

# **YOUR LIBRARY IS THE COMMON CORE: CCSS, STEM/STEAM, and How Libraries Fit in with the New Push Toward Non-Fiction**

## **2014 ACL Institute Bibliography**

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## **Professional Resources**

### **General Common Core:**

Cappiello, Mary Ann, and Erika Thulin Dawes. **Teaching With Text Sets**. Shell Education, 2012.

*Walks you through the steps to create and use multi-genre, multimodal text sets for content area and language arts study, providing detailed information on choosing topics, locating and evaluating texts, organizing texts for instruction, and assessing student learning.*

Evan-Moor Educational Publishers. **Reading Paired Text: Common Core Mastery, Grade 1/2/3/4/5/6**. Evan-Moor, 2014.

*Featuring reading, writing, and vocabulary activities for pairing nonfiction and fiction texts, this series helps young people read a variety of text types, find and use text evidence, and write about the texts "using opinion, argument, informative, and explanatory forms."*

Harada, Violet H., and Sharon Coatney. **Inquiry and the Common Core: Librarians and Teachers Designing Teaching for Learning**. Libraries Unlimited, 2013.

*Explains how the standards' emphasis on in-depth investigation and evidence-based reading and writing skills dovetails perfectly with inquiry-based learning initiatives.*

Harvey II, Carl A., and Linda L. Mills. **Leading the Common Core Initiative: A Guide for K-5 School Librarians**. Libraries Unlimited, 2014.

*To be published in November 2014, of this one the publisher says: "Introduces the CCSS in English and mathematics to K-5 librarians and aides, helping them to understand the concepts, analyzing the impact on the school library, and providing lesson plans, resources, and other tools for implementation in integrated instruction with other curricula and collaborative teaching with other elementary teachers."*

Kaplan. **Parent's Guide to the Common Core: 3<sup>rd</sup> Grade/4<sup>th</sup> Grade/5<sup>th</sup> Grade/6<sup>th</sup> Grade**. Kaplan/Simon & Schuster, 2014.

*To be published in July 2014, the publisher says about this guide: "As a parent, it is important not only to understand the new standards, but also to have the tools to help your child do his or her best in school. This book is designed to provide you with the guidance and resources to support classroom learning and help your child succeed."*

Mardis, Marcia A. **The Collection's at the Core: Revitalize Your Library with Innovative Resources for the Common Core and STEM**. Libraries Unlimited, 2014.

*To be published in July 2014, the publisher states: "Digital resources offer a current, exciting direction to involve school librarians with their STEM teachers. With its specific focus on open digital multimedia learning resources, this book will enable school librarians to take advantage of this opportunity and evaluate, build, and maintain their STEM collections."*

McClure, Amy A., Kristo, Janice V., and Abigail Garthwait. **Teaching Children's Literature in an Era of Standards**. Pearson, 2014.

*To be published in April 2014, the publisher states: "Topics include responses to literature, teaching strategies for the focused use of children's books, supporting literacy development, fostering a love of reading, and chapters devoted to the major forms and genres of children's literature: picture books, poetry, traditional literature, fantasy and science fiction, contemporary realistic fiction, historical fiction, and nonfiction."*

Myracle, Jared. **Common Core Standards for Parents for Dummies**. For Dummies/Wiley, 2014.

*Written by a former member of the Tennessee Department of Education's Common Core Leadership Council, this entry in the Dummies series explains the new set of standards, what it means for students, and how parents can get their children prepared for the school year.*

Wadham, Rachel L. **Supporting the Common Core: A Guide for Youth Services and High School Librarians**. Libraries Unlimited, 2014.

*Amazon.com lists the publication date as May 2014, while most other booksellers list December 2014. No publisher information on the title at present, but it sounds like it could be exactly what we've been looking for! Keep an eye out for this one!!*

Werner-Burke, Nanci. **Beyond the Classroom: Collaborating with Colleagues and Parents to Build Core Literacy**. Routledge, 2014.

*To be published in July 2014, the publisher states: "Discover how to better meet the rigorous goals of the Common Core by opening new lines of communication with colleagues, parents, and students. Learn how to help parents understand what the Common Core is really asking and how they can partner with you to improve their children's skills at home."*

## **STEM/STEAM:**

The Exploratorium. **Exploralab**. Weldon Owen/Simon & Schuster, 2013.

*A hands-on activity guide from San Francisco's Exploratorium which aims to get kids to see that, in everyday life, everywhere around them is a possible laboratory.*

The Exploratorium. **Exploratopia: More Than 400 Kid-Friendly Experiments and Explorations for Curious Minds**. Little, Brown, 2006.

*San Francisco's Exploratorium presents a guide to innovative "experiments and explorations" that can be done with simple, everyday items.*

The Exploratorium Teacher Institute. **The Exploratorium Science Snackbook: Cook Up Over 100 Hands-On Science Exhibits from Everyday Materials**. Jossey-Bass, 2009.

*Step-by-step instructions for building "junior versions" of some of the Exploratorium's most popular and exciting exhibits.*

Ghoting, Saroj Nadkarni, and Pamela Martin-Diaz. **Storytimes for Everyone!: Developing Young Children's Language and Literacy.** ALA Editions, 2013.

*In addition to being an essential professional resource for other reasons, Chapter 5 ("Using Informational Books With Young Children") states the case for the importance of including informational books in storytimes for children ages 2 and up to expose them to science and mathematical knowledge and concepts. Also included are storytime planning guides and sample science experiments and math activities that can be easily replicated after storytime.*

Honey, Margaret, and David E. Kanter. **Design, Make, Play: Growing the Next Generation of STEM Innovators.** Routledge, 2013.

*Offers ways to inspire young budding scientists about science and technology learning, and highlights a number of programs alright tested in schools, museums, community centers, and virtual spaces. Aligned with the National Research Council's new Framework for Science Education.*

Howarth, Sue, and Linda Scott. **Success With STEM: Ideas for the Classroom, STEM Clubs and Beyond.** Routledge, 2014.

*The publisher notes: "Success with STEM is an essential resource, packed with advice and ideas to support and enthuse all those involved in the planning and delivery of STEM in the secondary school. It explains current initiatives to enhance STEM teaching and offers a wide range of practical activities to support exciting teaching and learning in and beyond the classroom."*

Isogawa, Yoshihito. **The LEGO Technic Idea Book: Simple Machines.** No Starch/O'Reilly Media, 2010. **(ENGINEERING)**

*Also available (same author and publisher) are The LEGO Technic Idea Book: Fantastic Contraptions, and The LEGO Technic Idea Book: Wheeled Wonders.*

Moomaw, Sally. **More Than Magnets: Exploring the Wonders of Science in Preschool and Kindergarten.** Redleaf Press, 1997.

*With more than 100 activities, this title aims to engage children in interactive science opportunities, while preparing teachers and caregivers to ask and answer questions.*

Morgan, Emily, and Karen Ansberry. **Picture-Perfect Science Lessons: Using Children's Books to Guide Inquiry.** National Science Teachers Association, 2013.

*Presents ready-to-teach lessons that use high-quality fiction and nonfiction picture books to guide hands-on science inquiry. Series which includes editions for different age ranges (K-5, 3-6), plus further titles (More Picture-Perfect Science Lessons, Even More Picture-Perfect Science Lessons).*

Oljace, Glory. **STEM is Elementary: Why Elementary Science, Technology, Engineering, and Mathematics Prepares Students to Beat the Gaps.** Lambert Academic Publishing, 2013.

*Clear explanations, vivid diagrams and step-by-step instructions for inspiring and preparing all students to succeed in STEM.*

Preddy, Leslie B. **School Library Makerspaces: Grades 6-12.** Libraries Unlimited, 2013.  
*Explains the Makerspace concept while providing real-world implementation guidance and inexpensive programming ideas that can be used as-is or adapted to suit a specific library or community's needs.*

Smallwood, Carol, and Vera Gubnitskaia. **How to STEM: Science, Technology, Engineering, and Math Education in Libraries.** Rowman & Littlefield. 2013.  
*By and for libraries who are involved in contributing efforts into advancing STEM subject areas. Presented in eight parts, each emphasizing a different aspect of how to succeed with STEM. Very thorough with information on grant writing, funding, community partnerships and research.*

Wilkinson, Karen, and Mike Petrich. **The Art of Tinkering.** Weldon Owen, 2014.  
*Bring the Maker Movement into your library with this new book profiling over 150 "Makers" and some of their most fascinating, and easily replicated, projects. Featuring conductive ink on the cover, this one is brought to us by the Exploratorium's Tinkering Studio.*

Yoder, Eric. **One Minute Mysteries: 65 Short Mysteries You Solve with Math!** Science Naturally! 2010.  
*Kids must tap into their critical thinking skills to solve these entertaining and educational mysteries. Each one-minute-long mystery challenges your knowledge of math in everyday life situations (solutions included).*

Yoder, Eric. **One Minute Mysteries: 65 Short Mysteries You Solve With Science!** Science Naturally! 2008.  
*Each one-minute mystery (solutions included) exercises critical thinking skills while covering earth, space, life, physical, chemical, and general science.*

## **Online Resources:**

### **Common Core:**

- <http://www.corestandards.org/>  
*"Official" website for the Common Core State Standards from the National Governors Association and the Council of Chief State School Officers.*

- **California Common Core State Standards:** <http://www.cde.ca.gov/re/cc/>  
*The California Department of Education website for the Common Core State Standards which includes information about fund allocation to school districts, as well as the implementation plan for the Standards, in California.*
- **State of California Department of Education – Brokers of Expertise – CCSS Professional Learning Modules:**  
<http://myboe.org/portal/default/Group/Viewer/GroupView?action=2&gid=2996>  
*EXTREMELY thorough learning modules (each lasting anywhere from an hour to 7 hours) that methodically walk one through all aspects of the Standards, including the CCSS English Language Development Standards, CCSS Literacy in Science, and Content Literacy for History/Social Studies and Technical Subjects. This could end up being your 1-Stop for becoming a Common Core expert!*
- **AASL Learning Standards and CCSS Crosswalk:**  
<http://www.ala.org/aasl/standards-guidelines/crosswalk>  
*Features tables which offer side-by-side comparisons of the Common Core State Standards and the AASL Standards for the 21<sup>st</sup>-Century Learner.*
- **ALSC Common Core resources page:** <http://www.ala.org/alsc/ccss-resources>  
*Resource page from the Association for Library Service to Children which highlights articles, blogs and websites focused on the connection between libraries/librarians and the Common Core State Standards.*
- **Achieve the Core:** <http://www.achievethecore.org/>  
*Run by Student Achievement Partners (who were lead writers of the CCSS), this resource is full of information on the Standards and where they came from, research supporting the CCSS, Common Core-aligned sample lessons, professional development modules, and, best of all, hopes that you'll "please steal these tools and share them with others."*
- **Catlin Tucker – Blended Learning & Technology in the Classroom:**  
<http://catlintucker.com/>  
*This teacher at the Windsor High School in Sonoma County has given webinars on Common Core, and writes extensively on how she is using technology with resounding success in her classroom to achieve the standards.*
- **The Classroom Bookshelf:** <http://classroombookshelf.blogspot.com/>  
*With a goal of identifying K-8 appropriate titles, this blog (edited by literacy professors from Lesley University in Cambridge, MA) aims to provide reviews of new children's and YA titles and provide ideas on how to incorporate them in the classroom. New posts are added weekly, and additional resources for further exploration are provided with each post.*
- **Great Kid Books Blog – Common Core in Real Libraries:**  
<http://greatkidbooks.blogspot.com/search/label/Common%20Core%20IRL>

*Featuring reviews of recent stellar nonfiction titles, this blog from MaryAnn Scheuer, school librarian and Chair of the Cybils Book Apps committee, offers up other titles on the same topic, but at different reading levels, and highlights which of the Common Core Standards each text covers.*

- **I.N.K – Interesting Nonfiction for Kids:** <http://inkrethink.blogspot.com/>  
*A librarian's dream website, I.N.K. features posts from those who are writing the amazing nonfiction books that we are putting in the hands of kids (Vicki Cobb, Steve Jenkins, David Schwartz) in which they describe their research and writing processes, make facts interesting and kid friendly, and discuss what topics they think authors should be writing about. A CCSS tab easily calls up posts which specifically refer to the Common Core Standards.*
- **National PTA CCSS Advocacy tools/FAQ/Toolkit:**  
<http://pta.org/advocacy/content2.cfm?ItemNumber=3008&navItemNumber=557>  
*Extensive coverage of the Common Core State Standards which includes a webinar series, state-specific assessment guides, a Parents' Guide to Student Success, and an Advocacy Toolkit.*
- **OK School Librarians – CCSS Resource wiki:**  
<http://okschoollibrarians.wikispaces.com/Common+Core+Resources>  
*Sizeable resource Wiki, including websites, links to articles, and videos, maintained by Tangient LLC, a wiki hosting service.*
- **Reading Rockets – Teaching Reading: The Common Core Standards:**  
<http://www.readingrockets.org/teaching/commoncore>  
*A national literacy initiative, Reading Rockets, hosts this site which includes extensive CCSS basics for beginners, as well as a dedicated section for librarians with links to sites that can help provide programming and support for teachers and parents.*
- **Scholastic – Common Sense for Common Core:**  
<http://commoncore.scholastic.com/home>  
*Includes themed booklists for a wide range of ages/grade levels, “expert videos”, and a section dedicated to resources for parents.*
- **SLJ:** <http://www.slj.com/2012/10/standards/common-core/sljs-resources-on-the-common-core/> & <http://www.slj.com/category/standards/common-core/>  
*An archive of School Library Journal's articles and discussions regarding Common Core (including many written by Marc Aronson in his SLJ column “Consider the Source”), as well as a multi-part webcast series “On Common Core”,*
- **Teaching With Text Sets:** <http://www.teachingwithtextsets.blogspot.com/>

