



[NSTA Home](#) | [Member Benefits](#) | [Conferences](#) | [Member Journals](#) | [Science Store](#) | [Learning Center](#)



June 2009: Free For All

F.R.E.E. ...That's our mantra at the start of summer. It's also our favorite amount of money to spend on quality teaching resources! This issue of *Science Class*—an online companion to *Science and Children*, NSTA's journal for elementary teachers—is our annual Free For All issue. With the next print issue of *Science and Children* set to arrive in July, this month's *Science Class* brings an extra issue of online-only content listing free materials and resources available from NSTA, the U.S. Government, and more.

Free For All From NSTA

NSTA offers many resources and services at no charge; some are available only to NSTA members, but many are available to all.

Career Center

Job seekers can search a database of jobs in complete confidentiality at no charge, receive career-planning advice, and read success stories. Visit NSTA's [Career Center](#) for complete details.

Every Day Science Calendar

This month's calendar features facts and challenges for science explorers. [Click here](#) to view and download a pdf of the calendar.

Sponsored by:

Sponsored by:



Sponsored by:

NSTA's E-Newsletters: *Science Class*, *NSTA Express*, and *Scientific Principals*

Science Class is e-mailed the first Wednesday of the month; each grade-specific issue features a theme that corresponds to the themes of NSTA's peer-reviewed journals. NSTA Express is sent every Monday; each issue keeps you up to date on the latest legislative, science education, and NSTA news. Scientific

Principals, is a monthly e-newsletter for elementary principals. You already know that these e-newsletters are free but your colleagues may not. Feel free to forward this issue to them or to send them to our [e-newsletter page](#) to sign up for their own copy.

Have you heard
the latest buzz?



NSTA Press Books

Did you know that you can access a chapter of many new NSTA Press books online for free? Visit the [Science Store](#) and click on the book of your choice. Scroll down to see the link to "Read a sample chapter."

NSTA Recommends

Read reviews of the latest science teaching materials, and take the guesswork out of purchasing. NSTA's online review service, NSTA Recommends, helps you find the best supplemental books, videos, DVDs, and computer software on the market. Our reviewers evaluate each product on the basis of classroom applicability, standards connections, and overall value. Search more than 3,400 reviews by grade level, subject, or keywords at [NSTA Recommends](#).

NSTA Reports' Science Teachers' Grab Bag

NSTA Reports' ever-popular column—[Science Teachers' Grab Bag](#)—is on the web. NSTA Reports is NSTA's source of news and information for and about science education, published nine times a year for NSTA members only. Check out the Grab Bag, where you can find hundreds of free resources, such as videos, publications, CD-ROMs, lab kits, and more.

NSTA Web Seminars

These 90-minute, live professional development experiences allow distant participants to interact with recognized experts including NSTA Press authors and scientists, engineers, and education specialists from NASA, the National Oceanic and Atmospheric Administration (NOAA), and the National Science Digital Library (NSDL). Seminars are from 6:30–8:00 p.m., EST. These online events are grant-funded, so they are offered at no cost; however, the number of participants is limited; it's first come, first served on the day of the program. Register early to receive a username. Password and other program information will follow via e-mail. See our [full schedule](#) of June seminar topics, dates, and times, and registration instructions.

SciGuides

NSTA's online resource, SciGuides, will transform the way you use the internet to plan and provide science instruction to your K–12 students. SciGuides will enable you to quickly and easily locate targeted science content information and teaching resources from NSTA-approved websites and will provide instructional tools and strategies to put them into practice. [Click here](#) for more information and a sample SciGuide.

SciLinks

SciLinks® is an exciting partnership between progressive U.S. textbook publishers and NSTA. If your textbook has SciLinks, you and your students will have the best internet science sources at your fingertips:

- Websites to extend and expand your students' understanding
- Science news to add context to their classroom learning
- Activities to bring science alive for them
- Experts to answer their questions and satisfy their curiosity

SciLinks is a free service to those with SciLinks-enabled textbooks and to NSTA members. And SciLinks is easy to use—just log on to the SciLinks site and enter a SciLinks number from the margin of your textbook. You will be offered a smorgasbord of teacher-approved internet resources tied to that specific point in your book. To learn more about SciLinks, [take a tour here](#).

