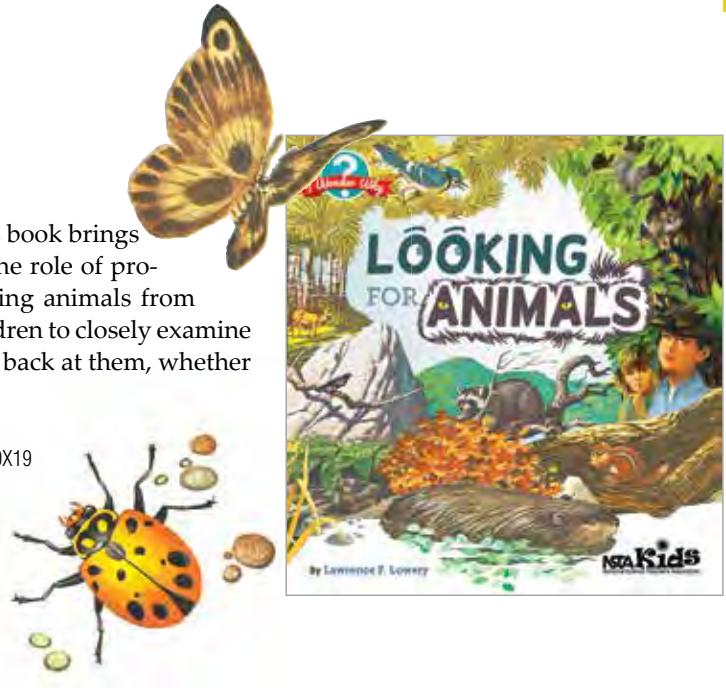
Looking for Animals

NSTA KIDS, GRADES K-3

By showing the same animals in two different settings, this book brings out the detective in young readers. They can investigate the role of protective coloration—nature’s own camouflage—in fascinating animals from bumblebees to beavers. The vivid examples encourage children to closely examine the characteristics of hidden creatures that may be looking back at them, whether from the pages of this book or in their own backyards.

© 2015; ISBN: 978-1-941316-27-6; 36 pages; Lexile: 570L

Stock #: PB330X19 E-book #: PKEB330X19 Book/E-book Set #: PKE330X19



Michael’s Racing Machine

NSTA KIDS, GRADES K-6

While building a soapbox racing car, two friends provide an easy-to-understand lesson in how simple machines are all around us. Michael and Luci show readers that a broom is a lever, nails are wedges, and a screwdriver is both a lever and a wheel and axle. The two also prove that curious children can be just like scientists, making observations and using *how* and *what* questions to explore physical science principles.

© 2014; ISBN: 978-1-941316-05-4; 36 pages; Lexile: 680L

Stock #: PB330X14 E-book #: PKEB330X14 Book/E-book Set #: PKE330X14



Our Very Own Tree

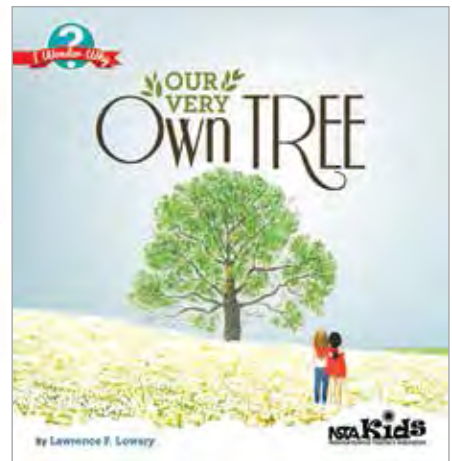
NSTA KIDS, GRADES K-3

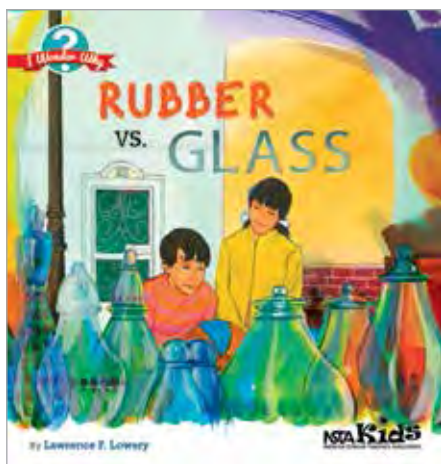
What happens when two friends take an interest in an oak tree? They begin to notice more about the world around them, such as the seasons changing and squirrels making homes. They are inspired to perform investigations, from studying acorns to looking up scientific terms, and to be creative, creating pictures, poems, scrapbooks, and artwork. They also discover new things, such as their tree’s structure—all because they stopped to look around them.