*Created and maintained by the authors of "Teaching With Text Sets" (Shell Education, 2012), this companion to the printed text expands the discussion with new resources and the ability to have an ongoing conversation about how text sets can be most effectively used, as well as keeping readers up to date on the authors' upcoming speaking engagements.*

- **The Uncommon Corps – [Champions of Nonfiction Literature for Children and Young Adults](http://nonfictionandthecommoncore.blogspot.com/): <http://nonfictionandthecommoncore.blogspot.com/>**

*Started and maintained by notable names in children's nonfiction (including Marc Aronson and Kathleen Odean), The Uncommon Corps provides a forum for the authors to champion their favorite nonfiction and provide Common Core State Standards-based teaching ideas.*

- **Why Common Core Standards Matter:**

<http://whycommoncorestandardsmatter.wikispaces.com/Common+Core+Resources>

*Wiki led by East Coast librarians and Common Core presenters which features a number of web resources and links to relevant articles on Common Core.*

## **Critics of Common Core State Standards:**

- **Californians Against Common Core:** <http://cuacc.org/>

*Though there is no indication, outside of a "Supporters" list, who is behind the creation of this website/group, the site states: "The purpose of this website is: To expose the deception, dangers, lower standards, and enormous costs behind the Common Core State Standards Initiative; to educate and motivate the public as to why Californians should be opposing Common Core, and why we should be exerting every effort to stop California from going forward with the CC curriculum, standards and Assessment tests."*

- **Stop Common Core – Reclaiming Local Control in Education:**

<http://stopcommoncore.com/>

*There is no indication as to who is behind the creation of this website/group, but they seem to be based in Georgia.*

- **Truth in American Education:** <http://truthinamericaneducation.com/>

*A national, non-partisan group of parents and citizens who believe that the Common Core State Standards (CCSS), CCSS assessments, and state longitudinal data systems development, along with associated privacy issues, are being implemented nationwide with insufficient research-based evidence and insufficient public examination and discourse.*

## **STEM/STEAM:**



**\*\*The very idea of STEM/STEAM is that each discipline not be discussed/focused on in isolation, but in congruence with the others. Therefore, as should be true in all cases, these links are categorized under the heading for which they MOST match, but definitely have crossover.**

## **General:**

- **Afterschool Alliance:** <http://www.afterschoolalliance.org/STEM.cfm>

*The Alliance works to ensure that all youth have access to affordable, quality afterschool programs by engaging public will to increase public and private investment in quality afterschool program initiatives at the national, state and local levels.*

- **California STEM Learning Network:** <http://cslnet.org/>

*With the vision that "all students in California have the knowledge and skills needed for success in education, work and their daily lives," California STEM Learning Network aims to link all California STEM-related programs and advocate for high quality STEM teaching throughout the state.*

- **California STEM Learning Network Out-of-School-Time:**

<http://powerofdiscovery.org/>

*A partnership between the California STEM Learning Network and the California AfterSchool Network which supports schools and community-based organizations to expand STEM learning opportunities for all students in California.*

- **Gateways East Bay STEM Network:** <http://www.eastbaystem.net/wp/>

*Affiliated with the California STEM Network.*

- **National Girls Collaborative Project – Directory of Programs in California STEM (CalGirls) Collaborative Project:**

<http://www.ngcproject.org/collaborative/california-girls-stem-calgirls-collaborative-project/programs>

*A listing of programs and organizations aimed at motivating girls to pursue careers in the STEM areas. A thorough networking site that has program descriptions, resources available at each organization, and multiple ways to contact these potential partners.*

- **The Show Me Librarian – All Things STEAM:**

<http://showmelibrarian.blogspot.com/p/all-things-steam.html>

*One-stop STEAM resource for librarian led programs by Amy Koester, children's librarian for St. Charles City-County Library District's Corporate Parkway Branch in Wentzville, MO.*

- **Simply STEM – Simple Ideas for STEM Programming in Libraries:**

<http://simplystem.wikispaces.com>

*An open source Wiki where librarians can find and share activities, plans, and resources for simple STEAM programs.*

- **STEM Connector – One Stop Shop for STEM Information:**

<http://www.stemconnector.org/california>

*In addition to providing a newsletter aggregating news items in STEM education, this site is a directory of national, state, local and Federal STEM organizations.*

- **STEM Education Coalition:** <http://www.stemedcoalition.org/reports/>

*Washington, D.C., based organization whose mission is “to inform federal and state policymakers on the critical role that STEM education plays in U.S. competitiveness and future economic prosperity and to advocate for policies that will improve STEM education at every level.”*

## **Science:**

- **Bay Area Science Festival:** <http://www.bayareascience.org/>

*Includes an extensive calendar of science-based programs being held in the Bay Area year-round.*

- **BaySci – A Partnership for Bay Area Science Education:** <http://www.baysci.org/>

*Based out of the Lawrence Hall of Science, the goal of BaySci is to strengthen inquiry-based elementary science instruction in the Bay Area through partnerships and a network of local “science-rich educational institutions (SREIs)”, school districts, and teachers.*

- **Biological Exceptions – As Many Exceptions as Rules:**

<http://biologicalexceptions.blogspot.com/>

*Mark E. Lasbury (MS, MEd, PhD), staff member at Indianapolis Marion County Public Library, runs this website for middle and upper grade budding scientists which tackles a different topic every week, telling “the stories of organisms that break biological rules or norms in order to survive and thrive.”*

- **California Academy of Sciences:** <http://www.calacademy.org/>

*Though primarily a site to highlight the activities at the California Academy of Sciences in Golden Gate Park, there are also webcams (Farallones, shark lagoon, penguins) and a Science Today section which highlights important science stories from around the globe.*

- **Coalition for Science After School:** <http://afterschoolscience.org/>

*Provides a National After School Science directory, maintains a catalogue of coalition projects and conferences, and highlights articles relevant to providing science in out-of-school settings. Based out of the Lawrence Hall of Science in Berkeley.*

- **Exploratorium:** <http://www.exploratorium.edu/>

*Now sporting a spectacular new location on Pier 15 in San Francisco, the Exploratorium truly is “a twenty-first-century learning laboratory, an eye-opening, always-changing, playful place to explore and tinker.” Their website also offers a wealth of activities to explore online including “The Science of Cooking”, optical illusions, and an investigation into “The Physics of Skateboarding Tricks”, to name just an absolute few.*

- **How to Smile.org – All the Best Science & Math Activities:** <http://howtosmile.org/>  
*Based out of UC Berkeley's Lawrence Hall of Science, SMILE (Science and Math Informal Learning Educators) is a free listing of more than 3,600 science and math activities especially geared toward educators of children in non-classroom settings.*
- **Lawrence Hall of Science:** <http://www.lawrencehallofscience.org/>
- **Mission Science Workshop:** <http://www.missionscienceworkshop.org/>  
*Housed in Mission High School in San Francisco, this organization combines traditional science experiences with project building. They host a Whale Week program in which they will bring a 36' whale skeleton to your community!*
- **NASA's Climate Kids:** <http://climatekids.nasa.gov/>  
*Produced by the Earth Science Communications Team at NASA's Jet Propulsion Laboratory / California Institute of Technology, NASA's Climate Kids website brings the exciting science of climate change and sustainability to life. Targeting upper-elementary-aged children, the site is full of interactive games, hands-on activities, and engaging articles that make climate science accessible and fun. With a special section for educators, Climate Kids is great for parents and teachers as well. With clear explanations for the big questions in climate science, you will be a climate expert in no time!*
- **NASA's SciJinks:** <http://scijinks.jpl.nasa.gov/>  
*NOAA (National Oceanic and Atmospheric Administration) and NASA have joined forces to create the ultimate weather website. Targeting middle school students, SciJinks makes the science of weather fun and engaging with exciting and accessible content, games, and multimedia. Find answers to mysteries like our changing seasons, lightning, hurricanes, tornadoes, and other curious phenomenon. There are videos, lots of printable images and posters, and lots of other help for teachers.*
- **NASA's Space Place:** <http://spaceplace.nasa.gov/>  
*NASA's award-winning Space Place website engages upper-elementary-aged children in space and Earth science through interactive games, hands-on activities, fun articles, and short videos. With material in both English and Spanish and numerous resources for parents and teachers, Space Place has something for everyone. Learn about everything from black holes and wild space weather to the reasons for seasons here on Earth. The Space Place has material on space, the Sun, the Solar System, our own planet, and the scientists and technology that make discovery possible.*
- **National Center for Science Education:** <http://ncse.com/>  
*Based out of Oakland, the National Center for Science Education is a non-profit organization that provides information and resources for schools, parents, press, etc. on keeping evolution and climate science in public school science education.*
- **ZettaTech – Science for Everyone:** <http://www.zettatechscience.com/>

*Hosts of after-school programs, classes, demonstrations, seasonal camps, and private events, ZettaTech offers open-ended projects built around discovery through science and art.*

## **Technology:**

- **Carnegie Mellon Robotics Academy:**

<http://www.education.rec.ri.cmu.edu/index.htm>

*The Robotics Academy develops tools for teachers that make it easier to implement robotics in today's classrooms with curriculum that is research-based, aligned with standards, and focused on the development of 21st century skill sets in students.*

## **Engineering:**

- **LEGO Education WeDo Robotics:**

<http://www.legoeducation.us/eng/categories/products/elementary/lego-education-wedo>

*Though not particularly cheap, these are great sets to use for "school age" library programming as they are self-contained, come with an extensive curriculum guide and software, and have projects with clear step-by-step instructions. In addition, all projects are split into two parts/booklets so that 2 children may each work on a portion, marrying their creations in the end to form a single project. It should be noted that a laptop loaded with the accompanying software is necessary to animate the projects.*

- **LEGO Engineering:** <http://www.legoengineering.com/get-started/>

*For any library interested in getting into LEGO robotics, this site provides help on choosing the right kit, managing a classroom project, and what to do with all of those little pieces!*

- **Play-Well TEKnologies:** <http://www.play-well.org/>

*Champions of "learning through play", Play-Well has an activity center in Pleasanton, and offers classes and camps built around using LEGOs to foster pre-engineering skills.*

## **Arts:**

- **San Francisco Children's Creativity Museum:** <http://creativity.org/>

*Formerly known as Zeum, and billed as "an interactive art and technology museum for kids", the San Francisco Children's Creativity Museum provides opportunities for children and their families to create media projects celebrating creativity.*

## **Math:**

- **Cool Math 4 Kids:** <http://www.coolmath4kids.com/>

*"An amusement park of math" which offers an endless wealth of games touching upon all areas of math and its various forms, from fractions and times tables to jigsaw puzzles and tessellations. Link to this one on your children's computers!*

## **Resources for Use With Young People**

\*\*What follows is a list of great informational picture books to read aloud for storytimes or primary grade classes, containing both factual information as well as a story narrative. Most of these hybrid nonfiction picture books meet the Common Core standard that 50% of the books read by elementary school students be nonfiction/informational. Also, check out your collection of concept books; many alphabet and counting books contain factual information about the items used in the book.