Free for All From the U.S. Government

[Environmental Protection Agency's Schools Chemical Cleanout Campaign](#)

EPA's Schools Chemical Cleanout Campaign (SC3) aims to ensure schools avoid hazards associated with mismanaged chemicals. SC3's online resources can help K–12 schools develop a successful management plan for chemicals found everywhere from the maintenance closet to the chemistry lab.

Download the public service announcement PDFs "You Work Hard to Keep Your Students Safe From Bullies and Drugs, But What About Chemicals?" and "Is Chemical Safety Part of the Equation?"

[Federal Emergency Management Agency \(FEMA\) for Kids](#)

Herman the Spokescrab introduces children to disaster preparation and prevention and the functions of FEMA. Site visitors can play games, read stories, and become Disaster Action Kids after completing a checklist of educational activities. Ideas for disaster-preparedness include planning for pet care and holding a Family Scavenger Hunt to identify necessary supplies. Resources for teachers include materials on terrorism, fire safety, and school safety. Curriculum materials include an exercise in building a hurricane-proof house, a community preparedness role-play, and a Master of Disaster Quiz Bowl game.

[National Aeronautics and Space Administration \(NASA\) For Kids Only!](#)

The Balloon Program Office at NASA's Wallops Flight Facility in Virginia supervises an initiative to provide high-altitude balloon platforms for scientific and technological investigations. As part of that office's outreach program, a website with materials for students offers resources, such as a buoyancy experiment using simple, readily available materials; a downloadable maze shaped like a NASA pumpkin balloon; and two balloon-related word searches.

[NASA's Kids Science News Network Newsbreaks for K–2 Students](#)

NASA's Kids Science News Network program has produced 20 newsbreaks—60-second animations, activities, and resource links that present "science news you can use." Available in English and Spanish, the newsbreaks explore topics that naturally pique children's curiosity, from what causes day and night to why shadows grow and shrink. Teachers can incorporate newsbreaks into instruction by using them to introduce a concept or as a warm-up, or they can request copies of the scripts and have students perform the newsbreaks themselves.

[NASA/National Oceanic and Atmospheric Administration \(NOAA\) SciJinks Weather Laboratory](#)

Students in grades 4–8 will learn about weather through interactive games, illustrated text, and fun facts. The How and Why section provides simple, concise answers to familiar questions (Why is the sky blue?), while the Weather and People section relates weather folklore from around the world (for example, ancient Egyptians believed the Sun sailed across the sky in a shallow boat). More than 20 ideas for weather-related science fair projects are described. Teachers will find classroom materials to download, including activity guides on weather-related topics and posters on clouds, satellites, global weather patterns, and ocean science.

[Peace Corps Challenge](#)

Teachers can access interdisciplinary lesson plans for grades 3–12 on topics including water contamination, malaria, sanitation and disease, and soil runoff. The site also describes service learning and enrichment opportunities and offers language lessons.

[U.S. Department of Education \(ED\) The Psychology of Learning: How to Organize Your Teaching](#)

Visitors to ED's Doing What Works website will find answers to a very important question: What can teachers do to ensure their students are learning? The site's Psychology of Learning section presents research-based instructional strategies aimed at improving students' memory and strengthening their understanding of skills and concepts. The four strategies described are

- spacing learning over time,
- alternating solved problems with problems to be solved,
- connecting abstract ideas with concrete contexts, and
- asking higher-order questions.

In each case, the research base for the method is explored, examples of the method in practice are provided, and step-by-step instructions for implementing the method, including planning templates, are detailed.

[U.S. Department of Energy \(DOE\) Human Genome Project Education Resources](#)

DOE and the National Institutes of Health on the Human Genome Project (HGP), teamed up to produce educational resources. Teachers can download publications on the basic science behind HGP, as well as K–12 curriculum modules and lesson plans, teacher guides, software, slide sets, and posters. Links lead to tutorials, videos, webcasts, teacher training and workshop opportunities, and genetics websites in Spanish.