As dreamy as a summer day, *Our Very Own Tree* will inspire readers to seek out their very own places in nature.

© 2015; ISBN: 978-1-941316-24-5; 36 pages; Lexile: 480L

Stock #: PB330X16 E-book #: PKEB330X16 Book/E-book Set #: PKE330X16





Rubber vs. Glass

NSTA KIDS, GRADES K-6

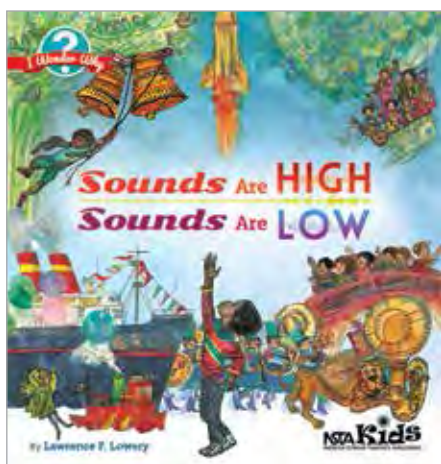
A friendly debate leads Bill and Mary to compare rubber balls, rafts, and gloves with glass marbles, greenhouses, and jars, objects that at first seem very different. A field trip shows that both rubber and glass can bend, bounce, stretch, and even melt. This story introduces the concept of properties. As scientists know, properties are characteristics that help us understand the traits of substances all around us if we observe closely.

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Sounds Are High, Sounds Are Low

NSTA KIDS, GRADES K-6

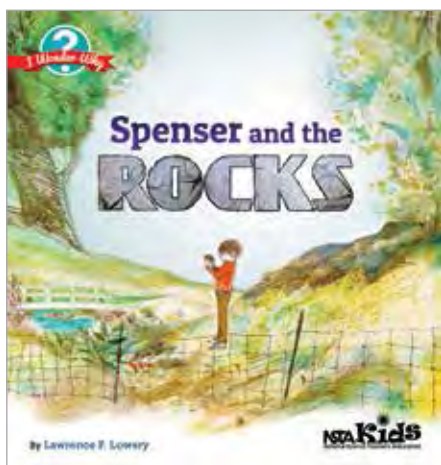
Here's proof of how fun it is to observe with your ears. A whimsical introduction to pitch and volume, this book practically begs young scientists to read it aloud. And why not? It's the best way to compare the differences among a telephone's high ring, a cow's low moo, a fire truck's loud clang, and more. *Sounds Are High, Sounds Are Low* is ideal for beginning readers and hilarious practice for future sound effects pros.

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Spenser and the Rocks

NSTA KIDS, GRADES K-6

In this tale of discovery, a curious boy asks himself, Do all rocks contain hidden surprises? The answer is definitely yes! His fascination grows as he sorts and re-sorts his rock collection and asks questions about what he observes. For Spenser—as well as the book's young readers—the experience is an engaging introduction to such scientific procedures as classification and research.

© 2013; ISBN: 978-1-938946-11-0; 36 pages; Lexile: 550L

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The Tree by Diane's House

NSTA KIDS, GRADES K-3

This book about life cycles and the food chain begs to be read out loud. Written in the rhythm of "The House That Jack Built," the book tells the story of a budding tree and a growing girl. After the tree grows from seed to sycamore, Diane sees a bittersweet end for the tree and the creatures that depended on it. The book shows young readers how an end can also be a new beginning in the natural world.