### **Books About Science for Storytime:**

- Aston, Dianna. **An Egg is Quiet**. Illus. by Sylvia Long. Chronicle, 2006. Gr. K-4.  
*Detailed illustrations show over fifty eggs and the birds that emerge from them.*
- Berkes, Marianne. **Going Around the Sun: Some Planetary Fun**. Illus. by Janeen Mason. Dawn, 2008. Gr. K-2.  
*The planets of the Solar System are described in a rhyming text based on "Over In the Meadow."*
- Berkes, Marianne. **Over In the Forest: Come and Take a Peek**. Illus. by Jill Dubin. Dawn, 2012. Gr. pre-2.  
*Animals of the temperate forest habitat are celebrated in this tale based on the song "Over In the Meadow."*
- Berkes, Marianne. **Over In a River: Flowing Out to the Sea**. Illus. by Jill Dubin. Dawn, 2013. Gr. pre-2.  
*Using the folksong "Over In the Meadow" as the basis for the rhyming text, animals who live at various rivers in the United States are profiled.*
- Berkes, Marianne. **The Tree That Bear Climbed**. Illus. by Kathleen Rietz. Sylvan Dell, 2012. Gr. K-2.  
*Using "The House That Jack Built" as the model for the cumulative text, this shows the various parts of a tree and the bees that live there.*
- Brocket, Jane. **Cold, Crunchy, Colorful: Using Our Senses**. Millbrook, 2014. Gr. pre-2.  
*Color photos illustrate this look at using your five senses, with a brief but lively text appropriate for very young children.*
- Brown, Ruth. **Ten Seeds**. Illus. by Ruth Brown. Andersen Press, 2010. Gr. pre-K.  
*Ten sunflower seeds are planted, and Brown describes various obstacles in the way of growing up to be a plant.*
- Browne, Anthony. **One Gorilla: A Counting Book**. Candlewick, 2012. Gr. pre-2.  
*A variety of primates are counted in this engaging book.*
- Cobb, Vicki. **I Face the Wind**. Illus. by Julia Gorton. HarperCollins, 2003. Gr. K - 2.  
*Cobb explains the scientific principles behind wind in a way that's easy to understand.*
- Cobb, Vicki. **I Fall Down**. Illus. by Julia Gorton. HarperCollins, 2004. Gr. K - 2.

*Cobb explains the scientific principles behind gravity in a way that's easy to understand.*

Cobb, Vicki. **I Get Wet.** Illus. by Julia Gorton. HarperCollins, 2002. Gr. K - 2.  
*Cobb explains the scientific principles behind water in a way that's easy to understand.*

Cobb, Vicki. **I See Myself.** Illus. by Julia Gorton. HarperCollins, 2002. Gr. K - 2.  
*Cobb explains the scientific principles behind light and reflection in a way that's easy to understand.*

Cowley, Joy. **Chameleon, Chameleon.** Photos by Nic Bishop. Scholastic, 2005.  
Gr. pre-1.  
*A chameleon travels in the rain forest, searching for a new home, and meets several creatures along the way.*

Cowley, Joy. **Red-Eyed Tree Frog.** Photos by Nic Bishop. Scholastic, 1999. Gr. pre-1.  
*Bishop's stunning photographs show a tree frog's adventures one night in the rain forest. Cowley includes a lengthy endnote with more facts about the frog and all those he encounters in the rain forest.*

Ehlert, Lois. **Eating the Alphabet: Fruits and Vegetables from A to Z.** Illus. by Lois Ehlert. Houghton Mifflin, 1993. Gr. pre-K.  
*Ehlert illustrates fruits and vegetables from apples to zucchini.*

Ehlert, Lois. **Feathers for Lunch.** Illus. by Lois Ehlert. Houghton Mifflin Harcourt, 1990.  
Gr. pre-K.  
*The cat got out, but can he catch his chosen lunch? Ehlert provides facts about the birds in several spreads at the end of the book.*

Ehlert, Lois. **Waiting for Wings.** Illus. by Lois Ehlert. Houghton Mifflin Harcourt, 2001. Gr. pre-2.  
*Ehlert recreates the excitement as eggs become caterpillars, then butterflies.*

Fleming, Denise. **UnderGROUND.** Illus. by Denise Fleming. Beach Lane Books, 2012. Gr. pre-K.  
*A "Creature Identification" spread at the end allows the reader to learn more about each of the creatures shown in Fleming's book about life underground.*

French, Vivian. **Growing Frogs.** Candlewick, 2000. Gr. K-3.  
*A little girl watches tadpoles develop into frogs in this factual story with vibrantly painted illustrations.*

French, Vivian. **Yucky Worms.** Candlewick, 2009. Gr. K-2.  
*While helping grandma in the garden, a child learns about the importance of worms in a plants life cycle.*

Gray, Rita. **Have You Heard the Nesting Bird?** Illus. by Kenard Pak. Houghton Harcourt, 2014. Gr. pre-2.

*A boy and girl stroll through their neighborhood and hear various birds calling in this rhyming tale.*

Greenstein, Elaine. **One Little Seed**. Illus. by Elaine Greenstein. Viking, 2004. Gr. pre-K. *Greenstein's simple text describes the life cycle of a sunflower.*

Houran, Lori H. **Dig Those Dinosaurs**. Illus. by Francisca Marquez. Whitman, 2013. Gr. pre-K. *A rhythmic text follows some paleontologists as they uncover and study dinosaur bones.*

Houran, Lori H. **A Trip Into Space: An Adventure to the International Space Station**. Illus. by Francisca Marquez. Whitman, 2014. Gr. pre-1. *A brief but lively look at life on the International Space Station.*

Hulbert, Laura. **Who Has These Feet?** Illus. by Erik Brooks. Henry Holt, 2011. Gr. pre-1. *Hulbert invites readers to guess each animal based on its feet, then explains why its feet are suited to its environment.*

Hulbert, Laura. **Who Has This Tail?** Illus. by Erik Brooks. Henry Holt, 2012. Gr. pre-1. *Hulbert invites the reader to guess the owner of nine different tails and explains why each tail helps its owner.*

Jenkins, Steve. **Actual Size**. Illus. by Steve Jenkins. Houghton Mifflin, 2004. Gr. K-4. *Jenkins's illustrations show both the appearance and the size of animals, which he describes in brief captions and explanatory notes in the back of the book.*

Jenkins, Steve and Robin Page. **My First Day**. Illus. by Steve Jenkins. Houghton Mifflin, 2013. Gr. pre-2. *Jenkins and Page describe the first day of life for several animals, including a Siberian tiger and an emperor penguin.*

Levine, Sara. **Bone by Bone: Comparing Animal Skeletons**. Illus. by T.S. Spookytooth. Millbrook, 2013. Gr. K-2. *Using a question and answer format, the human skeleton is compared to various animal skeletons.*

Lunde, Darrin. **Hello, Baby Beluga**. Illus. by Patricia J. Wynne. Charlesbridge, 2011. Gr. pre-2. *A direct text follows a beluga whale in the Arctic, describing its surroundings.*

Lunde, Darrin. **Hello, Bumblebee Bat**. Illus. by Patricia J. Wynne. Charlesbridge, 2007. Gr. pre-2. *In this Geisel Honor Award book, a small bat describes its environment.*

Lunde, Darrin. **Hello, Mama Wallaroo**. Illus. by Patricia J. Wynne. Charlesbridge, 2013. Gr. pre-2. *A simple text describes a wallaroo family, paired with realistic watercolor and colored pencil illustrations.*

MacDonald, Suse. **Peck, Slither and Slide**. Illus. by Suse MacDonald. Harcourt, 1997. Gr. pre - K.

*MacDonald pairs ten verbs with animals in their natural habitats, including a lengthy endnote that gives more detail about each animal.*

Mitchell, Susan K. **The Rainforest Grew All Around**. Illus. by Connie McLennan. Sylvan Dell, 2007. Gr. 1-3.

*Mitchell's tale is both cumulative and cyclical, featuring sidebars that give facts about the animals and plants of the rainforest.*

Salas, Laura Purdie. **A Leaf Can Be**. Illus. by Violeta Dabija. Millbrook, 2012. Gr. K-2.

*Rhyming couplets describe leaves, with several examples of how leaves help the environment.*

Salas, Laura Purdie. **Water Can Be**. Illus. by Violeta Dabija. Millbrook Press, 2014. Gr. pre-3.

*Short rhyming couplets describe the different uses for water, followed by more information on the properties of water.*

Sayre, April Pulley. **Eat Like a Bear**. Illus. by Steve Jenkins. Holt, 2013. Gr. K-2.

*Full color paper collage illustrations are a standout in this lively description of a Yellowstone bear.*

Sayre, April Pulley. **Rah, Rah, Radishes! A Vegetable Chant**. Beach Lane, 2011. Gr. pre-2.

*Vegetables at the farmers' market are celebrated in this photo-filled rhyming book.*

Sayre, April Pulley. **Go, Go, Grapes! A Fruit Chant**. Beach Lane, 2012. Gr. pre-2.

*Common and unusual fruits get equal acclaim in this rhyming story paired with color photos.*

Sayre, April Pulley. **Let's Go Nuts! Seeds We Eat**. Beach Lane, 2013. Gr. pre-2.

*A rhyming text and full color photos combine to make a lively look at seeds we eat.*

Schaefer, Lola. **This is the Sunflower**. Illus. by Donald Crews. Greenwillow, 2000. Gr. pre-K.

*Schaefer's cumulative tale describes how birds help in the life of a sunflower. The bird varieties are identified at the end of the book.*

Stewart, Melissa and Allen Young. **No Monkeys, No Chocolate**. Illus. by Nicole Wong. Charlesbridge, 2013. Gr. 1 - 3.

*Stewart and Young start with chocolate and work backward through a cocoa tree's lifecycle.*

Stockdale, Susan. **Bring on the Birds**. Peachtree, 2011. Gr. pre-1.

*Simple rhymes describe 21 species of birds, accompanying acrylic illustrations of each bird. A picture glossary in the back describes each species.*

Stockdale, Susan. **Fabulous Fishes**. Peachtree, 2008. Gr. pre-2.

*Several fish are described in this rhyming story with plenty of factual information.*

Stockdale, Susan. **Stripes of All Types**. Illus. by Susan Stockdale. Peachtree, 2013. Gr. pre-2.



*Short rhyming couplets describe various striped animals, depicted in realistic acrylic paintings. Back matter includes a paragraph on each animal and a guessing game.*

Taback, Simms. **Dinosaurs**. Illus. by Simms Taback. Blue Apple Books, 2012. Gr. pre-K. *As the child lifts flaps, Taback gives hints about each dinosaur's identity, eventually revealing each dinosaur's name.*

Tafuri, Nancy. **Spots, Feathers and Curly Tails**. Illus. by Nancy Tafuri. HarperCollins, 1988. Baby-Toddler. *A simple question-and-answer format and eye-catching illustrations make this best for babies and toddlers.*

Ward, Jennifer. **Mama Built a Little Nest**. Illus. by Steve Jenkins. Beach Lane, 2014. Gr. pre-2. *Jenkins' signature cut paper collages illustrate this look at birds' nests, paired with four line rhymes describing the nests.*

### **Books About Technology and Engineering for Storytime:**

Biggs, Brian. **Everything Goes: By Sea**. Balzer + Bray, 2013. Gr. pre-K. *In this interactive book with hidden pictures, all the different types of water vehicles are celebrated.*

Biggs, Brian. **Everything Goes: In the Air**. Balzer + Bray, 2012. Gr. pre-K. *Henry and his parents learn about all types of flying vehicles.*

Biggs, Brian. **Everything Goes: On Land**. Balzer + Bray, 2011. Gr. pre-K. *Seek and find details make this tale of Henry and his dad an engaging look at vehicles.*

Kelly, Mark. **Mousetronaut Goes to Mars**. Illus. by C.F. Payne. S&S, 2013. Gr. pre-2. *A mouse is part of the crew that journeys to Mars in this engaging story written by a former astronaut.*

### **Books About Art for Storytime:**

Morris, Ann. **Bread, Bread, Bread**. HarperCollins, 1989. Gr. pre-K. *In a series of books, Morris demonstrates a simple concept using color photos from around the world to show the universality of mankind. Other titles include:*  
*Families, 2000*  
*Teamwork, 1999*  
*Work, 1998*  
*Play, 1998*  
*Shoes, Shoes, Shoes, 1995*  
*Tools, 1992*  
*Houses and Homes, 1992*  
*On the Go, 1990*  
*Loving, 1990*  
*Hats, Hats, Hats, 1989*

**\*\*Here is a STEAM list for school-aged children. This list is long, so it is divided into each of the five sections (science, technology, engineering, art, and mathematics). In each of these sections, books are arranged roughly by grade level, then by author.**

### **Science - Elementary School:**

Adler, David. **Things That Float and Things That Don't**. Illus. by Anna Raff. Holiday House, 2013. Gr. K-2. Unpaged.

*Adler's clear text and Raff's cartoonlike illustrations make the concept of density clear to the reader.*

Arnosky, Jim. **All About Frogs**. Scholastic. Gr. 1-4. Unpaged.

*Everything you need to know: how they develop, why they can jump so far, what they eat, what eats them -- and more!*

Arnosky, Jim. **Shimmer and Splash: the Sparkling World of Sea Life**. Sterling, 2013. Gr. 2-5. 41 p.

*Arnosky's foldout illustrations allow the reader to feel immersed in the ocean while learning about some of the creatures that live there.*

Berne, Jennifer. **On a Beam of Light: a Story of Albert Einstein**. Illus. by Vladimir Radunsky. Chronicle Books, 2013. Gr. 2-5. Unpaged.

*Einstein asked many questions and persevered to find the answers. Radunsky's illustrations convey some of the excitement and wonder of Einstein's discoveries.*

Bishop, Nic. **Snakes**. Scholastic, 2012. Gr. 3-5. 48 p.