[U.S. Department of the Treasury H.I.P Pocket Change](#)

The U.S. Mint created this website to show how coins are "history in your pocket" (H.I.P.). Teaching materials include science lesson plans using coins, a monthly update on the latest coin resources, and suggestions for coin-related student projects and activities. Children can view the coin of the month, travel by time machine to learn about the history of U.S. coins, watch a cartoon showing how a coin is made, play games, and solve puzzles.

Free for All Teachers of Science

[Children's Engineering: A Teacher Resource Guide](#)

Children's Engineering: A Teacher Resource Guide for Design and Technology in Grades K–5 identifies classroom experiences that enable teachers to introduce students to the technological world around them. Resources for each activity include a design brief, teacher tips, reproducible guided portfolio pages, and an assessment rubric.

[Children's Gardens: A Field Guide](#)

Teachers can download this 200-page guide produced by Common Ground, a program from the University of California Los Angeles County Cooperative Extension Service. The book includes detailed instructions on the process of establishing a garden for children, numerous related experiments and activities, a guide to resources, and a selected bibliography.

[Elementary Lessons With Video Games](#)

A teacher from the MathScience Innovation Center in Richmond, Virginia, developed two elementary-level lessons on physical science that incorporate

video gaming. Search the website for Twisted Forces (fourth grade) and Play in Motion (first grade).

[Honey Bee Unit](#)

Elementary level materials include printable activity sheets on the honey bee's body parts, life cycle, dancing communication, and role in pollination. Background information for teachers, lyrics for a bee rap song, and bee proverbs and poems are also available.

[Mama Mirabelle's PreK Science Game](#)

The PBS kids website features a game for preschoolers based on the animated series Mama Mirabelle's Home Movies. Children help animals find their way home from Mama Mirabelle's by clicking on the photograph matching Mama's description of the habitat each animal prefers. Short live-action video segments then show the animal in the correct habitat.

[Resources for English Language Learners](#)

A teacher from Sacramento, California, has compiled a collection of science-related links helpful to teachers of English language learners. Larry Ferlazzo takes a K–12 approach to his daily posts on the latest web-based teaching ideas he's come across. Many of the resources he identifies have all-student applications. His website also contains resources for other subjects.

[Sid the Science Kid Homepage](#)

This PBS series encourages preschoolers to explore the foundations of science in occurrences, such as melting popsicles and sneezing. Video clips, printables, information for parents and teachers, and science activities are available online.

[Universe Awareness for Young Children](#)

Part of the 2009 International Year of Astronomy outreach program, this site uses the wonders of astronomy to inspire and educate children ages 4–10, especially those from economically disadvantaged backgrounds. Visitors will find a variety of educational materials from around the world (the site is based in the Netherlands).

[Video-Making for the Classroom](#)

Animoto offers educators a cutting-edge teaching tool: the ability to create (or to have students create) short films for the classroom. Users e-mail their images and sounds to Animoto, and minutes later a customized video has been generated. The video can then be posted and embedded elsewhere or downloaded for in-class presentations. Examples of how educators have used the service are provided.

[WhaleTimes](#)

These online educational materials include the Fishin' for Facts Library, which presents marine science information to students in grades 4–8; Ask Jake, the Sea Dog, which answers children's "seamail" questions about ocean animals; The Colossal Dictionary of Whale Words; a species sleuth activity; and a list of recommended books for children and adults.

Coming next month...**Connecting With Technology**

If you would like to read another level of *Science Class*, or if your colleagues would like to subscribe, please [click here](#)

In addition, elementary administrators can sign up for our *Scientific Principals* newsletter at http://science.nsta.org/scientific_principals/. Readers tell us this is a great way to build support for science in elementary schools.

Forward this message to a colleague

[Sign Up/OptOut](#) | [Feedback](#) | [Archive](#) | [NSTA News Digest](#) | [Career Center](#)
[NSTA Home](#) | [Member Benefits](#) | [Conferences](#) | [Member Journals](#) | [Science Store](#) | [Learning Center](#)

This e-newsletter is brought to you by the National Science Teachers Association
1840 Wilson Boulevard • Arlington, VA 22201-3000 • Phone: 703-243-7100
<http://www.nsta.org>

If you do not want to receive this e-newsletter, please follow this link:
<http://ecommerce.nsta.org/optout/default.asp?source=scienceclass>