



CRS

COMMUNITY RESOURCES FOR SCIENCE
practical support for great science teaching

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Sample Materials 5th Grade Earth Science

Audio Tape/CD

AstroCappella CD

\$15-20

The Chromatics

<http://www.astrocappella.com>

AstroCappella is a marriage of astronomy and music, developed by astronomers. The CD features songs about the planets, the sun, Hubble Space Telescope discoveries, meteors, asteroids, comets, and more. Lesson plans, puzzles and games also accompany the CD. The CD works on a CD player, Mac and PC computers.

Sing Along with the Weather Dude

\$15-20

Amazon.com

<http://www.amazon.com>

none

Songs provide an entertaining mini-lesson in meteorology. In musical styles ranging from light rock to light rap to ballads, Walker guides children through cloud types, rain, snow, wind and air pressure, thunderstorms, the seasons, the water cycle, and weather forecasting. Comes with a related activity book. Cheaper item price at www.wxduke.com, but if you're buying many things from Amazon.com, total cost with shipping might be less through them.

Sunshine makes the Seasons

\$10-15

Amazon.com

http://www.amazon.com/Sunshine-Seasons-reillustrated-Lets-Read---Find-Out/dp/0060592052/ref=sr_1_1?s=books&i
ISBN: 978-0060592059

Make sure to buy the audio cassette edition. By Franklin M. Branley. It all starts with the sun. The sun shines on the Earth and keeps it warm. We have day and night because the Earth spins on its axis and we spend part of each day facing the sun and part of the day facing away from it. But why are days longer in the summer than in the winter? The answer to this question is explained through an experiment using a pencil, an orange, and a flashlight. And when you see this, you'll know the reasons for the seasons. Audiocassette and book also available at Barnes & Noble.

Tours of the Night Sky

\$15-20

Astronomical Society of the Pacific

<http://www.astrosociety.org>

OA301

This best-selling ASP collection of 4 seasonal audio nightsky tours and 40-page booklet with star charts makes stargazing easy. Whether hiking, camping, or simply going out into your backyard, you can play these audio tours (either CD or cassette) on your portable player and embark on a magical tour of the heavens. Using the brightest stars as markers, you will soon effortlessly locate major constellations and discover their mythical origins. It's like having an astronomer by your side! Set includes 2 compact discs, 4 audio cassettes, 40-page booklet.

A Drop Around the World

\$7-8

Amazon.com

<http://www.amazon.com>

ISBN: 1883220726

The Teacher's Guide for this book is available for \$7.95. A drop of rain is a drop of life--a drop of eternity. Barbara Shaw McKinney and illustrator Michael Maydak take us on an "out of sight" journey from Maine to Mumbai, with just one raindrop as it touches plant, animal, and human life all around the world. Traveling with Drop, readers will see the world, inside and out, from solid, liquid, and vaporous viewpoint. Full color.

A Drop of Water

\$10-15

Amazon.com

<http://www.amazon.com>

by Walter Wick. As you're admiring the "crown" created by a water drop splashing into a pool, or how many water droplets can fit on the head of a pin (the smallest droplet on the pin contains more than three trillion water molecules), you'll learn about evaporation, condensation, snowflakes, how clouds form, and more amazing water tricks. Wick's other artfully composed photographs include a "wild wave" caused by a brown egg dropped in a water glass, soap bubbles with a "shimmering liquid skin," a snowflake

A River Ran Wild: An Environmental History

\$7-8

Amazon.com

<http://www.amazon.com>

ISBN 0152163727

by Lynne Cherry. True story of the Nashua River Valley in North-Central Massachusetts from the time that the Native Americans settled there, naming it River With the Pebbled Bottom. The book traces the impact of the industrial revolution on the river and the eventual clean-up campaign mounted by a local watershed association. The graphic borders are packed with historical information, showing the original wildlife, tools and utensils used by Native Americans and early settlers, and continuing on to modern artifacts such as plastic water jugs. A suggested reading for the GEMS River Cutters unit.

Abel's Island

\$6-7

Amazon.com

http://www.amazon.com/Abels-Island-Newbery-Award-Honor/dp/0312371438/ref=sr_1_1?s=books&ie=UTF8&qid=140

ISBN 0374400164

by William Steig. Abel is an urban mouse who suddenly finds himself on an uninhabited island trying to survive. He discovers skills and talents in himself that help him think of ways to forage for food, cross the river, and return home. Abel's time on the island brings him a new understanding of the world from which he's separated as he reexamines the easy way of life he had previously. A suggested reading for the GEMS River Cutters unit.

Activity books in Sunflower/Girasol Bilingual Series

\$5-6

Intercultural Center for Research in Education

<http://www.incre.org>

Student Activity Books and Bilingual Memory Game sold separately. Sunflower/Girasol is a fully bilingual Spanish/English curriculum designed to encourage students to develop language skills and at the same time to turn their interest to the world of scientific discovery. The full-color format of Sunflower/Girasol invites children in grades 2-6 to engage in science and environmental education activities and to carry out investigations in their schools, homes and communities. Each thematic unit of Sunflower/Girasol is presented in a full-color magazine format activity book in either Spanish or English, with an accompanying teacher's guide. The first six units of Sunflower/Girasol are Plants, Water, Human Body, Air, Trash and Sound.

California gold-rush plays

FREE

Alameda County Public Libraries

<http://alam1.aclibrary.org/search~S30/?searchtype=t&searcharg=california+gold-rush+plays&searchscope=30&sortdrc>
812.3 CALIFORNIA

edited, with an introduction, by Glenn Loney, 180 pages. Joaquin Murieta De Castillo / Charles E.B. Howe, A live woman in the mines / Alonzo Delano, Two men of sandy bar / Bret Harte.

California Rivers and Streams

\$25-30

Amazon.com

<http://www.amazon.com>

This is a superb review of how rivers systems work and how man-made changes impact these systems. Perfect for the interested layperson interested in earth science. The second half of this book covers the major watersheds of California.

Close Encounters: Exploring the Universe With the Hubble Telescope

FREE

Alameda County Public Libraries

<http://alam1.aclibrary.org/search~S30/?tclose+encounters/tclose+encounters/1%2C8%2C10%2CB/frameset&FF=tclose>
J523 SCOTT

by Elaine Scott. Gr. 4-7. With stunning photos and clear text, Scott demonstrates the importance of the information provided by the repaired Hubble Space Telescope in this companion to Adventure in Space: The Flight to Fix the Hubble (1995). Following a brief history of astronomy and the development of the telescope, the author describes how the Hubble helps scientists explain the formation of planets, the birth and death of stars, and the existence of black holes. Scott's comparisons and examples make highly complex information easier to understand. Although the captions are awkwardly separated from their illustrations, the photographs themselves are striking, plentiful, and appealing. Out of print, available in libraries or used.

Cloud Dance

\$10-15

Amazon.com

<http://www.amazon.com>

ISBN: 0152022317

by Thomas Locker, This beautifully designed book celebrates clouds as they appear during the different hours of the day and seasons of the year. Each two-page spread features a few lines of prose on the verso and an illustration encompassing most of the recto. The oil paintings are done in subdued and relaxing colors.

Coal, Energy and Crisis

\$2-3

Amazon.com

<http://www.amazon.com>

ISBN: 0817852026

by Lillie D. Chaffin. Describes the methods currently being used to mine "black gold" and explores the problems that confront coal miners, mine owners, manufacturers, and consumers.

Coralito's Bay/ La Bahía de Coralito \$10-15
Monterey Bay National Marine Sanctuary

<http://www.mbnmsf.org>
ISBN 0-9742810-0-X

Coralito's Bay is the story of a young boy's imaginary underwater adventures through the Monterey Bay National Marine Sanctuary. This dream-like journey in his father's adapted flower truck shows young Coralito the natural wonders of living in the Sanctuary, and how important clean waters are to it's inhabitants. Coralito learns that the ocean, like himself, needs a clean and healthy environment. The book is in both spanish and english.

Cycles Books (10 copies) \$25-30
Astronomical Society of the Pacific

<http://www.astrosociety.org>
KT101

An illustrated introduction to astronomy and time. Adults and older children will love this friendly pocket-sized guide! Restore an awareness of the cycles of our planet, lost by modern man's dependence on clocks and calendars. Engaging illustrations graphically reveal the motion of the Sun and stars, phases of the Moon, and the reasons for the seasons. Remedy common scientific misconceptions with these delightful cartoons!

Danny Dunn and the Universal Glue \$10-15
Amazon.com

<http://www.amazon.com>
ASIN 007070550X

by Jay Williams and Raymond Abraskin; Illustrated by Paul Sagsoorian. Danny and his friends bring evidence to a town meeting that waste from a local factory is polluting the local stream. A discussion of watersheds, watersheds, water tables and the way the pollution moved through the system of streams (on page 85) relates well to Session 6 and 7 in the GEMS River Cutters teacher guide.

Discover Storm Water FREE
California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

A student activity book that explains what storm water is, where it comes from, how it can get polluted and can affect the environment, and what we can do to prevent storm water pollution.
Appropriate for Grades 4-6.

Drylongso \$10-15
Amazon.com

<http://www.amazon.com>
ISBN 0152015876

by Virginia Hamilton; Illustrated by Jerry Pinkey
This strikingly illustrated book takes a powerful look at what happens when rivers dry up. An unknown boy blows into a village with a severe dust storm, and tells the villagers his name is Drylongso. He tells them that he was born in a time of great drought, but that his mother told him wherever he goes "life will grow better." Drylongso has special information about drought cycles, agriculture, and ways to survive; he carries a "dowser," or divining rod

Great Kapok Tree: A Tale of the Amazon Rain Forest \$10-15
Amazon.com

http://www.amazon.com/Great-Kapok-Tree-Amazon-Forest/dp/0152026142/ref=sr_1_1?s=books&ie=UTF8&qid=1406.
ISBN: 015200520X

by Lynne Cherry, This book tells the story of what happens when the rain forest is destroyed. Animals living in the kapok tree whisper the importance of the rain forest ecosystem in the ears of a sleeping tree cutter. Watercolor illustrations accompany the text.