*With fascinating images and engaging text, learn why snakes do what they do and why they look the way they do.*

Butterworth, Chris. **See What a Seal Can Do**. Illus. by Kate Nelms. Candlewick, 2013. Gr. K-3. 28 p.

*Seals might look lazy while basking in the sun, but underwater they are quite different. Butterworth describes their activities with lively turns of phrase.*

Cate, Annette LeBlanc. **Look Up! Bird-Watching in Your Own Backyard**. Candlewick, 2013. Gr. 3-5. 51 p.

*Discover how fun bird-watching can be.*

Coleman, Janet. **Eight Dolphins of Katrina: a True Tale of Survival**. Illus. by Yan Nascimbene. Houghton Mifflin Harcourt, 2013. Gr. 2-5. Unpaged.

*Eight dolphins were swept into the Gulf of Mexico after their home at the Oceanarium was destroyed during Hurricane Katrina. Coleman describes their rescue here, including information about dolphins.*

Cooke, Lucy. **A Little Book of Sloth**. Photographs by Lucy Cooke. Margaret K. McElderry, 2013. Gr. 2-5. 58 p.

*Cooke tells about sloths in a Costa Rican sanctuary; her full-color photographs are full of vivid details (such as sloths in pajamas!).*

Crump, Marty. **Mystery of Darwin's Frog**. Illus. by Steve Jenkins and Edel Rodriguez. Boyds Mills Press, 2013. Gr. 3-6. 39 p.

*In 1834, Charles Darwin discovered an exotic frog that researchers learned surprising facts about, including the fact that males are responsible for the young.*

DeCristofano, Carolyn Cinami. **A Black Hole Is Not a Hole**. Illus. by Michael Carroll. Charlesbridge Publishing, 2012. Gr. 3-5. 74 p.

*What is a black hole? Find out in this easy-to-understand and engaging book.*

Guiberson, Brenda. **Frog Song**. Illus. by Gennady Spirin. Henry Holt, 2013. Gr. K-3. Unpaged.

*Both the text and beautiful illustrations by Gennady Spirin help explain the vital role frogs play in environmental balance.*

Guiberson, Brenda. **Greatest Dinosaur Ever**. Illus. by Gennady Spirin. Henry Holt, 2013. Gr. K-4. Unpaged.

*Twelve dinosaurs present facts about why each is the greatest dinosaur ever.*

Hartland, Jessie. **How the Meteorite Got to the Museum**. Blue Apple Books, 2013. Gr. 3-5. 40 p.

*Follows the trail of a meteor that came from outer space, across the eastern United States, to a car roof in New York, and was then was certified and displayed at the American Museum of Natural History.*

Jenkins, Steve. **The Animal Book: a Collection of the Fastest, Fiercest, Toughest, Cleverest, Shyest - and Most Surprising - Animals on Earth**. Illus. by Steve Jenkins. Houghton Mifflin Harcourt, 2013. Gr. 1-5. 208 p.

*Jenkins drew from his earlier books to create this amazing compendium of more than 300 animals.*

Judge, Lita. **How Big Were Dinosaurs?** Roaring Brook, 2013. Gr. 1-3. Unpaged.

*Judge makes dinosaur sizes easy to understand by comparing them to creatures children will be familiar with, such as dogs. Her afterword explains how she figured out the relative sizes of the dinosaurs.*

Macaulay, David. **Eye: How It Works**. Roaring Brook, 2013. Gr. 2-4. 32 p.

*Macaulay uses diagrams and relatively simple language to explain how the eye processes information.*

Markle, Sandra. **The Case of the Vanishing Golden Frogs: a Scientific Mystery**. Millbrook, 2012. Gr. 3-5. 48 p.

*The Panamanian golden frog, the national symbol of Panama, has been vanishing due to a fungus. Here a team of scientists try to save the frogs.*

Markle, Sandra. **The Case of the Vanishing Honeybees**. Millbrook Press, 2013. Gr. 4-7. 48 p.

*Markle looks at possible causes for Colony Collapse Disorder (CCD), including ways to help bees thrive.*

Martin, Jacqueline B. **Farmer Will Allen and the Growing Table**. Illus. by Eric-Shabazz Larkin. Readers to Eaters, 2013. Gr. 2-4. Unpaged.

*Martin describes how Will Allen started an urban farm in Milwaukee and then spread his message about urban farming to other communities in the United States and abroad.*

Noonan, Diana. **The Frog**. Chelsea Clubhouse, 2003. Gr. K-2. 32 p.

*The life cycle of a frog from egg to tadpole to adult and hibernation in the winter is explained with colorful photographs.*

Pringle, Laurence. **Frogs! Strange and Wonderful**. Illus. Meryl Henderson. Boyds Mills, 2012. Gr. 4-6. 30 p.

*Accompanied by colorful photographs, this gives lots of information about frogs and toads, their habitat and life cycle.*

Roth, Susan L. **Parrots Over Puerto Rico**. Lee and Low, 2013. Gr. 2-5. Unpaged.

*Roth's Sibert-winning title describes not only the decline and slow improvement in the number of Puerto Rican parrots, but also some of the history of Puerto Rico.*

Rusch, Elizabeth. **Volcano Rising**. Charlesbridge, 2013. Gr. 3-5. 32 p.

*Volcanoes can be both destructive and creative, as Rusch shows here.*

## **Science - Middle School:**

Beltz, Ellin. **Frogs: Inside Their Remarkable World**. Firefly, 2005. Gr. 6-8. 175 p.

*Besides the scientific facts about the frog and toad families around the world, this discusses the frog in myth, art and literature.*

Hollar, Sherman (ed.). **Poisoning Planet Earth: Pollution and Other Environmental Hazards**. Britannica Educational Publishing, 2011. Gr. 6-8. 88 p.

*Describes the consequences of pollution on the environment, and discusses different types of pollution.*

MacLeod, Elizabeth. **Bones Never Lie: How Forensics Helps Solve History's Mysteries**. Annick Press, 2013. Gr. 5-7. 156 p.

*MacLeod tells how forensics has been used to help shed light on several mysteries, such as the Man in the Iron Mask and the fate of Grand Duchess Anastasia.*

McClafferty, Carla. **Fourth Down and Inches: Concussions and Football's Make or Break Moment**. Carolrhoda, 2013. Gr. 5-9. 96 p.

*McClafferty's extensive source notes and research add weight to her careful conclusions about football and the risk of concussion.*

Montgomery, Sy. **Saving the Ghost of the Mountain: An Expedition Among Snow Leopards in Mongolia**. (Scientists in the Field series). Photographs by Nic Bishop. Houghton Mifflin Harcourt, 2009. Gr. 6-8. 74 p.

*People call the Mongolian Snow Leopard the 'Ghost of the Mountain,' because they almost never see one. Follow a group of scientists as they study them.*

Montgomery, Sy. **The Tapir Scientist**. Photographs by Nic Bishop. Houghton Mifflin Harcourt, 2013. Gr. 5-9. 80 p.

*Montgomery and Bishop travel to the Pantanal wetlands of Brazil to see how Dr. Patricia Medici and her team are studying the lowland tapir.*

Ottaviani, Jim and Maris Wicks. **Primates: The Fearless Science of Jane Goodall, Dian Fossey, and Birute Galdikas**. First Second Books, 2013. Gr. 6-8. 133 p.

*In graphic novel format, Primates details the lives and work of scientists Jane Goodall, Dian Fossey, and Birute Galdikas, who lived with and studied chimpanzees, gorillas, and orangutans, respectively, in their own habitats, which has helped us understand primates, including humans.*

Parsons, Harry. **The Nature of Frogs: Amphibians with Attitude**. Greystone, 2000. Gr. 6-8. 102 p.

*Not only does the reader learn how frogs live and develop around the world, but the author also discusses how the frog has roles in myths and legends. Stunning photographs.*

Rusch, Elizabeth. **Eruption!: Volcanoes and the Science of Saving Lives**. Houghton Mifflin Harcourt, 2013. Gr. 5-7. 76 p.

*Eruption! tells about a team of geologists from the Volcano Disaster Assistance Program, a "volcano crisis team", are working with scientists in other countries with potentially dangerous volcanoes.*

Silvey, Anita. **The Plant Hunters: True Stories of Their Daring Adventures to the Far Corners of the Earth**. FSG, 2012. Gr. 6-8. 88 p.

*Uses primary source materials to teach us about people from the eighteenth and nineteenth centuries that traveled the globe to discover and collect new and unusual plants.*

Singer, Marilyn. **Venom**. Darby Creek, 2007. Gr. 6-8. 96 p.

*Many animals, including spiders, snakes, frogs, toads and other creatures, produce venom and use it to survive.*

Thimmesh, Catherine. **Scaly Spotted Feathered Frilled: How Do We Know What Dinosaurs Really Looked Like?** Houghton Mifflin Harcourt, 2013. Gr. 5-7. 57 p.

*Thimmesh explains how paleontologists and paleoartists use fossil evidence to try to work out how dinosaurs looked.*

Turner, Pamela. **Dolphins of Shark Bay**. (Scientists in the Field series). Houghton Mifflin Harcourt, 2013. Gr. 5-9. 76 p.

*Turner describes how biologist Janet Mann and her colleagues study bottlenose dolphins in Western Australia's Shark Bay.*

Turner, Pamela S. **The Frog Scientist**. (Scientists in the Field series). Photographs by Andy Comins. Houghton Mifflin Harcourt, 2011. Gr. 6-8. 58 p.

*Dr. Tyrone Hayes loved frogs when he was a kid. He now works at UC Berkeley in a frog research lab. There he discovered that a pesticide called atrazine caused frogs to become half-male, half-female. Follow Dr. Hayes as he finds out why.*

## **Science - High School:**

Deem, James M. **Faces From the Past: Forgotten People of North America.** Houghton Mifflin, 2012. Gr. 6-10.

*Shows how the use of forensic science in archaeology reveals evidence about how early North American civilizations lived.*

Wittenstein, Vicki Oransky. **For the Good of Mankind?: The Shameful History of Human Medical Experimentation.** Twenty-First Century Books, 2013. Gr. 7-adult. 96 p.

*Wittenstein's brief but disturbing account of using humans in medical research ranges over the modern history of this practice while also discussing the evolution of medical ethics.*

## **Technology and Engineering - Elementary School:**

Chant, Christopher. **Rapid Transportation Systems and the Decline of Steam.** Chelsea, 2000. Gr. 3-5. 64 p.

*These days steam locomotives have been replaced by diesel and electric power. Here are detailed descriptions of subway trains, trolley cars, monorails and other fast moving trains.*

Coleman, Miriam. **Earth-Friendly Buildings.** PowerKids, 2011. Gr. 3-5. 32 p.

*Those who build earth friendly buildings have techniques to save water and energy efficiently by using local materials, green roofs and other ideas.*

Cooper, Elisha. **Train.** Illus. by Elisha Cooper. Orchard, 2013. Gr. K-2. 40 p.

*In this very informative picture book, the reader boards a train in New York and travels west noting the various stations, scenery, passing trains and meeting various people who work on the train.*

Floca, Brian. **Locomotive.** Atheneum, 2013. Gr. 3-5. Unpaged.

*Learn what it was like to travel on the Transcontinental Railroad in the 1860's in Floca's Caldecott-winning book.*

Heos, Bridget. **Let's Meet a Construction Worker.** Illus. by Mike Moran. Millbrook, 2013. Gr. pre-2. 24 p.

*Just what it says! A construction worker explains his job to a group of children.*

Macaulay, David. **Castle: How it Works.** Roaring Brook, 2012. Gr. 2-4. 32 p.

*Macaulay invites the reader in as a friend, telling about everyday life in the castle, before presenting the reader as "foe" and showing how a castle's defenses could be breached.*

Macaulay, David. **Jet Plane: How it Works.** Roaring Brook, 2012. Gr. 2-4. 28 p.

*Macaulay tells how a plane is propelled and steered, as well as how it takes off and stays in the air.*

Macaulay, David. **Toilet: How it Works.** Roaring Brook, 2013. Gr. 2-4. 32 p.

*Macaulay's clear, easy-to-read text takes the reader from the process of the body's waste disposal system to how a toilet works to how waste is dealt with post-flush.*

McMahon, Peter. **Ultimate Trains**. Illus. by Andy Mora. Kids Can Press, 2010. Gr. 3-5. 40 p.

*Following a brief history of locomotives, this describes the development of bullet trains with experiments to demonstrate the scientific principles.*

O'Hearn, Michael. **Awesome Space: Robots**. Edge Books, 2013. Gr. 3-5. 32 p.

*Robots have been exploring the planets and helping astronauts do research since the 1970s. Learn about incredible space robots and the amazing things that they have discovered about our solar system.*

Ritchie, Scot. **Look at That Building! a First Book of Structures**. Kids Can, 2011. Gr. K-2. 32 p.