© 2015; ISBN: 978-1-941316-25-2; 36 pages; Lexile: 630L

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Up, Up in a Balloon

NSTA KIDS, GRADES K-6

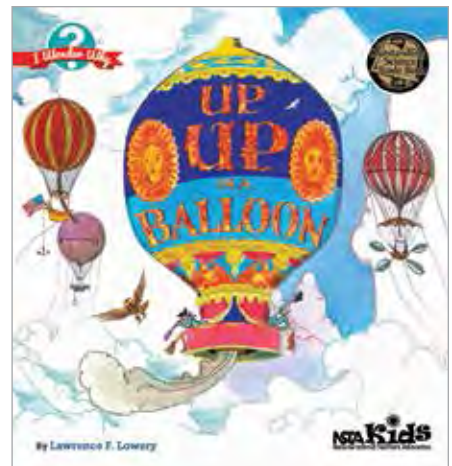
Young scientists will get both inspiration and the giggles from this silly but true tale. It tells how the first successful venture into human flight came about because of two French brothers, several paper bags, heated air, leaky cloth, hydrogen gas, a duck, a rooster, and a sheep. In addition to introducing scientific processes and principles of flight, it may prompt budding inventors to try, try again.

© 2013; ISBN: 978-1-938946-14-1; 36 pages; Lexile: 620L

Stock #: PB330X9

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What Can an Animal Do?

NSTA KIDS, GRADES K-6

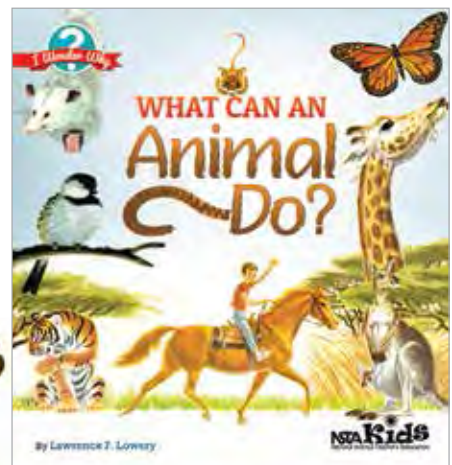
What can an animal do? All kinds of things! This book encourages children to notice the characteristics and behaviors of a world of different animals: from gnawing, swimming beavers to spinning, climbing spiders to hopping, baby-toting kangaroos. *What Can an Animal Do?* is a lively introduction to observing, comparing, and describing—all things budding scientists can do, too.

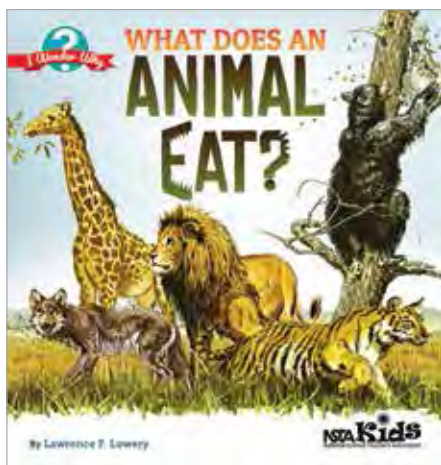
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Stock #: PB330X5

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What Does an Animal Eat?

NSTA KIDS, GRADES K-6

Kids who want to know all about animals will find this book fascinating. It offers insights into two special aspects of hungry animals: how their teeth and beaks offer clues to what they eat and the food chain's role in helping to make sure there's enough for all. Illustrated with detailed drawings, the book's simple explanations lay the foundation for a deeper understanding of animal adaptation and the need for human help to protect the food chain.

© 2013; ISBN: 978-1-936959-46-4; 36 pages; Lexile: 680L

Stock #: PB330X1

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What Makes Different Sounds?

NSTA KIDS, GRADES K-6

On their walk home from school, twins Jane and Jim explore why sounds can be startling (like sirens), soothing (like certain music), or mysterious (like eerie creaking in an empty house). Along the way, readers get an introduction to the roles that vibration, pitch, and volume play in how rustles, rumbles, and rat-a-tat-tats are made and transferred to our ears.

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