Jupiter

\$20-25

Amazon.com

<http://www.amazon.com>

ISBN0531203875

By Landau, Elaine. Correcting old errors and adding new information, Landau updates her 1991 introductions to the next two planets beyond Earth. There have been plenty of developments in the meantime including the Ulysses and Galileo probes that have provided close-up views of Jupiter and its moons, Comet Shoemaker-Levy 9's spectacular crash into that planet, and Mars Pathfinder's considerably softer landing in 1997 to launch little Sojourner. Along with a generous selection of paintings and enhanced-color photos, readers will get a summary of our developing knowledge of each planet, plus a glimpse of plans for future exploratory missions.

Make Things Fly: Poems About the Wind

\$3-4

Amazon.com

http://www.amazon.com/Make-Things-Fly-Poems-About/dp/0689815441/ref=sr_1_1?s=books&ie=UTF8&qid=1406317

ASIN: 0689815441

by Dorothy M. Kennedy, This is a collection of 27 weather poems about wind written by familiar names in children's literature. The pencil illustrations enhance the moving, sweeping, sometimes wild and sometimes gentle, movements that the words evoke. A perfect read aloud to introduce the subject of wind.

Mars

\$8-9

Amazon.com

<http://www.amazon.com>

ISBN0531164284

By Landau, Elaine. Correcting old errors and adding new information, Landau updates her 1991 introductions to the next two planets beyond Earth. There have been plenty of developments in the meantime including the Ulysses and Galileo probes that have provided close-up views of Jupiter and its moons, Comet Shoemaker-Levy 9's spectacular crash into that planet, and Mars Pathfinder's considerably softer landing in 1997 to launch little Sojourner. Along with a generous selection of paintings and enhanced-color photos, readers will get a summary of our developing knowledge of each planet, plus a glimpse of plans for future exploratory missions. Both accounts close with lists of books, Web sites, and places to visit. Despite the revisions, these titles still lag well behind events-particularly Mars, which goes into generalities after Pathfinder and mentions the Mars Polar Lander not at all

Miss Rumphius

\$6-7

Amazon.com

http://www.amazon.com/Miss-Rumphius-Barbara-Cooney/dp/0140505393/ref=sr_1_1?s=books&ie=UTF8&qid=14065

ISBN: 0140505393

by Barbara Cooney. As a child Great-aunt Alice Rumphius resolved that when she grew up she would go to faraway places, live by the sea in her old age, and do something to make the world more beautiful--and she does all those things, the last being the most difficult of all.

My Life With the Wave

\$7-8

Amazon.com

http://www.amazon.com/My-Life-Wave-Catherine-Cowan/dp/0060562005/ref=sr_1_1?s=books&ie=UTF8&qid=140691

ISBN: 0060562005

By Cowan, Catherine. A boy befriends a wave and brings it back home where they romp together until the onset of winter storms turns it bleak and angry. The wave is returned to the sea in "frozen form" and the boy dreams of a new predicament. The acrylic and oil illustrations complement the story. Fiction, picture book, read-aloud.

Night of the Twisters

\$6-7

Amazon.com

<http://www.amazon.com>

ISBN: 0064401766

by Ivy Ruckman, In 1980, a series of devastating tornados stormed through portions of Nebraska. This is the story of a fictional character, Dan Hatch, and his friend who survive the tornados and the aftermath of the storms. This engaging story is a good choice for reluctant readers and for literature circles.

One Well: The Story of Water on Earth

\$10-15

Amazon.com

amazon.com

Seen from space, our planet looks blue. This is because almost 70 percent of Earth's surface is covered with water. Earth is the only planet with liquid water -- and therefore the only planet that can support life. All water is connected. Every raindrop, lake, underground river and glacier is part of a single global well. Water has the power to change everything -- a single splash can sprout a seed, quench a thirst, provide a habitat, generate energy and sustain life. How we treat the water in the well will affect every species on the planet, now and for years to come. One Well shows how every one of us has the power to conserve and protect our global well. One Well is part of CitizenKid: A collection of books that inform children about the world and inspire them to be better global citizens.

Our Wet World

\$6-7

Amazon.com

http://www.amazon.com/Our-Wet-World-Sneed-Collard/dp/0881062685/ref=sr_1_1?s=books&ie=UTF8&qid=1406919108&sr=1-1
ISBN0881062685

By Collard, Sneed B.; Needham, James M. (illustrator). The magic of the underwater world comes alive in this pleasant children's book. The illustrations help to take the reader through the many different ecosystems that constitute Earth's "wet world." From streams and rivers through marshes to the shore, each ecosystem is carefully described in clear terms that can be understood and appreciated by children ages 5 to 9. Worth noting is the excellent glossary, unusual in a children's book but quite useful here.

Plant Profiles: Free Guide to Common Bay Area Native Plants

FREE

The Watershed Project

<http://www.thewatershedproject.org>

Download off of website. Buckeye, Coyote Brush, Lupine.....These are just a few of California's most common native plants. Use this guide to find out more about these amazing species. And now you can identify the most invasive species that threaten their existence.

Powers of ten : a book about the relative size of things in the universe and th

FREE

Alameda County Public Libraries

<http://alam1.aclibrary.org/search~S30?/aMorrison%2C+Philip/amorrison+philip/-3,-1,0,B/browse>
523.1 MORRISON

Out of print. Powers of Ten (1982) by Philip & Phylis Morrison and The Office of Charles and Ray Eames. This is a wonderful and elegant book version of the classic film.

Renewable Energy Energist

\$0-1

National Energy Foundation

<http://www.nef1.org/>
#45RENEW

This 8-page 11" x 17" two-color newspaper-format publication provides excellent background information on what renewable energy is, including: geothermal energy; OTEC, tidal and ocean waves; biofuels, refuse and wood; wind; hydropower; passive and active solar energy; photovoltaics; and power towers. Each energist has interesting scientific data, student learning activities, and games. Grades K-12.

Saturn

\$8-9

Amazon.com

<http://www.amazon.com>

ISBN0531164306

By Landau, Elaine. These attractive volumes offer much for report writers and browsers. Each begins with a brief overview of the discovery of the planet. With plenty of full-color and black-and-white photographs and paintings, the authors detail what we know, suspect, and hope to find out about Earth's close neighbor Venus and the mysterious ringed Saturn.

Science Projects in Renewable Energy

\$10-15

National Energy Foundation

<http://www.nef1.org/>

#30ASES

Projects range from simple to complex. Experimental projects use inexpensive materials and simple-to-build models that focus on demonstrating the scientific method and teach renewable energy concepts. Students will learn about solar, wind, biofuels, hydrogen, energy efficiency and the world around them. A reference list is included. 144 pp.

Sector 7

\$10-15

Amazon.com

<http://www.amazon.com>

ISBN: 0395746566

by David Wiesner, While on a school trip to the Empire State Building, a boy is taken by a friendly cloud to visit Sector 7, where he discovers how clouds are shaped and channeled throughout the country. This book is an excellent weather resource, could spark some discussion, and may change the way you and your students look at clouds.

Sing A Song of Science

\$15-20

Amazon.com

http://www.amazon.com/Sing-Song-Science-Kathleen-Carroll/dp/156976090X/ref=sr_1_2?s=books&ie=UTF8&qid=1461111111
ISBN: 156976090X

by Kathleen Carroll. Sing A Song Of Science presents sixteen topics showcased in songs, raps, stories, and visualizations in the format of a 64-page activity manual and a 35-minute audiotope designed for use with elementary school grades K-6. Important subjects as matter and energy, weather, how the human body works, the story of George Washington Carver, tropical rain forests, etc. are presented with an easy-to-read overviews and combines an innovative approach with traditional methods of teaching to reinforce fundamental science facts. Each topic includes two sets of activities enabling students to construct their own understanding with hands-on kinesthetic discover activities. The students further expand their learning with activities to reinforce the vocabulary and concepts learned in the songs.

Solar Power (Energy for Today)

\$9-10

Amazon.com

http://www.amazon.com/Solar-Power-Energy-Today-Benduhn/dp/083689362X/ref=sr_1_1?s=books&ie=UTF8&qid=1461111111
ISBN-10: 083689362X

By Tea Benduhn

Packaged in a small, square format, this title presents a surprising amount of information about solar power in brief sentences that are calibrated to newly confident readers' abilities. The short chapters start with essential definitions of terms such as solar system before moving into topics such as renewable energy and greenhouse gases. The selection of well-chosen color photos, which are crisply reproduced on each page, is particularly strong in final chapters about solar technology, and the close-up images of a solar-powered car and tent will attract young browsers. Readers will likely need help with advanced concepts, for example, global warming, which is illustrated with a helpful diagram, but the language is direct, clear, and enlightening. A short glossary, resource list, and index close this strong title in the Energy for Today series. This will partner well with Helen Orme's Energy for the Future, also reviewed in this issue, in elementary units on the environment. Grades 2-4

Starry Messenger

\$15-20

Amazon.com

http://www.amazon.com/Starry-Messenger-Galileo-Peter-S%C3%ADs/dp/0374470278/ref=sr_1_1?s=books&ie=UTF8
ISBN: 0374371911

By P. Sis. The story of Galileo is at once inspiring and troubling. The brilliant astronomer was a celebrated scientist who was showered with honors and patronage until his greatest discovery--that the earth circled the sun rather than the other way around--proved to be too much of a threat to prevailing orthodoxy.