*A close-up look at various types of building with lots of facts and a little fiction thrown in.*

Simon, Seymour. **Seymour Simon's Book of Trains**. HarperCollins, 2002. Gr. 3-5. Unpaged.

*In his well-known thorough approach, Simon explores many different types of trains and their uses.*

Sullivan, George. **Built to Last: Building America's Amazing Bridges, Dams, Tunnels and Skyscrapers**. Scholastic, 2005. Gr. 3-5. 128 p.

*Here are 17 architectural and engineering marvels and the architects and engineers that made them possible.*

Todd, Traci N. **C is for Caboose: Riding the Rails from A to Z**. Chronicle, 2007. Gr. K-2. 24 p.

*Combining the old and the new, from early trains, the transcontinental railroad and modern trains, there is much to learn in all the details.*

Vestergaard, Hope. **Digger, Dozer, Dumper**. Illus. by David Slonim. Candlewick, 2013. Gr. K-1. Unpaged.

*Vestergaard's playful verse tells about 16 different trucks and the work each one does.*

Weitzman, David. **John Bull: a British Locomotive Comes to America**. FSG, 2004. Gr. 3-5. 40 p.

*The engine John Bull, a steam locomotive, was built in England, brought to the US in 1831, assembled, used then modified for use with modern rail transportation.*

Zemlicka, Shannon. **From Oil to Gas**. Lerner Publishing, 2013. Gr. K-2. 24 p.

*Follow each step in the manufacturing process from oil to gas, from clearing land to filling a tank with gas in this captivating book!*

Zimmermann, Karl. **Steam Locomotives: Whistling, Chugging, Smoking Iron Horses of the Past**. BoydsMills, 2004. Gr. K-2. 48 p.

*Most steam trains are no more, but as the first trains they were, and in some places still are, fine transportation.*

## **Technology and Engineering - Middle School:**

Aaseng, Nathan. **Construction: Building the Impossible.** Oliver, 1999. Gr. 6-8. 144 p.  
*Profiles of eight builders and their famous construction projects from the Egyptian pyramids to the Empire State Building.*

Aguilar, David. **Space Encyclopedia: A Tour of Our Solar System and Beyond.** National Geographic Children's Books, 2013. Gr. 6-8. 191 p.  
*Presenting the most recent findings on space exploration, research and spectacular views of the universe, all in one complete reference book.*

Enz, Tammy. **Build Your Own Periscope, Flashlight, and Other Useful Stuff.** Capstone Press, 2011. Gr. 5-8. 32 p.  
*Enz tells how to build a variety of objects, from showshoes to a pop gun; the difficulty level and the tools required will mean an adult must help with some of the work.*

Freedman, Russell. **Becoming Ben Franklin: How a Candle-Maker's Son Helped Light the Flame of Liberty.** Holiday House, 2013. Gr. 5-8. 86 p.  
*Diplomat, scientist, patriot: Franklin was all of those and more. Freedman quotes from Franklin's autobiography as well as from several Franklin scholars, and includes source notes to back up his research.*

Graham, Ian. **Megastructures: Tallest, Longest, Biggest, Deepest.** Firefly, 2012. Gr. 6-8. 128 p.  
*Within its four main subjects, this explains how and why various structures were built and the physics behind them.*

Heos, Bridget. **Stronger than Steel: Spider Silk DNA and the Quest for Better Bulletproof Vests, Sutures, and Parachute Rope.** (Scientists in the Field series). Photographs by Andy Comins. Houghton Mifflin Harcourt, 2013. Gr. 7-9. 79 p.  
*Spider silk is amazingly strong and versatile; to produce more, biologist Randy Lewis injects goat embryos with the spider-silk gene. Amazing science, enhanced by Comins's photographs.*

Kras, Sara Louise. **The Steam Engine.** Chelsea, 2004. Gr. 6-8. 102 p.  
*The invention of the steam engine transformed society and advanced the use of technology in general.*

Matthews, John R. **The Railroad** (Inventions that Shaped the World series). Franklin Watts, 2005. Gr. 6-8. 80 p.  
*This provides a timeline of the development of the railroad from early steam engines to the high speed trains of today and the future.*

Murphy, Jim and Alison Blank. **Invincible Microbe: Tuberculosis and the Never-Ending Search for a Cure.** Clarion Books, 2012. Gr. 6-8. 149 p.  
*Take a closer look at this deadly illness that has had doctors and scientists perplexed for centuries.*



Rusch, Elizabeth. **The Mighty Mars Rovers: The Incredible Adventures of Spirit and Opportunity**. (Scientists in the Field series). Houghton Mifflin Harcourt, 2012. Gr. 6-8. 79 p.  
*Follow two rovers, Spirit and Opportunity, as they explore Mars searching for signs that life could ever have been on that planet.*

Sheinkin, Steve. **Lincoln's Grave Robbers**. Scholastic, 2013. Gr. 5-7. 214 p.  
*In 1876, robbers tried to steal Abraham Lincoln's body. Sheinkin tells about the plot, with lively digressions into counterfeiting, the Secret Service and the Presidential election of 1876.*

## **Technology and Engineering - High School:**

Blumenthal, Karen. **Steve Jobs: The Man Who Thought Different: A Biography**. Feiwel & Friends, 2012. Gr. 7-10. 310 p.  
*Well-researched biography of "technology rock star" Jobs with source notes, a bibliography, tech time line, a glossary and index.*

Kamkwamba, William. **The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope**. Harper, 2010. Gr. 10-adult. 290 p.  
*Malawian author tells how he built a windmill from found parts that brought electricity to his community.*

Rosen, William. **The Most Powerful Idea in the World, a Story of Steam, Industry and Invention**. Random House, 2010. Gr. 9-adult. 370 p.  
*The Industrial Revolution spawned many inventions using steam, most notably steam engines for trains.*

## **Art - Elementary School:**

Barsony, Piotr. **The Stories of the Mona Lisa: an Imaginary Museum Tale About the History of Modern Art**. Trans. by Joanna Oseman. Skyhorse, 2012. Gr. 3-5. 55 p.  
*Using the Mona Lisa as a focal point, a father guides his daughter through a museum, explaining various art movements and artists.*

Blake, Quentin. **Tell Me a Picture**. Millbrook, 2003. Gr. K-5. 128 p.  
*Using paintings from the National Gallery in London, this well-known children's book illustrator encourages young readers to find the story in each.*

Cline-Ransome, Lesa. **Before There Was Mozart: the Story of Joseph Boulogne, Chevalier de Saint-George**. Illus. by James E. Ransome. Schwartz and Wade, 2011. Gr. 2-5. Unpaged.  
*Joseph Boulogne was born to a French plantation owner and a slave from Senegal in 18th-century Guadeloupe; his talent and dedication to becoming a violin virtuoso made him a favorite in France.*

Danneberg, Julie. **Monet Paints a Day**. Charlesbridge, 2012. Gr. 3-5. 32 p.  
*Focusing on one day in Monet's life, the author takes the reader through his approach to his painting.*

DK Publishing. **Outdoor Crafts: Lots of Fun Things to Make and Do Outside.** DK Publishing, 2013. Gr. 2 - 4. 79 p.

*Children will be inspired to make, cook or create with the ideas in this book, which are drawn from things they can find or grow outside.*

Hill, Laban Carrick. **When the Beat Was Born: DJ Kool Herc and the Creation of Hip Hop.** Illus. Theodore Taylor III. Roaring Brook, 2013. Gr. 2-5. Unpaged.

*DJ Herc Kool (born Clive Campbell) revolutionized DJ work when he hooked up two turntables to create an uninterrupted flow of music and rapping.*

Krull, Kathleen. **The Beatles Were Fab (And They Were Funny).** Illus. by Stacy Innerst. Harcourt Children's Books, 2013. Gr. 2-5. 40 p.

*Krull makes the Beatles come alive for a new generation.*

Markel, Michelle. **The Fantastic Jungles of Henri Rousseau.** Illus. by Amanda Hall. Eerdmans Books for Young Readers 2012. Gr. K-3. Unpaged.

*Markel's biography tells the inspirational story of Rousseau - who did not even pick up a paintbrush until he was 40, and had no formal training - in a way that will make the reader want to create art, too.*

Micklethwait, Lucy. **I Spy Shapes in Art.** Greenwillow, 2004. Gr. K-2. Unpaged.

*Using paintings by artists such as Magritte, Escher and Matisse, the reader looks for various shapes in the paintings.*

Micklethwait, Lucy. **In the Picture: Get Looking! Get Thinking!** Frances Lincoln Children's Books, 2010. Gr. K - 3. 26 p.

*Micklethwait chooses ten famous images by artists such as Brueghel and Seurat and encourages the reader to explore them.*

National Gallery. **An Eye for Art: Focusing on Great Artists and Their Work.** Chicago Review Press, 2013. Gr. 3-5. 177 p.

*Educators from the National Gallery have organized fifty art pieces from the National Gallery into seven topics, providing context for the art and suggesting related activities.*

Nobleman, Marc Tyler. **Bill the Boy Wonder: The Secret Co-Creator of Batman.** Illus. by Ty Templeton. Charlesbridge, 2012. Gr. 3-5. 48 p.

*Many think that Bob Kane was the sole creator of Batman, but writer Bill Finger was just as essential. Nobleman tells Finger's story here.*

Schroeder, Alan. **Baby Flo: Florence Mills Lights Up the Stage.** Illus. by Cornelius Van Wright. Lee and Low, 2012. Gr. 2-5. 40 p.

*Schroeder's upbeat text will interest young readers in "Baby Flo", who began performing for audiences at age 3. A more somber afternote about the challenges Mills faced concludes the book.*

Stringer, Lauren. **When Stravinsky Met Nijinsky: Two Artists, Their Ballet, and One Extraordinary Riot.** Houghton Mifflin Harcourt, 2013. Gr. K-3. Unpaged.

*While Stringer exaggerates the degree to which Stravinsky and Nijinsky collaborated on "The Rite of Spring", she successfully conveys the excitement and furor the ballet produced.*

Tate, Don. **It Jes' Happened: When Bill Traylor Started to Draw**. Illus. by R. Gregory Christie. Lee and Low, 2012. Gr. 2-5. Unpaged.

*Traylor's life went from slavery to sharecropping to, in his eighties, beginning to spend time drawing. Tate gives more information in an afterword.*

Wenzel, Angela. **13 Artists Children Should Know**. Prestel, 2009. Gr. 3-5. 46 p.

*The lively text and fine reproduction of the art pieces along with the chronological timeline format make this especially suitable as an introduction to art.*

Winter, Jonah. **Just Behave, Pablo Picasso**. Levine, 2012. Gr. 3-5. 48 p.

*Pablo Picasso was a world-famous artist who followed his own ideas about art even when his work was called ugly.*

### **Art - Middle School and High School:**

Butler, Jerry. **A Drawing in the Sand: a Story of African American Art**. Zino, 1998. Gr. 6-8. 64 p.

*Jerry Butler's discovery of the long, beautiful tradition of African American art deeply influences his approach to art.*

Close, Chuck. **Face Book**. Illus. by Chuck Close. Abrams Books for Young Readers, 2012. Gr. 4-7. 55 p.

*Close presents fourteen of his self-portraits and tells about his artistic process in interview format.*

Greenberg, Jan and Sandra Jordan. **The Mad Potter: George E. Ohr, Eccentric Genius**. Roaring Brook, 2013. Gr. 5-8. 53 p.

*Ohr created works on a potter's wheel, then resculpted them into art that was far ahead of its time; unsold in its day, his works began to receive serious attention in the 1970s.*

Kidd, Chip. **Go: A Kidd's Guide to Graphic Design**. Workman, 2013. Gr. 7-10. 150 p.

*This is a book not only for art classes, but also for units on persuasive writing and advertising, and to demonstrate how strong visual images convey meaning and appeal.*

Major, John. **Caravan to America: Living Arts of the Silk Road**. Cricket, 2002. Gr. 6-8. 130 p.

*This profiles eight artists and artisans not living in the U.S. who are originally from the Silk Road, an ancient caravan trail between Asia and the Mediterranean.*

Martinez, Andres Vera, & Na Liu. **Little White Duck**. Graphic Universe, 2012. Gr. 4-7. 108 p.

*Liu's childhood in 1970s China is brought to life in this graphic novel memoir.*

Raczka, Bob. **Here's Looking at Me: How Artists See Themselves**. Millbrook, 2006. Gr. 5-7. 32 p.

*Fourteen famous artists are profiles in self-portraits that illustrate their different styles and how they see themselves.*

Rubin, Susan Goldman. **Diego Rivera: An Artist for the People**. Abrams Books for Young Readers 2013. Gr. 5-8. 56 p.

*Although schooled in European traditions, Diego Rivera always said his best work is his Mexican, a background well displayed in all his works.*

## **Mathematics - Elementary School:**

Adler, David. **Millions, Billions, Trillions: Understanding Big Numbers**. Illus. by Edward Miller. Holiday, 2013. Gr. 3-5. [32] p.

*An explanation of quantities in terms young readers can understand, e.g. one million dollars would buy 2 full pizzas a day for more than 68 years!*

Ball, Johnny. **Why Pi?** DK, 2008. Gr. 3-5. 93 p.

*Concentrating on how people from Ancient Egyptians to modern scientists have used numbers, this book enlivens math using games, puzzles and other facts.*

Cleary, Brian. **The Action of Subtraction**. Illus. by Brian Gable. Millbrook, 2006. Gr. K-2. 30 p.

*Using a charming rhyme, this presents the basics of subtraction - taking one number from another leaving less.*

Goldstone, Bruce. **That's a Possibility!: A Book About What Might Happen**. Henry Holt, 2013. Gr. K-3. 32 p.

*Goldstone teaches the reader the vocabulary and concepts surrounding probability.*

Heiligman, Deborah. **The Boy Who Loved Math: the Improbable Life of Paul Erdos**. Illus. by Leuyen Pham. Roaring Brook, 2013. Gr. K-3. 37 p.

*Heiligman presents appealing details about the eccentric and brilliant mathematician Paul Erdos.*

Jenkins, Steve. **Just a Second: A Different Way to Look at Time**. Houghton Mifflin Harcourt, 2011. Gr. 3-5. Unpaged.

*Jenkins shows us there are other ways to measure time besides using a clock, such as a crocodile heartbeat or a lifespan of a mayfly. He also takes a look at all of the different things in nature that can take place in a second, a day, and a year.*

Markel, Michelle. **Tyrannosaurus Math**. Tricycle, 2009. Gr. K-3. 32 p.

*Tyrannosaurus Math's family doesn't appreciate his love of math (despite their willingness to name their baby t. rex after his love of math), but they grow to appreciate it after he uses estimation skills to save his sister.*

Overdeck, Laura. **Bedtime Math**. Illus. by Jim Paillot. Feiwel and Friends, 2013. Gr. K-3. 85 p.

*Overdeck's book, based on her website [bedtimemath.org](http://bedtimemath.org), encourages families to do math before bed instead of reading.*

Schaefer, Lola. **Lifetime: the Amazing Numbers**. Chronicle Books, 2013. Gr. K-3. Unpaged.

*Schaefer combines facts about animals and some astonishing numbers in this unusual counting book: 20 fleeces, 30 holes bored by a woodpecker, 1000 seahorse babies.*

Tang, Greg. **Math Fables, Too: Making Science Count**. Scholastic, 2007. Gr. K-2. 40 p. One in a series of books with math as their base. Here the emphasis is on counting and grouping. Friendship and cooperation are usual part of the mix.

Yoder, Eric. **One Minute Mysteries: 65 Mysteries You Solve with Math**. Science Naturally, 2010. Gr. 3-5. 176 p.

*These mysteries require all your mathematical skills to solve; no tricks just math in everyday life.*

## **Mathematics - Middle School:**

Goldsmith, Mike. **How to be a Math Genius: The Brilliant Brain and How to Train It**.

Illustrated by Seb Burnett. DK Publishing, 2012. Gr. 6-8. 128 p.

*This guide shows readers how they really do use math skills on a regular basis and features ideas, activities, and puzzles to keep the mind sharp. Facts are presented in a easy-to-understand format, and include short biographies on math geniuses.*

Gow, Mary. **Archimedes: Mathematical Genius of the Ancient World**. Enslow, 2005. Gr. 6-8. 128 p.

*Archimedes helped establish many of the math principles we use today.*

Green, Dan. **Algebra and Geometry (Anything but Square)**. Kingfisher, 2011. Gr. 6-8. 128 p.

*Using cartoon-like characters, this explains elements of algebra and geometry: numbers, shapes, equations, functions, graphs and more.*

Jennison, Christopher. **Baseball Math: Grandslam Activities and Projects**. Goodyear, 2001. Gr. 6-8. 104 p.

*Using baseball statistics, score-keeping, salary caps, the value of baseball cards and more, this encourages boys and girls to evaluate the game mathematically.*

## **High School STEAM websites/games:**

### **Websites:**

- **The Concord Consortium:** <http://concord.org/stem-resources>  
*The STEM Resource Finder features free, open source educational activities, models and software tools searchable by keyword or filter by subject, grade level and type. K-12+*
- **CK-12:** <http://www.ck12.org/teacher/>  
*Search for free, standards-aligned STEM resources.*
- **Science Buddies:** <http://www.sciencebuddies.org>  
*Great resource for those seeking science project support. 4-12*
- **Virtual Nerd:** <http://www.virtualnerd.com/>  
*Free math and physics video tutorials aligned to Common Core standards. 6-12.*
- **Get the Math:** <http://www.thirteen.org/get-the-math/>  
*Solve real-life algebra problems with diverse students and fun videos. 6-12.*

### **Online Games:**

- **Algodoo:** <http://www.algodoo.com/>  
*Building and designing tool enables engaged, conceptual physics inquiry. 4-12.*
- **Kerbal Space Program:** <https://kerbalspaceprogram.com/>  
*Rocket simulation game that teaches physics and engineering. 9-12.*
- **Codecademy:** <http://www.codecademy.com>  
*Free program that teaches students to build apps and websites from scratch. 7-12.*

\*\*Here, ACL members have compiled a list of **fiction/nonfiction pairings**. Each pairing has a heading in bold type.

### **Alcatraz**

Choldenko, Gennifer. **Al Capone Does My Homework**. Dial, 2013. Gr. 5-8. 212 p.

*In this third and final book in the trilogy, Moose tries to find the arsonist who started a fire in the family apartment to implicate Moose's autistic sister. (fiction)*

MacDonald, Donald. **Alcatraz: History and Design of a Landmark**. Chronicle Books, 2012. Gr. 6-12. 141 p.

*For all ages, architectural drawings, photos, and intriguing facts combine to make this a history of the San Francisco island and prison. (non-fiction)*

### **Amistad**

Edinger, Monica. **Africa is My Home: A Child of the Amistad**. Candlewick, 2013. Gr. 4-7. 55 p.

*Nine-year-old Magulu was a captive on the slave ship the Amistad, and she tells her eyewitness story of the revolt and trial. (fiction)*

Chambers, Veronica. **Amistad Rising: A Story of Freedom**. Houghton Mifflin Harcourt, 1998. Gr. 2-4. 32 p.

*The uprising and takeover of the slave ship Amistad is told by focusing on the leader Joseph Cinque. (non-fiction)*

### **Angel Island**

Honeyman, Kay. **The Fire Horse Girl**. Arthur A. Levine, 2013. Gr. 9-12. 321 p.

*Jade Moon and her father are offered a chance to go to America by a young man named Sterling Promise, but America in 1923 doesn't want to admit many Chinese and they are detained at Angel Island, the "Ellis Island of the West". (fiction)*

James, Helen Foster, and Virginia Shin-Mui Loh. Wilson Ong, ill. **Paper Son: Lee's Journey to America**. Sleeping Bear, 2013. Gr. 2-6. [32 p.]

*Lee, a 12-year-old orphan from China, is detained on Angel Island in 1926 while he is tested on the authenticity of his immigration documents and his relationship to his "paper father" in San Francisco. (fiction)*

Freedman, Russell. **Angel Island: Gateway to Gold Mountain**. Clarion, 2014. Gr. 4-8. 81 p.

*With large B&W historical photos, the engaging text gives an honest depiction of what it was like to wait on Angel Island before being admitted to the U.S. as an immigrant from Asia. (non-fiction)*

### **Atomic Bomb: Los Alamos**

Klages, Ellen. **The Green Glass Sea**. Viking, 2006. Gr. 5-8. 321 p.

*Eleven-year-old motherless Dewey and her father moved to Los Alamos so he can work on the Manhattan Project. (fiction)*

Sheinkin, Steve. **Bomb: The Race to Build - and Steal - the Worlds' Most Dangerous Weapon**. Roaring Brook, 2012. Gr. 5-9. 266 p.

*The activities to build an atomic bomb in Los Alamos parallel the stories of spies who try to prevent the Germans from doing the same thing in this action-packed narrative nonfiction book. (non-fiction)*

### **Atomic Bomb Testing: Marshall Islands**

Taylor, Theodore. **The Bomb**. Harcourt, 1995. Gr. 5-8. 197 p.

*In 1946, the residents of Bikini Island are told by the U.S. military that they will be temporarily located while an atomic test is done but will soon be able to return. 14-year-old Sorry Rinamu doesn't believe them and tries to stop the testing. (fiction)*

Goldsmith, Connie. **Bombs Over Bikini: the World's First Nuclear Disaster**. Twenty-First Century, 2014. Gr. 7-10. 88 p.

*The atomic testing over the Marshall Islands from 1946-58 is described in this clear, lively narrative paired with historic b&w photos. (non-fiction)*

### **Birmingham, 1963**

Levinson, Cynthia. **We've Got a Job: The 1963 Birmingham Children's March**. Peachtree, 2012. Gr. 5-8. 176 p.

*Using four children, ages 9, 14, 15, and 16, as touch points Levinson weaves together the events and experiences of the 1963 Children's March in Birmingham, Alabama, situating them in the historical context of segregation and the civil rights movements. (non-fiction)*

Curtis, Christopher Paul. **The Watsons Go to Birmingham-1963**. Delacorte, 1995. Gr. 5-8. 210 p.

*Ten-year-old Kenny and his family travel from their home in Flint, Michigan, to visit their grandmother in Birmingham, Alabama, in 1963 where they witness the bombing of the Sixteenth Avenue Baptist Church. (fiction)*

### **Black Paratroopers**

Stone, Tanya Lee. **Courage Has No Color; The True Story of the Triple Nickles, America's First Black Paratroopers**. Candlewick, 2013. Gr. 5-9. 147 p.

*The unsung story of the US Army's first African-American paratrooper's unit moves gracefully among portraits of individual paratroopers, the history of the unit, and the complex social issues of the time. (non-fiction)*



Pearsall, Shelley. **Jump Into the Sky**. Knopf, 2012. Gr. 6-9. 344 p.

*In 1945, 13-year-old Levi, looking for the father he hasn't seen in three years, finds him in Oregon, where his all-Black 555th paratrooper battalion, who will never see combat finally has a mission. Includes historical notes. (fiction)*

### **Building a House**

Bean, Jonathan. **Building Our House**. Illus. Jonathan Bean. FSG, 2013. Gr. K-2. 36 p.

*The author documents his own family's building their house from choosing the lot to the final product 5 years later. (fiction)*

Hudson, Cheryl Willis. **Construction Zone**. Photographs by Richard Sobol. Candlewick, 2008. Gr. K-2. 32 p.

*In simple text, this describes the building process from the design to the completed building, explaining both activity and jargon used. (non-fiction)*

Lyon, George Ella. **You and Me and Home Sweet Home**. Illus. by Stephanie Anderson. Atheneum, 2009. Gr. K-4. 48 p.

*Third grader Sharonda and her mother help volunteers build a house that will become their own - a bit of sweat equity. (fiction)*

Nelson, Robin. **From Tree to House**. Lerner, 2004. Gr. K-2. 24 p.

*Loggers cut down trees which go to the mill; holes are dug for foundations; the house rises bit by bit until the house is complete. (non-fiction)*

### **California Indians**

Heizer, Robert and Kroeber, Theodora. **Ishi, the Last Yahi: A Documentary History**. University of California Press, 1979. Gr. 10-adult. 242 p.

*This volume has a collection of forty original documents that concern Ishi, the Yahi Indian, who stepped out of the Stone Age about seventy years ago to enter civilization for a brief period. He was one of the Yahi tribes Northern California, a small band which managed to survive and continue to live in ancient ways of hunting and gathering. It depicts amazing black and white pictures and maps of their old ways and houses and has notes by anthropologists. (non-fiction)*

O'Dell, Scott. **Island of the Blue Dolphins**. Houghton Mifflin, 1960. Gr. 4-7. 177 p.

*Karana's story is based on a true story of a 12-year-old native Indian who is suddenly left alone on an island off the California coast. She could have been rescued by white men sent by the chief, but she remains on the island to be with her younger brother. How she survives and faces wild dogs that kill her brother, hunger, the treacherous Aleuts (white man) and nature is a great story of survival. (fiction)*

### **Civil War - United States**

Anderson, Tanya. **Tillie Pierce: Teen Eyewitness to the Battle of Gettysburg**. Twenty-First Century, 2013. Gr. 5-8. 96 p.

*Using excerpts from Pierce's memoir, a teen girl describes her experience as a townsperson who lived through this devastating Civil War battle. (non-fiction)*

Philbrick, W.R. **The Mostly True Adventures of Homer P Figg**. Blue Sky, 2009. Gr. 5-8. 224 p.