The Ben Franklin Book of Easy and Incredible Experiments

\$15-20

Amazon.com

http://www.amazon.com/Franklin-Book-Easy-Incredible-Experiments/dp/0471076384/ref=sr_1_1?s=books&ie=UTF8&
ISBN: 0471076384

A Franklin Institute Science Museum Book. Gr. 4-6. From the Franklin Institute Museum, a hands-on science museum in Philadelphia, comes a book with a somewhat unusual concept. Following an introduction to Benjamin Franklin, come "Using Your Head," a chapter concerning observation, innovation, and invention, as well as five other chapters on activities and experiments related to some of his major interests: weather, electricity, music, paper and printing, light, and sound. Clear, simple directions guide rea

The Big Storm

\$5-6

Amazon.com

<http://www.amazon.com>
ISBN: 0689317700

by Bruce Hiscock. Gr. 2-5. Hiscock's informative picture book chronicles the course of a devastating storm that crossed the U.S. in spring 1982. He tracks the progress of the low-pressure system that caused heavy rains along the Pacific Coast, avalanches in the Sierra Nevadas, blizzards in the Rockies, tornadoes in the Midwest, and deep snow from the Great Lakes to the East Coast. Brightly hued watercolor paintings portray the storm in a variety of ways: aerial satellite views, diagrams of fronts, close-ups of tornadoes touching down, and captioned diagrams explaining hail formation. Although the text is far more comprehensive than the format might suggest, Hiscock writes clearly and precisely: younger readers who may not understand all the meteorological concepts will still grasp the geography of North American weather patterns and enjoy the drama of this particular storm.

The Hidden Forest

\$6-7

Amazon.com

http://www.amazon.com/Hidden-Forest-Jeannie-Baker/dp/0744578760/ref=sr_1_3?s=books&ie=UTF8&qid=14063173
ASIN: 0688157602

by Jeannie Baker, When a friend helps him retrieve the fishing trap he lost while trying to fish just off the coast of eastern Tasmania, Ben comes to see the Giant Kelp forest where he lost his fishing trap in a new light. The collage artwork combines pressed seaweed, sponges, and sand. An author's notes gives information about kelp forests including how they grow and their habitat.

The Magic School Bus at the Waterworks \$4-5

Amazon.com

<http://www.amazon.com>

ISBN: 0590403605

by Joanna Cole; illustrated by Bruce Degen. Grades: K-6. Ms. Frizzle, the "strangest teacher in school," takes her class on a field trip to the waterworks. First, they journey to the clouds where the class rains, each kid inside his own raindrop. Then they end up experiencing the water purification system from the inside, traveling through the mixing basin, settling basin, filter, and through the pipes to emerge from a faucet. Evaporation, the water cycle, and filtration are just a few of the concepts explored.

The Magic School Bus Wet All over: A Book About the Water Cycle \$3-4

Amazon.com

<http://www.amazon.com>

Grades 3-5. Readers are invited to join Ms. Frizzle and her class on a wet and wild Magic School Bus ride through the water cycle that enables them to experience the processes of evaporation, condensation, and rain.

The Missing 'Gator of Gumbo Limbo: An Ecological Mystery \$2-3

Amazon.com

http://www.amazon.com/Missing-MISSING-Craighead-Mar-19-93-Paperback/dp/B007SKBPUE/ref=sr_1_2?s=books&i
ISBN 006440434X

by Jean C. George. Sixth-Grader Liza K and her mother live in a tent in the Florida Everglades. She becomes a nature detective while searching for Dajun, a giant alligator who plays a part in a waterhole's oxygen-algae cycle, and is marked for extinction by local officials. The book is full of detail about the local habitats and species and the forces that impact on them. "Look how Mother Nature's plan for the Everglades has been tortured and diverted...the Everglades, which is really a slow river, is so r

The Planets (Starting with Space) \$10-15

Amazon.com

http://www.amazon.com/Planets-Starting-Space-Cynthia-Nicolson/dp/1550745123/ref=sr_1_1?s=books&ie=UTF8&qid
ISBN 1550747169

by Cynthia Pratt Nicolson, Bill Slavin (Illustrator). Aimed at readers who know a little and want to know a little more, these above-average surveys include simple projects and briefly told myths. Using a question-and-answer format, Nicolson begins her tour of The Planets with Mercury, systematically describing local conditions ("What would it be like to visit...?"), major physical features ("Why does Venus look so bright?"), and basic facts, such as year length and size compared to Earth's. She also offers

The River that Gave Gifts: An Afro-American Story \$4-5

Amazon.com

http://www.amazon.com/River-Gifts-Fifth-World-Tales/dp/0892390271/ref=sr_1_1?s=books&ie=UTF8&qid=140658365
ISBN 0892390271

by Margo Humphrey. Four Children in an African village make gifts for wise old Neema while she still has partial vision. Yanava, who is not good at making things, does not know what to give and seeks inspiration from the river. As she washes her hands in the river, rays of light fly off her fingers, changing into colors and forming a rainbow. After all the other gifts are presented, she rubs her hands in the jar of river water she has brought and thus gives a rainbow of light and the gift of sight to Neema. In addition to the themes of respect for elders and the validity of different kinds of achievement, the river is portrayed as a primeval source of power. A suggested reading for the GEMS River Cutters unit.

- The Sacramento; golden river of California, (Rivers of the world, W21)** \$25-30
 Amazon.com
http://www.amazon.com/Secret-Place-Eve-Bunting/dp/0395643678/ref=sr_1_2?ie=UTF8&qid=1406574037&sr=8-2&ke
 Information about Sacramento River
- The Sespe Wild: Southern California's Last Free River** \$15-20
 Amazon.com
<http://www.amazon.com>
- The Sespe Wild" is an anthology of reflections on life and life issues in the Sespe river. Each chapter focuses on an animal that lives or used to live around the Sespe. There are also chapters talking about attempted dams, oil drilling, and rock art left by the Chumash Indians. The book can be read in installments, or, if you have the time, in one sitting.
- This Is the Ocean** \$10-15
 Amazon.com
<http://www.amazon.com>
 ISBN: 1563978903
 by Kersten Hamilton, This book explores the cycle of water from the ocean to the clouds, mountains, rivers and streams, and back to the ocean. The rhyming text is rich in its simplicity. The full-color illustrations are composed of three-dimensional textured-paper collages.
- Three Days on a River in a Red Canoe** \$6-7
 Amazon.com
http://www.amazon.com/Three-River-Canoe-Reading-Rainbow/dp/0688040721/ref=sr_1_1?s=books&ie=UTF8&qid=1406574037&sr=8-2&ke
 ISBN 0688040721
 by Vera B. Williams. Mom, Aunt Rose, and two children on a three-day camping trip by canoe, encounter currents, wild winds, a rainbow, a moose and more. A suggested reading for the GEMS River Cutters unit.
- Tops and Bottoms** \$10-15
 Amazon.com
http://www.amazon.com/Tops-Bottoms-Caldecott-Honor-Book/dp/0152928510/ref=sr_1_1?s=books&ie=UTF8&qid=1406574037&sr=8-2&ke
- by Janet Stevens. Hare turns his bad luck around by striking a clever deal with the rich and lazy bear down the road.
- Venus** \$15-20
 Amazon.com
http://www.amazon.com/Venus-Watts-Library-Sagebrush-Spangenburg/dp/061337617X/ref=sr_1_fkmr0_2?s=books&ie=UTF8&qid=1406574037&sr=8-2&ke
 ISBN: 0531139921
 By R. Spangenburg and K. Moser. Discusses the orbit, atmosphere, surface features, and exploration of the planet Venus.
- Water Dance** \$6-7
 Amazon.com
<http://www.amazon.com>
 ISBN: 0152163964

by Thomas Locker Elegant landscape and seascape paintings present water in forms such as storm clouds, mist, rainbows, and rivers. Each painting is accompanied by poetic text that highlights the specific phenomenon. At the end of the book, the paintings appear in miniature with a brief paragraph of information provided by a scientist relating to the water cycle.

Water Music: Poems for Children

\$8-9

Amazon.com

<http://www.amazon.com>

ISBN: 1590782518

by Jane Yolen, Seventeen original poems celebrate water in various forms including raindrops, waterfalls, streams, surf, ice, and snow. Crispily-focused, full-color photographs highlight the special qualities of water in all the various forms. This would be useful as a writing model as well as for enhancing a science unit.

Weather

\$6-7

Amazon.com

<http://www.amazon.com>

ISBN 068817521X

by Seymour Simon. As with Simon's previous titles on the individual planets (Morrow), this book is a perfect marriage of words and pictures. Each high-quality, full-color photograph or diagram is truly a work of art, suitable for framing. The large-print text, sometimes superimposed on the illustrations, is easy to read. Beginning with the general effects of the sun and the Earth's rotation, continuing with wind patterns, temperature, clouds, and precipitation, and concluding with smog and the greenhouse effect, the author lucidly discusses all of the terms and elements that constitute tropospheric weather. Instruments and the possible affects of human activity on the atmosphere are touched upon. Unfortunately, the full-page diagrams that demonstrate the way the sun warms the Earth and the speed of its rotation do not clearly explain those phenomena. Gail Gibbons's *Weather Words and What They Mean* (Holiday, 1990) covers much of the same information, but has a cartoon format. Martyn Bramwell's *Weather* (Watts, 1988; o.p.) is for older readers.

Where the River Begins

\$6-7

Amazon.com

http://www.amazon.com/Where-River-Begins-Picture-Puffins/dp/0140545956/ref=sr_1_1?s=books&ie=UTF8&qid=140

ISBN: 0140545956

by Thomas Locker, Two brothers and their grandfather go on a camping trip to locate the source of the river that flows by their home. The text is richly illustrated with Locker's remarkable, museum quality oil paintings that evoke detail and reflect the changing landscape and weather.

Computer Software

Great Solar System Rescue

\$80-90

Tom Snyder Productions

<http://www.tomsnyder.com>

With this cooperative learning program, students must find and rescue probes lost in the solar system. Role-playing scientific experts, students use geology, planetary science, chemistry, and other subjects to guide their search. Students discover that teamwork and collaboration, as well as science, are the keys to success.

Ocean Expeditions: El Nino

\$120-140

Tom Snyder Productions

<http://www.tomsnyder.com>

F-OEX

Not offered by Tom Snyder anymore. Try The Great Ocean Rescue. Engage your students in an interactive CD-ROM world of interdisciplinary scientific research. Working in teams of four, students take on roles of navigator, communications expert, data collector, and data analyst to determine if an El Nino weather pattern is forming. After developing a hypothesis, students test it by gathering and analyzing real NASA and NOAA data on sea surface temperature and pressure; clouds and precipitation; currents; and wind. Grades 6-12.

Science Court: Water Cycle

\$120-140

Tom Snyder Productions

<http://www.tomsnyder.com>

WATA

Grades 4-6 one computer license. Meteorologist Maria Hernandez takes the stand as an expert witness in the case of Pip Peterson's leaky pipes. Are the pipes really leaking? Or are they victims of the water cycle? You can complement your Science Court experience with hands-on science kits, investigation books, wall charts, the original video episodes, or reading books.

Space Update CD-ROM

\$35-40

The Public Connection Project at Rice University

<http://earth.rice.edu/>

SPACE UPDATE is an interactive, real-time display system of Earth and Space Science images and data designed for Museums and Schools. 5 modules: ASTRONOMY - Images from the Hubble Space Telescope and other observatories around the globe. SKY TONIGHT - Daily skyviews (including the planets and Moon!), for morning and evening skies, looking N, S, E, W, and UP. The CD ships with 8 preset viewing latitudes. SOLAR SYSTEM - Recent results from planetary missions, plus planetary images from Hubble! SPACE WEATHER - A description of what space weather is and what it does. SPACE EVENTS - Information about new discoveries like Comet Shoemaker-Levy 9 and solar and lunar eclipses. The images and overview of the CD-ROM are available online at <http://mtpe.com/connected/spaceupdate.html>

Kits & Modules

4Rs Teaching Kit

FREE

StopWaste.org

<http://www.stopwaste.org>

Kit includes "Kids Talkin' Trash" and "Do the Rot Thing" videos; Reduce, Reuse, Recycle, Rot: pictograms/ discussion guide; A Teacher's Guide to Compost Activities: "Do the Rot Thing"; Poster - Classroom compost poster; "Teaching Waste Reduction Through Children's Literature" : a review of 67 children's books for their links to waste reduction messages.

Alternative Energy and Environmental Science Power House Green Essentialia

\$70-80

Amazon.com

http://www.amazon.com/Thames-Kosmos-Alternative-Environmental-Essentials/dp/B001R4RAKG/ref=sr_1_cc_1?s=aj

Power House: Green Essentials Edition. To live sustainably, we must use Earth's resources at a rate at which they can be replenished, and thus provide for future generations to live as we have. In this kit, you can learn about alternative energy and sustainable living by conducting experiments and building energy-related models. Thirty of the best experiments and the ten most important building projects from the original Power House kit are presented in their Green Essentials Edition. The ten building projects include: the power house itself, a greenhouse, a solar cell array, a passive solar collector, a solar oven, an air conditioner, a refrigerator, a hydrometer, a lemon battery, and a wind power generator. Experiment with the heating, cooling, and insulation of the house and greenhouse. Test passive solar collection methods with a solar collector. Assemble a solar power array to explore active solar power with photovoltaic's. Build a model refrigerator and air conditioner to learn about heat transfer. Experiment with a lemon battery to learn about power storage. Set up a wind turbine to generate electricity from the wind. As you perform the experiments, you will read the diary entries of a group of young explorers who are learning to live a sustainable existence on an island. To survive, they must implement real-world versions of the projects you are doing in the kit.

Earth Science Nutshells - Water Cycle

\$35-40

Delta Education

<http://www.delta-education.com/>

WW-750-2835

Grades 2-6. Investigate different aspects of the water cycle, learn about properties of matter, observe cloud formation, and watch how water cycles through a closed environment.

Make Your Own Watershed Kit

\$40-45

Acorn Naturalists

<http://www.acornnaturalists.com/store/MAKE-YOUR-OWN-WATERSHED-KIT-P342C0.aspx>

KIT-9210

Useful tool for showing students the effects of runoff in a watershed. Kit includes plastic mold for forming watershed and human-built structures, plaster mix (poured into mold to make watershed) set of acrylic paints, brushes, and instructions for putting it all together. Includes basic activities which can be modified to suit particular needs. Add small models of animals, cars or people (not included) for added effect. A basic yet effective teaching tool.

Mobile Glow In The Dark Solar System

\$10-15

Edmund Scientific

<http://www.scientificsonline.com/>

082623

Bring home the heavens with this glow in the dark solar system in a box! Hangs from your ceiling! Anyone into planet watching will love this personal planetarium. Includes 9 planets with hangers, Sun with hanger, 32 feet of clear plastic line for hanging and a solar system guide.

Recommended age 6+

Physics Solar Workshop Discovery Kit

\$60-70

Acorn Naturalists

<http://www.acornnaturalists.com/store/PHYSICS-SOLAR-WORKSHOP-DISCOVERY-KIT-P4864C0.aspx>

KIT-14719

The energy we use originates as energy from the Sun. This kit explores the topic of solar energy, focusing on energy capture using photovoltaic cells. By building 12 models and conducting 30 experiments, students will learn how solar cells transform light into electrical energy, and how motors and mechanical devices optimize the work done by this energy. Build different vehicles and machines to demonstrate how gears can convert and transform power for different needs. Includes 320 parts and a 64-page manual. Engaging, hands-on learning for students ages 8 and up. #KIT-14719.

Power House Kit, Sustainable Living for the 21st Century \$90-100

Acorn Naturalists

<http://www.acornnaturalists.com/store/POWER-HOUSE-KIT-Sustainable-Living-for-the-21st-Century-P8853C0.aspx>
KIT-20259

POWER HOUSE KIT, Sustainable Living for the 21st Century. Power House provides a fascinating introduction to regenerative energy sources and teaches basic physical science concepts and principles. The kit focuses on heat and light energy from the Sun, energy from the wind, as well as electrochemical and green plant energy. Build a model house complete with solar panels, windmill, greenhouse, and desalination system. You can also build and operate an electric train, windmill, solar cooker, solar hot water tank, hygrometer, electric motor, power hoist, sail car, and more! Learn how plants convert sunlight into energy and how the process of evaporation provides cooling. Includes materials for 20 projects plus a 96-page instructional manual with diagrams and suggestions for additional projects. Ages 12 and up.

Power of Science® Weather Kit \$50-60

Learning Resources

<http://www.learningresources.com>

LER 2004

Let students build their own weather stations and study temperature, map reading, barometric pressure, humidity, wind speed and direction. More than 40 different experiments and materials included.

Science in a Nutshell - Weather Wise \$35-40

Delta Education

<http://www.delta-education.com/>

WW750-2846

Designed for grades 3-6, but has parts that can be used in earlier grades.

Record weather changes, clouds, and atmospheric movement. Show how water in the air behaves in gas and liquid states, and collect weather data.

Each Nutshell includes:

8-12 activities that develop a specific science topic

Quality materials for 1-3 students

An Activity Guide with simple, clearly written instructions

3 Activity Journals to record student observations and data, and apply writing skills

Consumable materials for 6 uses

Can also be a class set (6 kits) for \$194

SciQuest® Weather Mini Kit Instrument Pack \$30-35

NASCO Science

<http://www.enasco.com>

SB24802M

Includes one each of the following weather instruments: weather vane, anemometer, barometer, hygrometer, and thermometer. Comes with instructions.

Specialized Nature Kits \$25-30

Wildcare

http://www.wildcarebayarea.org/site/PageServer?pagename=NatureEducation_Programs_NatureKits

2 or 3 week rental. Nature Kits contain: a taxidermied animal in a life-like pose, information cards with important facts about the animal, facsimile ceramic bird eggs for students to handle in bird kits, ideas for integrated, thematic experiences, and a poster. Choose from: Animal Footprints, Indian Uses of Native Plants, Beaks and Feet Comparative Kit, Butterflies, Water Cycle Puppets.