*In this humorous Newbery Honor novel, Homer describes the search for his older brother who has been illegally sold to the Union Army during the Civil War. (fiction)*

## **Earthquakes**

Yep, Lawrence. **The Earth Dragon Awakes: The San Francisco Earthquake of 1906**. Harper Collins, 2008. Gr. 4-6. 117 p.

*The book follows young Chinese immigrant Chin, and Henry, a banker's son, as they deal with the aftermath and evacuation following the 1906 San Francisco earthquake. (fiction)*

Tanaka, Shelly. **Earthquake! On a Peaceful Spring Morning, Disaster Strikes San Francisco**. Hyperion, 2004. Grades 5-8. 48 p.

*4 young survivors narrate their account of Great Earthquake and Fire of 1906 with historic photographs and maps. (non-fiction)*

Murdico, Suzanne J. and Greg Roza. **Earthquakes: A Practical Survival Guide**. Rosen Central, 2006. Gr. 7-9. 64 p.

*Earthquake myths and facts as well as brief information about how to react to an earthquake. (non-fiction)*

## **Evolution**

Kelly, Jacqueline. **The Evolution of Calpurnia Tate**. Holt, 2009. Gr. 5-8. 340 p.

*Science and nature are frowned upon on topics of interests to girls in 1899, as Texan Calpurnia discovers. (fiction)*

Heiligman, Deborah. **Charles and Emma: The Darwins' Leap of Faith**. Holt, 2009. Gr. 8-12. 268 p.

*This dual biography examines the life of scientist Charles Darwin and his religious wife Emma, and how she supported his theory of evolution. (non-fiction)*

## **Gardens**

Ancona, George. **It's Our Garden: From Seeds to Harvest in a School Garden**.

Candlewick, 2013. Gr. K-3. Unpaged.

*A Santa Fe elementary school plants a year-round garden for their school community to share and learn about the seasons, harvest, growth and renewal all shown in striking photos by master photographer George Ancona. (non-fiction)*

Lee-Tai, Amy. **A Place Where Sunflowers Grow**. Illus. by Felicia Hoshino. Children's Book Press, 2006. Gr. K-4. 31 p.

*While Mari lives in the Topaz internment camp, she tries to make her surroundings more beautiful by planting a garden of sunflowers. This story is based on the author Amy Lee-Tai's grandmother's life and art, and is luminously illustrated by San Francisco native Felicia Hashino with watercolor, ink and tissue paper. (fiction)*

### **Harper Lee and *To Kill a Mockingbird***

Lee, Harper. ***To Kill a Mockingbird***. Harper, 1960. Gr. 9-12. 281 p.

*A perennial favorite and a Common Core Text Exemplar for grades 9-10, this is the classic story of eight-year-old "Scout" Finch witnessing racial injustice in her small Alabama town. (fiction)*

Shields, Charles J. ***I Am Scout: The Biography of Harper Lee***. Henry Holt, 2008. Gr. 7-10. 246 p.

*This is a version of the author's title *Mockingbird: A Portrait of Harper Lee* (2006) adapted for young adults which draws well-researched connections between the novel and the details of Lee's life. (non-fiction)*

### **Hurricane Katrina**

Coleman, Janet Wyman. ***Eight Dolphins of Katrina***. Houghton Mifflin Harcourt, 2013.

*Hurricane Katrina devastated the homes and lives of people, and animals, all along the gulf coast. This book tells the true, and uplifting, story of eight bottlenose dolphins, and their trainers, who survived after "a forty-foot tidal wave washed over the Marine Life Oceanarium in Gulfport," Mississippi. (non-fiction)*

Rhodes, Jewell Parker. ***Ninth Ward***. Little, Brown Books for Young Readers, 2012.

*When Katrina hits, and the flooding begins, Lanessa, a young girl from New Orleans' Ninth Ward, must listen to her senses, use her intelligence, and think fast under pressure to save herself and her friend from perishing in the rushing waters. Realistic and moving, Ninth Ward puts a human, and very personal face, on the Hurricane Katrina disaster. (fiction)*

### **Internment Camps**

Moss, Marissa. ***Barbed Wire Baseball***, Abrams, 2013. Gr. 1-4. 40 p.

*Fresno baseball player and manager Kenichi "Zeni" Zenimura, is known now as "The Father of Japanese-American Baseball", but during WW II, he and his family were interned in the Gila River War Relocation Center in Arizona, where he rallied his fellow internees to build a playing field and bleachers, where over 6,000 internees attended the first game. Rousing text and marvelous illustrations done with Japanese calligraphy brush and ink with copious notes make a stunning picture book for school-age readers. (non-fiction)*

Uchida, Yoshiko. ***Journey to Topaz***. Gr. 4-6. 149 p.

*Berkeley author Uchida was the first children's author to explore the Japanese-American experience. In this novel she tells of an 11-year-old girl and her family who are relocated to the Topaz Japanese American Internment Camp in the Utah desert, basing the story on her own family history. (fiction)*

### **Math**

Litton, Jonathan. ***Mesmerizing Math***. Templar/Candlewick, 2013. Gr. 3-6. [32 p].

*Full of small pop-ups, booklets, games, pullouts, and other movable elements, this look at math factoids encourages readers to flit from topic to topic, whether it is Fibonacci, Pascal's Triangle, probabilities, shapes and angles, prime numbers, or tessellation. (non-fiction)*

Enzensberger, Hans Magnus. **Number Devil: A Mathematical Adventure**. Holt, 2000. Gr. 5-8. 262 p.

*Robert, a boy who hates math, meets the Number Devil in a dream and is taken on twelve math-related adventures. (fiction)*

## **Owls**

Gibbons, Gail. **Owls**. Holiday House, 2006. Gr. K-3. 32p.

*From the smallest, the elf owl, to the largest, the great gray owl, here is information about the 21 types that are believed to be living in North America. (non-fiction)*

Waddell, Martin. **Owl Babies**. Illus. by Patrick Benson. Candlewick, 1992. Gr. pre-2.

*Three owl babies whose mother has gone out in the night try to stay calm while she is gone. (fiction)*

## **Pumpkins**

White, Linda. **Too Many Pumpkins**. Holiday House, 1997. Gr. K-2. 32 p.

*Having survived a poor childhood by eating a variety of pumpkin dishes, Rebecca disdains them so much that when one falls into her yard she buries it out of sight, only to be rewarded with a spring bounty and a new appreciation of how delightful pumpkins can be. (fiction)*

Schwartz, David. **Rotten Pumpkin: A Rotten Tale in 15 Voices**. Creston Books, 2013 Gr. 1-4. [32 p].

*This non-fiction narrative uses the perspective of fifteen "voices" to tell the story of how a Jack-O-Lantern rots and returns to the earth to be born again in time for next Halloween. (non-fiction)*

## **St. Francis of Assisi**

Pandell, Karen. **Saint Francis Sings to Brother Sun: A Celebration of His Kinship with Nature**, Candlewick, 2005. Gr. 3-6. 64 p.

*An ode to St. Francis, in which stanzas of his "Canticle of the Creatures," one of the first poems written in the Italian language, are interwoven with nature tales -- selected and retold by Karen Pandell -- about the man who composed this magnificent sacred song. A substantive biography, notes about the Feast of Saint Francis, the full text of the canticle, and sources notes conclude this volume. (non-fiction)*

Paterson, Katherine. **Brother Sun, Sister Moon: Saint Francis of Assisi's Canticle of the Creatures**. Chronicle, 2011. Gr. K-4. 36 p.

*A powerful reimagining and reworking of Francis of Assisi's 1224 "Canticle of the Creatures" by Paterson that celebrates God's gifts throughout the universe. Full text of poem translated by Bill Barrett and notes from author and illustrator complete this wonderful book. (fiction)*

Lindbergh, Reeve. **The Circle of Days**. Candlewick, 1997. Gr. pre-3. [32 p].

*In this picture book adaptation of the "Canticle of the Creatures", Lindbergh uses short rhyming couplets to present St. Francis' praise and thanks for all of creation including not only wind and sun, plants and animals, desert, rocks, and sea, some of which are allegorized in the original poem, but also humans. Cathie Felstead's collaged illustrations work splendidly with the text to present the multiple beauties and wonders of our world. (non-fiction)*

## **Salem Witch Trials**

Aronson, Marc. **Witch-Hunt: Mysteries of the Salem Witch Trials**. Atheneum, 2003. Gr. 7-12. 272 p.

*Aronson gives background for the events of the trials, using primary sources where possible to dispel myths about what happened. (non-fiction)*

Hemphill, Stephanie. **Wicked Girls: a Novel of the Salem Witch Trials**. Balzer & Bray, 2010. Gr. 8-12. 408 p.

*Hemphill tells the story of the Salem trials from several points of view; the verse leaves space for a reader to fill in the gaps and also to imagine how this could have happened. (fiction)*

## **Toads**

Gleitzman, Morris. **Toad Rage**. Random, 2004. Gr. 4-6, 165 p.

*Limpy, the cane toad, determines to discover who Australians hate cane frogs and try to improve relations. Here he takes on the Summer Olympics in Sydney. (fiction)*

Seibert, Patricia. **Toad Overload: a True Tale of Nature Knocked Off Balance in Australia**. Millbrook, 1996. Gr. 2-4. Unpaged.

*Linked with the Gleitzman title above, this will explain what happened when giant toads were brought to Australia to control beetles in the sugar cane crop. (non-fiction)*

## **Transcontinental Railroad**

Perritano, John. **Transcontinental Railroad**. Childrens, 2010. Gr. 3-5. 48 p.

*All the ins and outs, whys and wherefores, of the development of the rail system as a way out West. (non-fiction)*

Yep, Laurence. **Dragon's Gate**. HarperCollins, 1993. Gr. 5-8, 273 p.

*In 1867, a 15-year-old Chinese boy is sent to American to join his father and other Chinese working on a tunnel for the Transcontinental Railroad. (fiction)*

## **Turkeys**

Arnosky, Jim. **All About Turkeys**. Scholastic, 1998. Gr. 2-4. 32 p.

*Facts about turkeys, including what they eat, how they sleep, and how big they grow, are told through vivid drawings and concise descriptions that are just right for sharing with students in grades 2-4. (non-fiction)*

Cole, Brock. **The Money We'll Save**. Farrar, 2011. K-2. [32 p].

*Set in 19<sup>th</sup> century New York, the rollicking tale about an immigrant family includes funny yet realistic details about the ill-effects of turkey domestication that ensue when Pa brings a poult home to fatten up for Christmas dinner. (fiction)*

## **World War I**

Freedman, Russell. **The War to End All Wars: World War I**. Clarion, 2010. Gr. 7-10. 176 p.

*Freedman uses photographs, illustrations, maps and personal accounts to give both the big picture and the view from the trenches. (non-fiction)*

Morpurgo, Michael. **Private Peaceful**. Scholastic, 2004. Gr. 8-12. 202 p.

*Private Thomas Peaceful looks back over his childhood in the idyllic English countryside and the horrors he has faced since enlisting. (fiction)*

Angus, Sam. **Soldier Dog**. Feiwel, 2013. Gr. 6-8. 249 p.

*Thirteen year-old Stanley misses his brother Tom, who is fighting in France, so he runs away and joins the British Army where he becomes responsible for the care and training of army messenger dogs. (fiction)*

### **World War II: Daily Life in Germany**

Boyne, John. **The Boy in the Striped Pajamas: A Fable**. David Fickling, 2006. Gr. 8-12. 215 p.

*Nine-year-old Bruno's father gets a new job as the commandant at Auschwitz during the Holocaust, and Bruno connects with one of the prisoners, though he is unaware of what is happening in the camp. (fiction)*

Zusak, Marcus. **The Book Thief**. Knopf, 2006. Gr. 9-12. 552 p.

*In this Common Core Text Exemplar for grades 9-10, Death narrates the story of nine-year-old Liesel as she confronts the horrors of living in Nazi Germany. (fiction)*

Bartoletti, Susan Campbell. **Hitler Youth: Growing Up In Hitler's Shadow**. Scholastic, 2005. Gr. 6-10. 176 p.

*Award-winning nonfiction with extensive research, interviews, and letters about what it was like to be a teenager in Germany under Hitler. (non-fiction)*

### **World War II: Suspense**

Wein, Elizabeth. **Code Name Verity**. Hyperion, 2012. Gr. 9-12. 343 p.

*A suspenseful historical fiction novel about two young women, a spy and a pilot, who crash in Nazi-occupied France during WWII. (fiction)*

Bascomb, Neal. **The Nazi Hunters: How a Team of Spies and Survivors Captured the World's Most Notorious Nazi**. Levine, 2013. Gr. 8-11. 245 p.

*Thrilling narrative nonfiction about a team of Jewish men who track down a Nazi war criminal in the years after WWII. (non-fiction)*

### **Women in World War II**

Smith, Sherri. **Flygirl**. Speak, 2010. Gr. 9-12. 275 p.