- Spotlight on Science Wild Weather Kit** \$10-15
 Learning Resources
<http://www.learningresources.com>
 LER 2128
 Children will simulate hurricanes, tornadoes and lightning with this imaginative and informative kit. Contains 24 activities with science materials and an 8-page guide. Glossary and literature list also included. Grades 4-7.
- Stream Table Kit** \$80-90
 American Educational Products, Inc.
<http://www.amep.com/standarddetail.asp?cid=1243>
 3071
 Basic and smaller version of the Hydro-Geology Stream Table, this kit includes a plastic tray, drain trough, tray support and siphon tube. This economical stream table will give your students the chance to create their own landforms and follow the changes in the stream as it ages. Includes Teacher's Guide. Great for use in the classroom or as an outdoor activity. Also is used with the ESCP program
 NCTM - ST
- Watershed Field Trip** \$60-70
 Acorn Naturalists
<http://www.acornnaturalists.com/store/WATERSHED-FIELD-TRIP-KIT-P341C0.aspx>
 KIT-9319
 Complete kit for students in grades 1-5. Teacher's manual provides guidelines for taking field trips, conducting water quality tests and collecting and interpreting data. Includes tests for pH, nitrate, phosphate and dissolved oxygen using simple TesTabs. Includes all necessary tests and accessories for up to 30 students. An excellent way to introduce students to the chemistry of watershed protection.
- Weather Kit** \$80-90
 AIMS Education Foundation
<http://www.aimsedu.org/item/3080/weather-sense-kit/1.html>
 3080
 This kit is designed to accompany the two AIMS publications:
 Weather Sense: Temperature, Air Pressure, and Wind
 Weather Sense: Moisture
 The kit includes:
 30 thermometers (°C and °F)
 1 aneroid barometer
 15 cloud charts
 3 connecting tubes
 5 rectangular tube levels
- Weather Wise: Science in a Nutshell** \$35-40
 Delta Education
<http://www.delta-education.com/>
 750-2846
 Record weather changes, cloud, and atmospheric movement. Show how water in the air behaves in gas and liquid states, and collect weather data. Kit comes with a barometer, thermometer, wind vane, compass, psychrometer, and other materials to engage students in weather activities.

Posters/Pictures/Slides

<p>Bay Area Creek and Watershed Maps Oakland Museum of California <i>http://museumca.org/store/42</i> Code C14 Set of 10 of the same watershed maps for one of the regions listed here. Fremont & Vicinity, Hayward & San Leandro, Oakland & Berkeley, Pleasanton & Dublin Area</p>	\$30-35
<p>California Waterways Map California Dept. of Water Resources <i>http://www.water.ca.gov/education/wffcatalog.cfm</i></p>	FREE
<p>Free Water Education Materials can be obtained through the CA Department of Water Resources: <i>http://wwwowe.water.ca.gov/education/wff_welcome.html</i></p>	
<p>California's Amazing Delta - Book Marks California Dept. of Water Resources <i>http://www.water.ca.gov/education/wffcatalog.cfm</i></p>	FREE
<p>Two sided, 2.5 X 8 inch, black and white, bookmarks with artwork and information on the Sacramento-San Joaquin Delta ecosystem, taken from the Delta Book Cover. Co-produced with the CA Bay Delta Authority. Packaged in sets of 40, of 10 each of four different versions. (Click the image to see an enlargement.) Appropriate for all grades.</p>	
<p>Cloud Charts AIMS Education Foundation <i>http://www.aimsedu.org/item/1647/cloud-charts-set-of-15/1.html</i> 1647</p>	\$9-10
<p>Full-color photographs of the ten type of clouds on 8 1/2" by 11" laminated cardstock are helpful for identification. Set of 15 Cloud Charts</p>	
<p>Cloud Poster Delta Education <i>http://www.delta-education.com/</i> WW-160-8991</p>	\$7-8
<p>Brighten up your classroom while informing your students about different types of clouds and cloud formations with this attractive 25"x38" fact-filled color poster.</p>	
<p>Cloud Poster Set How the Weather Works <i>http://www.weatherworks.com/</i> 0301</p>	\$15-20
<p>3 full-color 12" x 24" posters showcasing 43 cloud and sky photographs. Poster #1 describes vertically-forming clouds (cumulus-type); poster #2 highlights layered clouds (e.g., stratus); and poster #3 focuses on weather-related optical phenomena (e.g., rainbows and sun dogs). Shipped in a sturdy reusable storage box. Buy two sets and laminate them. Post one on your bulletin board as a reference; cut up the other to make a hand-held cloud finder on a string.</p>	

Cosmic Scale and Size poster

FREE

Wright Center for Science Education, Dept. W, Rm. 267 C

http://www.tufts.edu/as/wright_center/

This poster was produced in part to celebrate the launching of the Hubble Space Telescope. It attempts to show the relative sizes of objects in the Universe, from familiar objects at the bottom of the poster to the dim and puzzling objects at the farthest reaches of the cosmos at the top. The printed caption states: "From the orbit of NASA's Hubble Space Telescope, the Universe is observed to be richly endowed with a wide range of astronomical objects--from planet Earth to the stars, galaxies, and clusters

Creek and Watershed Maps of Bay Area Cities

\$7-8

The Watershed Project

<http://www.thewatershedproject.org>

Elementary Weather Poster Set and Guide

\$20-25

How the Weather Works

<http://www.weatherworks.com/>

0316

These full-color 17" x 22" posters about CLOUDS, the WATER CYCLE, STORMS, and SEASONS are ideal for studying weather! At least 12 easy-to-see photographs (not artwork), along with brief descriptions on each poster, will help you introduce and reinforce key curriculum concepts in grades K-6. Order the entire set, and see how easy it is to liven your weather study unit. Includes suggested activities guide. Shipped in a sturdy, reusable storage box.

Groundwater Diagram

FREE

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

A cut away diagram illustrating groundwater and surface water with listings of the Department of Water Resources groundwater websites.

11" by 17" in size.

Appropriate for Grades 3rd to adult.

Hamburger Activity Sheet

FREE

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

8.5 x 11 sheet containing an activity to teach children how much water goes into making the parts -- bun, lettuce, tomato, cheese, hamburger -- of a hamburger sandwich. The sheet includes an illustration of the hamburger sandwich parts and the amounts of water that correspond to each part. The activity consist of matching the corresponding amount of water to sandwich part.

Answers are at the bottom of the page. The reverse side is in Spanish.

Appropriate for all grades. Downloadable PDF Versions: English Spanish

Meteorology Bulletin Board Set

\$8-9

Delta Education

<http://www.delta-education.com/>

WW025-6783

The perfect reference for any weather question is colorfully presented in this bulletin board set. Includes four 17x24" charts, each with resource guide.

Minerals in Our Environment FREE
USGS Distribution Center
<http://www.usgs.gov/pubprod/>

<http://geopubs.wr.usgs.gov/open-file/of00-144/> to download poster off website

Open Ocean Slide Set (MARE) \$35-40
Lawrence Hall of Science
lawrencehallofscience.org
MAR4SLIDES

Enjoy breathtaking views of nature with these fabulous slide presentations, each accompanied by an easy-to-follow script. These tools will enhance any demonstration or presentation, and are a great companion set to our various guides. Format: Each is a 20 slide set packaged in an archival plastic jacket with a corresponding script.

Powers of 10 Poster \$10-15
Powersof10.com
<http://www.powersof10.com>
PTL-01

This 27 inch by 27 inch Powers of Ten Poster is now available from the Eames Office. This beautiful poster features the images from the classic film (and later used in the Powers of Ten book). The poster shows all the powers of ten from the scale of the quark (10^{-18}) to the edge of the known universe (10^{+25}). The website offers interactive activities.

San Francisco Land Satellite Map \$15-20
Raised Relief Maps
<http://www.raisedreliefmaps.com>
340

25in. x 19in. Raised Relief Maps are a superior visual reference. Fully three-dimensional, these vacuum-formed vinyl maps use shaded relief to represent altitude gradation and topographic diversity. Scale: 1:250k or 1 in.=4 mi.

The Carbon Cycle Poster FREE
The Forest Foundation
<http://www.calforests.org/foundation>

This poster graphically demonstrates the cycle of carbon absorption, storage and release into the atmosphere. Included are visuals that explain the role of sustainable forestry, wood products and wildfires. Size 19" X 25" Can also download a PDF online

The Weather \$7-8
Einstein's Emporium
<http://www.einsteins-emporium.com>
GE110-WR

A new poster of the different climates and weather of Earth.

Today's Forecast Weather Map and Symbols Set \$30-35
Delta Education
<http://www.delta-education.com/>
WW193-4671

Spark interest and discussion of weather science using this large and lively map and symbol set! The king-sized national map includes 19 meteorologically accurate, colorful, and movable weather symbols that will have students racing to check the national forecast each morning. Includes a 28" x 48" map of the U.S., and 1 sheet of static cling weather symbols.

Various FREE posters on weather related topics

FREE

NASA CORE

<http://core.nasa.gov>

go to <http://scijinks.jpl.nasa.gov/en/educators/posters/index.shtml> to download posters/games on various earth science/astronomy topics"

Water Cycle Poster

\$5-6

Water Education Foundation

<http://www.water-ed.org>

2050

Water as a renewable resource is depicted in this 18x24 inch poster. Water is renewed again and again by the natural hydrologic cycle where water evaporates, transpires from plants, rises to form clouds, and returns to the earth as precipitation. Excellent for elementary school classroom use. To order 10 or more at a discounted fee, contact the Foundation at 916/444-6240 for more information.

Water Supply and Uses

FREE

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

This 26" by 26" colorful poster illustrates how water travels from mountain top to ocean and is used for many purposes along the way.

Appropriate for all grades.

Weather Wall Hanging Classroom Map

\$30-35

Carolina Biological

<http://www.carolina.com>

Item # 745510

This weather map of the United States (including Alaska and Hawaii) is durable and big enough for everyone to see—even in a large classroom. Included are 19 colorful, movable, and meteorologically accurate static-cling weather symbols for placing on the map to indicate weather activity. The map is a great way to spark students' interest in weather science and could have them running to check the national forecast each morning. The set includes one 44 x 28" weather map of the U.S. and one sheet

Weather Wizard's Cloud Chart & Poster Set

\$4-5

Edmund Scientific

<http://www.scientificsonline.com/>

3052221

Thirty-five full color photographs of clouds with descriptions on one beautiful poster. Images and info are both provided by Louis D. Rubin Sr., the author of "The Weather Wizard's Cloud Book" (30047-62). -21 measures 17.5" x 22.5". -22 is a set of 10, each measuring 11" x 17".

Wetlands Slide Set (MARE)

\$35-40

Lawrence Hall of Science

lawrencehallofscience.org

MAR3SLIDES

Enjoy breathtaking views of nature with these fabulous slide presentations, each accompanied by an easy-to-follow script. These tools will enhance any demonstration or presentation, and are a great companion set to our various guides. Format: Each is a 20 slide set packaged in an archival plastic jacket with a corresponding script.

Specimen

Meteorites

\$25-30

MARE Meteoritics

<http://home.flash.net/~meteors/index.htm#tektites>

The Astronomical Society of the Pacific recommended this vendor. Buy Iron Meteorites not rocky ones. Price Range \$25-\$500

Meteorites

\$100-120

New England Meteoritic Services

<http://www.meteorlab.com>

New England Meteoritic Services offers meteorites of all kinds. The Astronomical Society of the Pacific recommends you purchase an iron meteor. Prices range from \$25-\$500

Stickers/Games

Alternative Energy Instructional Play Ball

\$10-15

Acorn Naturalists

<http://www.acornnaturalists.com/store/ALTERNATIVE-ENERGY-INSTRUCTIONAL-PLAY-BALL-P4983C0.aspx>
G-15108

ALTERNATIVE ENERGY INSTRUCTIONAL PLAY BALL. This 24 inch inflatable Clever Catch ball adds a new dimension to learning about alternative energy sources! Toss around the classroom, playground or home and wherever your left thumb lands is the question that is to be answered! Teacher's answers and instructions are included. Grades 5-9. #G-15108.

Compost Gin (Card Game)

\$15-20

Acorn Naturalists

<http://www.acornnaturalists.com/store/COMPOST-GIN-Card-Game-P83C0.aspx>
G-8029

Wonderful way to teach the essentials of decomposition and composting. Includes 54 colorful cards depicting the different components necessary for decomposition to proceed. To make compost, students collect the right mixture of cards (different values are given to each mixture based on the probability that the mix will make good compost). The first player to get 200 points wins. Students now can talk trash in class! Ages 8-14.

Giant Solar System Puzzle Map

\$35-40

Carolina Biological

<http://www.carolina.com>

item # 957117 - Take a fabulous field trip through the solar system and its 9 planets with this colorful puzzle map. Puzzle measures 3 ft in diameter with identification of planets, moons, and nearby stars and constellations. Contains 152 pieces with 39 punch-outs labeled on the reverse sides for identification. Puzzle is constructed of durable Wonder Foam® for many years of use.

Know-No Game

\$15-20

Water Education Foundation

<http://www.water-ed.org>

Part# 5030 -

Plastic mounted board game that teaches children and adults about the source of their drinking water, what pollutants water may encounter as it moves through the watershed, and how to avoid contributing to nonpoint source pollution. Durable 17x22 inch game board. Game comes with four playing pieces, die and 64 game cards.

Puma Activity Book

FREE

Felidae Conservation Fund

http://www.felidaefund.org/pdf/activity_book.pdf

The Bay Area Puma Project (BAPP) is the first large scale research, education and conservation program for pumas in and around the San Francisco Bay Area. BAPP's primary goal is to increase knowledge, understanding and awareness about Bay Area puma populations, in order to promote better co-existence and less conflict between humans and pumas in the region, and ultimately to help foster a more harmonious relationship between humans and the natural world.

<http://www.bapp.org/objectives>

Weather Bingo Class Pack

\$25-30

Carolina Biological

<http://www.carolina.com>

Introduce your students to the wonders of weather and make learning fun with this adaptation of a popular game. Students learn interesting weather facts with the deck of 42 information cards, 18 playing boards, and enough plastic markers for 18 players.

Weather Bingo Game

\$10-15

Acorn Naturalists

<http://www.acornnaturalists.com/store/WEATHER-BINGO-GAME--P4383C0.aspx>

#G-14491.

This colorful bingo game contains 42 illustrated cards with information about the picture on the back of the card. Includes six playing boards along with a generous supply of bingo chips. Different board arrangements for "bingo" can also be called out to add variation to the games. Hours of educational fun for ages 4-9.

Teacher Guide/Reference/Curriculum

A Guide to California's Wildlife on Private Forest Lands

FREE

The Forest Foundation

<http://www.calforests.org/foundation>

California features amazingly diverse wildlife populations, but how do animals choose where to live? Throughout history, events like fire, landslides, earthquakes, windstorms, volcanic eruptions, climate changes and disease have led to dramatic changes in the forest landscape and profoundly effected wildlife. For at least 10,000 years, Native Americans have managed the land to provide hunting grounds, shelter and grow grasses for basket making.

Online: A Guide To California's Wildlife On Private Forestlands. Downloadable activities and lessons for use with Wildlife Book

Activity Sheet-True Tales

Activity Sheet-Cafe Menu

Curriculum Unit-Wildlife Book

California Water Story

\$25-30

Water Education Foundation

<http://www.water-ed.org>

5010

A multi-disciplinary approach to teaching about water as one of California's most important resources, California Water Story is designed for use in grades 4-6. The lessons integrate many subject areas (geography, history, science, math and art) and are designed to help students develop specific skills (critical thinking, organizing data, predicting, mapping and graphing). The program set includes a 24-page lesson plan booklet with worksheets and evaluation devices which may be duplicated, teacher instructions and background material, a video, the California Water Map, the Layperson's Guide to California Water, Water Fact Card, Hydrologic Cycle Poster and water awareness stickers. Materials can be duplicated for years of use.

California Water Units - Teacher's Guide

FREE

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

Includes three Teacher's Guides for 4th and 5th grades.

Unit #1 -

California's Water, addresses water supplies, geography, and rainfall.

Unit #2 - Water Sources, looks at surface and groundwater and the role reservoirs, canals and aqueducts play.

Unit #3 - Water Use, covers how water supplies are divided among urban, agricultural and environmental users.

Lessons are correlated to the California State Subject Area Standards. Includes pre and post assessment tools, teacher information, student handouts, worksheet masters and California Waterways Poster Map.

Climate Change Curriculum

FREE

Bay Area Air Quality Management District

<http://bit.ly/1bAz66R>

Bay Area Air Quality Management District allows you to download their Climate change curriculum for free.

El Universo a sus Pies

\$20-25

Astronomical Society of the Pacific

<http://www.astrosociety.org>

BO322

The Universe at Your Fingertips in Spanish! This new collection of over 60 exemplary hands-on activities features the "greatest hits" from Universe at Your Fingertips and More Universe at Your Fingertips, the most popular resource notebook and activity manuals published by Project Astro. The activities have been reviewed by a multi-national group of Spanish-speaking educators and astronomers and updated and appended for use in the northern or southern hemisphere. Perfect for the bi-lingual or Spanish classroom. Can be found under "Astroshop" heading.

Energy for Keeps: Electricity from Renewable Energy

\$10-15

Acorn Naturalists

<http://www.acornnaturalists.com/store/ENERGY-FOR-KEEPS-Electricity-from-Renewable-Energy-P3839C0.aspx>
EE-13450

ENERGY FOR KEEPS: Electricity from Renewable Energy. Educators for the Environment. Perfect guide for teaching middle school students the history, availability, management, and consequences of the use of various energy resources. Organized into five chapters, Energy for Keeps offers extensive background information and specific instructions for carrying out student activities that explore the realm of renewable, electricity-generating resources. Includes pre- and post-assessments, content standards correlations, discussion and student pages, timelines, and glossary. Grades 6- 8. #EE-13450.

GEMS Schoolyard Ecology

\$15-20

Lawrence Hall of Science

lawrencehallofscience.org
0-924886-35-8

This guide is designed to nurture curiosity about patterns and interactions in nature, beginning with students' immediate environment: the schoolyard and its inhabitants. Students develop sampling, mapping, and related math and environmental-writing skills.

Junior Master Gardener: Literature in the Garden

\$30-35

Texas Cooperative Extension

<http://tce.tamu.edu/>
B-6170

By: Randy Seagraves , Regina McAlonan , Julie Ryan , Melanie Welch and Lisa Whittlesey . This curriculum seeks to engage children through powerful garden- and ecology-themed children's books. It uses six books to inspire learning through outdoor activities, creative expression and open exploration. Dozens of hands-on activities encourage leadership development, individual responsibility, community involvement, and the development of critical thinking skills. (224 pp.)

Moon Mission Leader Kit

\$35-40

Astronomical Society of the Pacific

<http://www.astrosociety.org>
FA103-LK

Come explore the Moon in legend & folktale, and as a world with conditions very different from our own! The Moon is the one place beyond Earth that human beings have actually visited in person. Our Moon Mission activities will help your event participants learn that the Moon is more than just a bright object in the sky:

Explore the Moon in legend and folktale with "Toad in the Moon"

Understand why the Moon looks different during the course of the month with "Our Changing Moon"

"Sizing Up the Moon"

More Universe at Your Fingertips

\$25-30

Astronomical Society of the Pacific

<http://www.astrosociety.org>
BO123

The best-selling astronomy education resource available just got better! The thousands of educators and astronomers who own the original Universe at Your Fingertips have asked us for more! Here are 25 new classroom-tested activities, a host of resource listings and teaching suggestions, plus a guide to reliable astronomy information and activities on the web. Activities include Measuring the Hubble Deep Field, Organizing the Galaxies, Sorting Saturn's Moons, Making a Mapping a Volcano, and many more! An indispensable supplement to the first notebook and a stand-alone guide to the most up-to-date astronomy education resources.