*Ida Mae Jones, an African American woman in 1940's Louisiana, wants to be a pilot and decides to pass for white in order to enlist in the Women's Air Service Corps during World War II. (fiction)*

Davis, Tanita. **Mare's War**. Knopf Books for Young Readers. 2009. Gr. 7-10. 341 p.

*Two teens on a road trip with their grandmother learn about her experiences as an African American woman serving in the Women's Army Corps in both the US and Europe during World War II. (fiction)*

Farrell, Mary Cronk. **Pure Grit: How American World War II Nurses Survived Battle and Prison Camp in the Pacific**. Abrams, 2014. Gr. 7-11. 160 p.

*Pure Grit uncovers and honors the neglected history of the Army and Navy nurses who served in the Philippines during World War II. (non-fiction)*

## **Mobile apps to explore STEM topics with kids**

### **Book Apps for STEM topics:**

Disney. (2013). **Disney Animated** (Version 1.0.5) [Mobile application software]. Retrieved from <http://www.touchpress.com/titles/disneyanimated/> (technology)

This richly layered multimedia book app takes readers behind the scenes to see all the different aspects that go into creating animated feature films. It's fascinating peeling back the layers of classic animated as well as computer generated (CG) films, seeing how a scene develops from the initial story sketch to rough drawings or computer models, to final colored animation.

Nosy Crow. (2012). **Rounds: Franklin Frog** (Version 1.0.5) [Mobile application software]. Retrieved from <http://nosycrow.com/apps/rounds-frog> (science)

This interactive book app introduces preschoolers and kindergartners to real facts about frogs, from their habitat to feeding to metamorphosis, through an appealing story about Franklin Frog and his offspring. Children guide the frogs with their fingers, making them jump, swim, catch flies, avoid predators, find a place to hibernate, croak to attract a mate and more.

Oceanhouse Media. (2011). **Penguin's Family--Smithsonian Oceanic Collection** (Version 2.5) [Mobile application software]. Retrieved from <http://www.oceanhousemedia.com/products/penguinsfamily/> (science)

This straightforward picturebook app introduces students to the Humbolt Penguin, its environment, predators and breeding. The Oceanhouse Media apps provide excellent narration, literacy support, and sound effects that all aid comprehension for children, ages 3-7.

Push Pop Press. (2011). **Al Gore--Our Choice: A Plan to Solve the Climate Crisis** (Version 1.0.4) [Mobile application software]. Retrieved from <http://pushpoppress.com/ourchoice/> (science, technology)

Gore published **Our Choice: How We Can Solve the Climate Crisis** in 2009 as a young readers' edition of **An Inconvenient Truth** (2007). This app, appropriate for ages 10-18, updates the books' content, incorporating a variety of compelling information, with multimedia material ranging from news videos to interactive graphs to speeches and narration.

Story Worldwide. (2012). **Bats! Furry Fliers of the Night** (Version 1.2) [Mobile application software]. Retrieved from <http://www.storyworldwide.com/bats/> (science)

Dive into the world of bats with this fantastic app for kids ages 4-8. The design elements are top-notch, providing just the right amount of zing to keep kids engaged without distracting them from the essence of the material.

## **Games and Educational STEM Apps:**

Autodesk (2011). **Tinkerbox** (Version 1.5.1) [Mobile application software]. Retrieved from <http://tinkerboxnews.com/> (engineering)

Play this physics game in either the Puzzle or Invent mode, using trial and error to arrange and rearrange elements to design a successful solution. Students can creatively build outrageous machines, while they learn a variety of engineering concepts as well as creative problem solving skills.

Jundroo (2011). **SimplePhysics** (Version 2.1.1) [Mobile application software]. Retrieved from <http://www.jundroo.com/project/SimplePhysics> (engineering)

SimplePhysics challenges you design complex structures for everything from tree houses to Ferris Wheels. Test whether your design can hold the weight it needs to with a stress test. A great way to learn from mistakes and improve your designs.

Motion Math (2011). **Motion Math: Hungry Fish** (Version 2.7.2) [Mobile application software]. Retrieved from <http://motionmathgames.com/motion-math-hungry-fish/> (math)

This fun math app challenges users to combine bubbles to add up to the target number that the fish wants to eat. Users have to find different combinations of numbers that add up to the target number (for example, what combination of numbers equal ten?). A fast-action, fun math game with many levels of difficulty.

NASA Ames Research Center (2009). **NASA App** (Version 3.14) [Mobile application software]. Retrieved from <http://www.nasa.gov/centers/ames/iphone/> (science, technology)

The NASA App presents a wide range of the latest NASA content, easily accessible from one place. Students can find images, videos on-demand, NASA Television, mission information, news & feature stories, latest tweets, ISS sighting opportunities, satellite tracking, Third Rock Radio and more in this fascinating free app.

Spinlight. (2011). **Operation Math: Addition, Subtraction, Multiplication and Division for Kids** (Version 1.7) [Mobile application software]. Retrieved from <http://teacherswithapps.com/operation-math/> (math)

Stop Dr. Odd from his quest to eliminate the world's even numbers by finding his secret bases and destroying his computer mainframes. To complete a mission and unlock rewards the player must answer a certain number of math questions in 60 seconds. Training rooms' help students prepare for their timed mission.



## **STEM / STEAM Performers**

Libraries can help kids discover new interests by booking performers who combine knowledge and showmanship in great programs tailored for a variety of different age groups. Bring a bee hive to your library, give kids a chance to see large and small animals up close, or thrill to a science mystery unraveled. These performers are veterans at library and school presentations and may be willing to customize even further to match your needs. Most of them have appeared at ACL's annual Performers Showcase, a great place to scope out new performers before you unleash them on a library audience.

**The Amazing Bubble Man, Louis Pearl:** <http://www.amazingbubbleman.com>

Feats of bubble-making (square bubbles! Edible bubbles! People-inside-of bubbles! Centipede bubbles!) are made even more amazing by the look at the science behind the fun.

**Atlas Robotics:** <http://www.atlasrobotics.com>

A 2014 Showcase participant, Atlas Robotics brings with them a partially assembled robot and, with the help of volunteers, completes its assembly and transformation into a functioning robot.

**Big Tadoo Puppet Crew:** <http://www.emilybutterfly.com>

Emily Butterfly and the Big Tadoo Puppet Crew is based in San Francisco, and travels the country with its environmentally conscious puppetry. Sample program: "Granny Green's Garden Variety Show."

**Chabot Observatory:** <http://www.chabotspace.org/chabot-to-go.htm>

The Chabot to Go program features a variety of programs for evening and weekend community programs. Options include a new "Early Learner Astronomy" programs for ages 2- 5 plus programs on Astronomy, Space and Astronaut Training and the Chabot Sampler selection of favorite activities from a variety of subject areas.

**EarthCapades:** <http://www.EarthCapades.com>

EarthCapades weaves comedy and circus skills with clear lessons about ecology, earth science and positive environmental choices, demonstrating that every day is Earth Day. Audience participation and music are all part of their "Planetary Circus", which teaches practical solutions to real environmental problems.

**East Bay Vivarium:** <http://www.eastbayvivarium.com/aboutus/shows.html>

One-hour Traveling Reptile programs present 20-30 creatures in formats geared to audiences from preschool through adult. The focus is on natural history in general or on specific topics (arranged in advance), such as rainforest and desert ecology, adaptation and ecology.

**Edventure More:** <http://www.campedmo.org/>

Edventure More programs offer experiences in hands-on science, art and technology.

**Fur, Scales and Tails Animal Shows:** <http://www.furscalesandtails.com>

Baby chicks, hamsters, guinea pigs, turtles, snakes, ducks, tortoises, lizards, tarantulas, roosters, hermit crabs, frogs, chickens, hairless rats, and more are all part of the fun.

**Insect Discovery Lab:** <http://www.savenature.org/content/IDL>

The Insect Discovery Lab brings its hands-on insect lab to community locations and events; kids learn to identify insects and arthropods, see how insects defend themselves and appreciate their amazing diversity.

**Lawrence Hall of Science:** <http://www.lawrencehallofscience.org/>

Science shows include dynamic demonstrations and lots of audience participation, featuring topics such as "The Magic of Electricity", "The Science of Fire", and "Quakes and Shakes."

**Mad Science of the Bay Area:** <http://thebayarea.madscience.org>

This organization offers interactive STEM workshops and unique experiments from a variety of different locations.

**MaryLee Sunseri:** <http://www.maryleemusic.com/school-and-library-programs.html>

This award-winning singer of songs and teller of musical tales offers programs such as Songs & Tales of the Sea and Butterflies, Spiders and Bugs, Oh My!

**Mary Spalding:** <http://www.steeljam.com/?p=16>

Steel drummer Mary Spalding's workshops on nature awareness are interactive and green-friendly programs using music, songs and a presentation of instruments made from recycled materials as the foundation for facts and fun.

**Oakland Zoo:** [http://www.oaklandzoo.org/ZooMobile\\_Community.php](http://www.oaklandzoo.org/ZooMobile_Community.php)

Oakland Zoomobile programs offer options for preschoolers through adults. An Education Specialist brings small animals and animal artifacts, most of which can be touched. Sample programs include Animal Detectives, Listening with our feet; Poop Snoop.

**Python Ron's Reptile Kingdom:** <http://www.pythonron.com/>

Python Ron's traveling reptile adventure programs bring a selection of animals, including an 18 foot long python and 4-foot long lizards.

**San Francisco Zoological Society:** <http://www.ssfzoo.org/zoomobile.htm>

The San Francisco Zoomobile brings up-close, hands-on experiences with animals in a variety of programs developed for specific grade levels and aligned with the California Science Content Standards. Examples include: "The Wild City", "Evolving Reptiles", "How Animals Grow", "Habitats."

**Sandi and Stevie:** <http://www.sandiandstevie.com>

For young audiences, musicians and songwriters Sandi and Stevie bring their creature-friendly songs about insects and ocean life.

**Tree Frog Treks:** <http://www.treefrogtreks.com/>

"Wild Science" activities encourage children and adults to see themselves as part of a larger system of natural life in which every organism, from mosquito to shark and flower to mushroom, plays an important part. Naturalists introduce live rescued reptiles and amphibians and lead hands-on science and art activities.

**Uncle Jer's Traveling Bee Show:** <http://bee-show.com/home>

With two observation hives, and samples of beeswax and honey frames, Uncle Jer brings an up-close experience to library audiences, and answers all their questions on honey, bees, and pollination.

**Wildlife Associates:** <http://www.wildlifeassociates.org>

This group cares for non-releasable, abused, abandoned and injured wildlife at a wildlife sanctuary in Half Moon Bay, and brings a variety of programs featuring their animals to schools and community groups. .

**WildCare Nature Van Programs:** <http://www.wildcarebayarea.org/>

This group tailors their programs to preschool through sixth-grade groups, teaching students about animal characteristics, adaptations, and food webs.

**Wild Child Adventures - Bubbles & Balloons:** <http://www.wildchildadventures.com>

Starting with a dazzling demonstration of bubbles, this program introduces the physical characteristics of bubbles and related topics such as concave and convex reflections, transparency and rainbow effects.

## **Additional programming resources:**

Check with your local storytellers, puppeteers and musicians for local favorites who may offer science/ nature – themed programs. At the 2014 Performers Showcase, Risa Lenore's Jelly Jam Time (<http://www.jellyjamtime.com>) story-dancing class for young children featured an interactive song that sings kids through the stages of frog development. Juggler Doug Nolan (<http://www.RockSteadyJuggling.com>) combines recycling and water education programming with his juggling virtuosity. Storyteller Nancy Schimmel (<http://www.sisterschoice.com>) has a special interest in songs and stories about caring for the earth. Randall Metz and his Puppet Company (<http://www.puppetcompany.freesevers.com/>) offer “Why the Sea is Salt.” You may already know wonderful general performers who are willing to tailor their presentation to a STEM/STEAM focus.

And hiding on your book shelves are all those craft books and storytelling resources that will help you craft your own home-grown STEM/STEAM program, including Margaret Read MacDonald's *Earthcare: World Folktales to Talk About* and The National Storytelling Network's *Tales as Tools*, which devotes one chapter on using stories to teach science and math. Another Northern Californian, Sonoma County storyteller Kendall Haven, (<http://www.kendallhaven.com/works.htm>) is the compiler of several collections that use stories as a lead-in to science and math activities and learning.

The Story-Lovers website, developed by North Bay teller Jackie Baldwin has an on-line list of stories for use in science programs (<http://www.story-lovers.com/listssciencestories.html>) and offers many other more specific access points for locating STEM/STEAM stories (look for “animals”, “manure”, “water cycle”, among many possibilities).

Also check the jackets of favorite science books and the websites of children's book publishers to locate local science authors who may enjoy doing science presentations.

You may also be interested in a companion list of performers and presenters of history programs, prepared for the 2013 ACL Institute, *You're History!* It is available under Institute / Handouts/ on the ACL website,