Specifications: 180 sheets, 3-hole punched. For all grades.

Shipping: Oversized shipping is an additional \$4.

Night Sky Adventure Leader Kit
Astronomical Society of the Pacific

\$35-40

<http://www.astrosociety.org>

FA101-LK

Get to know the bright stars and constellations of each season!

A step-by-step introduction to the night sky, the Night Sky Adventure Leader Kit is full of activities and information to help explorers of all ages enjoy the night sky together. Each Family ASTRO Leader Kit below allows you to lead at least two 90-minute Astronomy Events and includes these unique adventures:

"Seeing in the Dark" – For the best viewing, learn why it's important to let your eyes adjust to the nighttime darkness.
"Constel

Project ASTRO Partners Kit
Astronomical Society of the Pacific

\$70-80

<http://www.astrosociety.org>

KT112

Funded by the NSF and NASA, Project ASTRO is an innovative ASP program to pair amateur and professional astronomers with 4th and 9th grade educators. These materials have been developed by our Project ASTRO staff and participants and tested in the many regional ASTRO sites across the country. The Project ASTRO Kit includes both The Universe and More Universe at Your Fingertips, the Partners in Learning DVD, and the How-To Manual for Teachers and Astronomers. (El Universo a sus pies not included)

Sunflower/Girasol Bilingual Science Discovery Kits
Intercultural Center for Research in Education

\$70-80

<http://www.incre.org>

Classroom set of 30 + Teacher Guide. Student Activity Books and Bilingual Memory Game sold separately. Sunflower/Girasol is a fully bilingual Spanish/English curriculum designed to encourage students to develop language skills and at the same time to turn their interest to the world of scientific discovery. The full-color format of Sunflower/Girasol invites children in grades 2-6 to engage in science and environmental education activities and to carry out investigations in their schools, homes and communities. Each thematic unit of Sunflower/Girasol is presented in a full-color magazine format activity book in either Spanish or English, with an accompanying teacher's guide. The first six units of Sunflower/Girasol are Plants, Water, Human Body, Air, Trash and Sound.

Teacher Guides - Sunflower/Girasol Bilingual Series
Intercultural Center for Research in Education

\$10-15

<http://www.incre.org>

Teacher Guides - Sunflower/Girasol is a fully bilingual Spanish/English curriculum designed to encourage students to develop language skills and at the same time to turn their interest to the world of scientific discovery. The full-color format of Sunflower/Girasol invites children in grades 2-6 to engage in science and environmental education activities and to carry out investigations in their schools, homes and communities. Each thematic unit of Sunflower/Girasol is presented in a full-color magazine format activity book in either Spanish or English, with an accompanying teacher's guide. The first six units of Sunflower/Girasol are Plants, Water, Human Body, Air, Trash and Sound.

Teacher's Guide to Open Ocean (MARE)

\$60-70

Lawrence Hall of Science

lawrencehallofscience.org

MAR4

Turn your classroom into an interdisciplinary laboratory for the study of the rocky seashore or visit the hidden world of the sandy beach without leaving your classroom. MARE teacher curriculum guides are packed with hands-on activities covering earth, physical, biological and environmental sciences, plus children's literature connections and information on how to plan a whole-school Ocean Week. All activities are designed to promote science literacy and language development among English Language Learners.

Teacher's Guide to Wetlands (MARE)

\$60-70

Lawrence Hall of Science

lawrencehallofscience.org

MAR3

Turn your classroom into an interdisciplinary laboratory for the study of the rocky seashore or visit the hidden world of the sandy beach without leaving your classroom. MARE teacher curriculum guides are packed with hands-on activities covering earth, physical, biological and environmental sciences, plus children's literature connections and information on how to plan a whole-school Ocean Week. All activities are designed to promote science literacy and language development among English Language Learners.

Teaching about Climate Change

\$10-15

Acorn Naturalists

<http://www.acornnaturalists.com/store/TEACHING-ABOUT-CLIMATE-CHANGE-Cool-Schools-Tackle-Global-Warming-EE-9372>

TEACHING ABOUT CLIMATE CHANGE, Cool Schools Tackle Global Warming. Grant, Littlejohn, Editors. Climate change is often taught so abstractly that students have a difficult time relating it to their daily lives. This compendium offers a framework for teaching the fundamental concepts through practical lessons and programs. Students run experiments on greenhouse effects and learn how to conduct school energy audits and help implement suggested changes. Grades 4 and up.

The Accidental Scientist: Watching Weather

\$10-15

Exploratorium

<http://www.exploratorium.edu>

805045422Item #: 11728

By Tom Murphree and Mary K. Miller with the Exploratorium - Watching Weather explains the basic scientific principles that underlie the vagaries of the weather. By combining knowledge of these principles, rules of thumb provided by this book, and observations of the sky and clouds and wind, you can begin to predict your local weather. Watching Weather helps you understand how the weather outside your door is linked to and driven by conditions thousands of miles away. 144 pages, black and white

The Universe at Your Fingertips

\$35-40

Astronomical Society of the Pacific

<http://www.astrosociety.org>

BO122

The essential astronomy notebook for anyone involved with science education at any level! This collection features 90 of the very best ready-to-use, hands-on activities for teaching many basic aspects of astronomy. Includes dozens of resource guides, helpful articles on student learning, and tips for creating an astronomy curriculum for any age group. Everyone who works with students or teachers in science should have this notebook on their shelf.

USA Today The Weather Book 2nd edition

\$10-15

Amazon.com

<http://www.amazon.com>

By Jack Willams. The definitive guide to American weather provides the latest information on computer forecasting, explanations on how events in space affect Earth's weather, reasons for our increasingly wild weather, coverage of recent hurricanes, and more.

Water Awareness School Education Books

FREE

California Water Awareness Campaign

<http://www.wateraware.org>

Free for educators. Call (916) 325-2596 to request a copy. The curriculum in the kit covers literature, art, science, math and social studies for grades K-6. Use these exciting materials and activities to help teach students about the sources, nature, importance and wise use of California's water.

Waves, Wetlands, and Watersheds

FREE

California Coastal Commission, Public Education Program

<http://www.coastforyou.org>

a classroom and community activity guide for teachers that addresses issues such as endangered species, marine debris, coastal geology, water use, and much more. It is carefully aligned to the California State Science Content Standards for grades 3 through 8, and includes "Community Action" lessons adaptable for all ages up to and beyond 12th grade. The guide is available for free from the California Coastal Commission. Spanish translated handouts are in printable, downloadable PDF format at <http://www.coastal.ca.gov/publiced/pendx.html>

Weather & Climate Learning Pack

\$90-100

United Learning

<http://teacherstore.discovery.com>

#770131

Finally, a comprehensive unit filled with multimedia resources for all learning styles. Introduce your junior meteorologists to the basic ingredients of every weather system with this Discovery Channel School learning pack. Includes an elementary video, an elementary CD-ROM featuring interactive games, activities and multimedia tools, a 30 pack classroom set of Discovery Wraps student worksheets and a comprehensive teacher's guide, including lesson plans and teaching strategies for integrating all components into the curriculum, and online resources for lesson support.

Weather and Climate Worksheets

\$8-9

United Learning

<http://teacherstore.discovery.com>

#767814

Junior meteorologists will learn by doing! See how air, heat and moisture interact to create weather — and finally understand all those funny squiggles and letters on the weather map. It's easy to experiment with the weather — measure the rainfall, record the direction of the winds, even make your own psychrometer to measure relative humidity. Now you'll know when to bring your umbrella to school!

Weather Sense: Temperature, Air Pressure, and Wind

\$20-25

AIMS Education Foundation

<http://www.aimsedu.org/item/p-1218/weather-sense-temperature-air-pressure-and-wind-4-5/1.html>
1218

19 activities 150 page

Budding meteorologists investigate temperature variations, discover the properties of air, and measure wind speed. Students also construct measuring tools, maps, and graphs. Weather proverbs, and journal prompts add a literacy component.

Weed Workers' Handbook: A guide to techniques for removing Bay Area inv.

\$10-15

The Watershed Project

<http://www.thewatershedproject.org>

The spread of invasive plants can be seen along roadsides and trails throughout the Bay Area, where these plants often crowd out native species, disrupt natural processes, and impose costs on human communities. Now, for the first time, there's a publication for volunteers who recognize this threat and are working to protect Bay Area open spaces. Published by the Watershed Project and California Invasive Plant Council. \$10

Worms Eat My Garbage

\$10-15

Amazon.com

http://www.amazon.com/Worms-Eat-My-Garbage-Composting/dp/0977804518/ref=sr_1_1?ie=UTF8&qid=1407793671
ISBN: 978-0977804511

Mary Appelhof, Mary F. Fenton (Illustrator). The definitive guide to vermicomposting-a process using redworms to recycle food waste into nutrient-rich food for plants. Newly revised and updated, this 162 page manual provides complete illustrated instructions on setting up and maintaining small-scale worm composting systems. Topics include different bins, what kind of worms to use, sex life of a worm, preparing worm beddings, how to meet the needs of the worms, what kinds of foods to feed the worms, harvesting worms, and making potting soil from the vermicompost produced. A 63 page bibliography, 24 annotated references, a glossary, and comprehensive index make this a valuable reference book as well as a practical manual.

Tools/Equipment

Baramoter

\$25-30

AIMS Education Foundation

<http://www.aimsedu.org/item/3103/barometer-millibars/millimeters/1.html>

3103

Barometer (millibars/millimeters). A weather kit component.

Celestial Globe

\$100-120

Edmund Scientific

<http://www.scientificsonline.com/>

3053594

Economical Globe for All Classrooms Learn About the Stars, Constellations, Sun and Planet Positions with this unique 12" transparent globe featuring an internal 4" Earth globe with adjustable Sun. Includes Study Guide. For grades 5-12.

EARTH-MOON MODEL

\$8-9

American Science & Surplus

<http://www.sciplus.com/>
92427

You can take the plastic parts in this Earth Moon Model Making Kit and make a 3-3/4" dia Earth and 7/8" dia moon. The first sits on a 3-3/8" pylon, the second sits on the end of a 5" arm and can be moved in a circular orbit around the Earth. You can then enhance the relief surfaces of both with the brush and paints in the kit (6 one-ounce pots of color, plus 2 pots of glow-in-the-dark paint)

Inflatable Solar System Set

\$40-45

Carolina Biological

<http://www.carolina.com>

Item # 957103 -This set includes an inflatable 36" Sun, proportional planets and the moon, a teacher's activity guide, and a convenient foot pump. You can easily demonstrate rotation of planets and their revolutions around the Sun, their relative sizes and orbits, and much more. When the lesson is over, hang everything from the ceiling on the hooks provided. Each piece is made of durable, washable plastic and easily deflates for storage.

Motorized Solar System

\$40-45

Carolina Biological

<http://www.carolina.com>

Item # 957152 - This dramatic light show brings our solar system right into your classroom. The model sun shines onto the 9 planets as they orbit around it. A star dome can replace the solar dome, converting a darkened room into a spectacular planetarium sky complete with major constellations. The base features planetary longitude marks, so the planets can be set up to their correct positions every day using the 5-year planetary longitudinal chart included. Powered by an AC adapter (included) or 4 C batteries (not included).

solar system model

\$35-40

American Science & Surplus

<http://www.sciplus.com/>
91930

This is one slick motorized solar system and planetarium from Educational Insights®. Make assembling it an educational exercise. Demonstrate how the planets circle the sun. The 4" dia sun is yellow plastic, lit with a krypton bulb. The planets are colored, reasonably proportional given their actual sizes, and marked with their symbols. They ride on black metal arms that disappear in the dark. The helpful instruction manual suggests activities, and includes a heliocentric longitude chart. Use it with the deg

Solar System Simulator

\$90-100

Edmund Scientific

<http://www.scientificsonline.com/>
3053595

Each planet is set on an independent wire arm that surrounds the sun. Calendar at the base allows for positioning of planets. Lesson plans discuss orbit and speed. For grades 3 - 9.

Solar System Simulator

\$100-120

Carolina Biological

<http://www.carolina.com>

Item # 612254 -AMEP. A 3-dimensional model of the sun and planets suitable for all grade levels for teaching planet identification, sizes, distances, and colors. Size, 12 × 22". With study guide.

The Orbitor

\$140-160

Edmund Scientific

<http://www.scientificsonline.com/>
3053596

The Orbitor is a gear driven model of the sun, Earth & moon. The components revolve around one another, depicting the true relationship between the three. The Orbitor allows you to demonstrate the positions during the day, night, various seasons. and phases of the moon.

Earth and moon are mounted on a 15" arm that rotates around the 6" Sun. Includes Instructional Guide. Brighten your model up with the illuminated version that lights up the sun.

The Solar Car Book

\$20-25

Acorn Naturalists

<http://www.acornnaturalists.com/store/THE-SOLAR-CAR-BOOK-P3074C0.aspx>
B-50992

THE SOLAR CAR BOOK. Klutz. Fascinating book filled with illuminating solar science facts plus everything you need to build a solar race car: wheels, axles, motors, wires and a genuine one-volt solar cell. No glue, no nails, no tape and, of course, no batteries required! Works best during midday—the intensity of the Sun affects the energy generated and thus the speed of the car. Experiment with different times of the day or use with different intensity bulbs. Set up defined track distances and run calculations, develop predictions—contains everything needed to get started. For students ages 8-15.

Tornado Tube

\$1-2

Insect Lore

<http://www.insectlore.com>
2556

Demonstrate the powerful spiralling force behind hurricanes and tornadoes with this simple science prop. Create exciting action in a bottle - it's super easy! You add the plastic soda bottles and water, and the Tornado Tube adds the connection that makes the vortex happen! The Tornado Tube is the tight-fitting connector that holds your 2-liter plastic bottles together, as shown. Sold individually. Bottles not included.

Tru-Check Rain Gauge

\$3-4

NASCO Science

<http://www.enasco.com>
C06430M

The only thing missing from the NASCO Weather Mini Kit. Measures from .01 of an inch of rainfall up to 6". Transparent, all-plastic unit has wedge-shaped well on which an easily-read scale is imprinted. The gauge has inch markings on front and metric on back, and can be put into the bracket either way. Bracket for mounting included.

Video

3 in 1 Video and Video Activity Packets

FREE

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

This video includes "Water, Who Needs It?" and "The Water Cycle" along with the Albert & Einstein, Aqueduct Safety PSA. Both videos use Jr. Scientists to conduct activities demonstrating various water concepts. Activity packets are available to accompany the program and enhance student learning. Available in VHS or DVD.

Limited to one packet per school.

Appropriate for Grades K-6.

- A Science Odyssey 5DVD set** \$70-80
 PBS
<http://www.pbs.org>
 SOCK450
 The most astonishing century of scientific discovery and technological advancement unfolds in this sweeping look at the last 100 years. Journalist Charles Osgood hosts this chronological survey of such marvels as penicillin, the airplane, the Model T., organ transplants, and space travel. Illuminating interviews, rare historical footage, and computer animation illustrate the changes that have revolutionized modern life and thinking.
- A Visit to the Feather River Hatchery** FREE
 California Dept. of Water Resources
<http://www.water.ca.gov/education/wffcatalog.cfm>
 This video features a young school girl named Maria who talks about her trip to the Fish Hatchery to her classmates in a "show and tell" format. The hatchery is shown and the life cycle of the salmon is explained as Maria tells of her experiences while on the tour.
 Grade 4 - 8; 9 minutes -- CC Preview.wmv* (6MB)
- Adventures of Wayan and the 3 R's** \$70-80
 The Video Project
<http://www.videoproject.org/>
 #192 VHS NTSC
 One day while playing, six-year old Wayan is upset to find plastic litter scattered around his lush, green village on the island paradise of Bali. That night, the shadow puppet master performs a play about a king who cleans up his domain by learning to reduce, reuse and recycle garbage. Wayan decides to lead an effort to tidy his village by practicing the three "R's." He and his friends celebrate their success with a surprise parade featuring musical instruments constructed from discarded plastic.
- Bill Nye: Climates** \$35-40
 Disney Education Products
<http://www.edustation.disney.com>
 68A94VL00
 From Saudi Arabia to Costa Rica, explain how different climates are created and how they affect our planet
- Bill Nye: Comets and Meteors** \$35-40
 Disney Education Products
<http://www.edustation.disney.com>
 68E53VL00
 Comets carry history about our Universe. A comet or meteoroid has hit every planet and moon we've discovered. In fact, Earth's impact with comets and meteors may have created the oceans, caused the extinction of the dinosaurs, or brought life to Earth.
- Bill Nye: Garbage** \$35-40
 Disney Education Products
<http://www.edustation.disney.com>
 68A60VL00
 Dig up the dirt on and ever-expanding landfills from Florida to New York.

Bill Nye: Gravity	\$35-40
Disney Education Products	
<i>http://www.edustation.disney.com</i>	
68A76VL00	
Have you ever wondered what holds the ocean on the Earth? Or what makes the Earth round? Perhaps you have thought about what holds humans to the ground? This video provides the explanations for these and other questions regarding the Earth's gravity.	
Bill Nye: Outer Space Video	\$35-40
Disney Education Products	
<i>http://www.edustation.disney.com</i>	
68A92VL00	
Bill Nye talks about Outer Space-- planets, stars, galaxies, and the universe. He also visits the Mount Wilson Observatory in California to help illustrate how long it takes light to travel through the galaxy.	
Bill Nye: Storms	\$35-40
Disney Education Products	
<i>http://www.edustation.disney.com</i>	
68E39VL00	
Storms happen when huge masses of air collide. Disaster or not -- storms benefit us. The tropical regions of the earth would be too hot to inhabit -- and the subregions too cold -- if we didn't have hurricanes and typhoons to distribute the Earth's heat so efficiently.	
Bill Nye: The Moon	\$35-40
Disney Education Products	
<i>http://www.edustation.disney.com</i>	
68A91VL00	
Learning about the Earth's natural satellite is an out-of-this-world experience as loony Bill Nye illuminates the orbit and phases of the moon. The program features an interview with Harrison Schmitt, the last astronaut to walk on the moon.	
Bill Nye: The Moon DVD	\$45-50
Disney Education Products	
<i>http://www.edustation.disney.com</i>	
77A15VL00	
Learning about the Earth's natural satellite is an out-of-this-world experience as loony Bill Nye illuminates the orbit and phases of the moon. In addition to the complete 26-minute episode of "The Moon," this disk is loaded with incredible DVD features like:	
*Fully indexed "chapters" correlated to National Science Standards.	
*Interactive glossaries and quizzes.	
*Bonus footage of never-before-seen segments, interviews, and demos.	
*Spanish translation and closed-captioning.	
*On-disk implementation Guide	
Bill Nye: The Planets	\$35-40
Disney Education Products	
<i>http://www.edustation.disney.com</i>	
68A58VL00	
Go planetgazing and take a serious look at Jupiter's features, Earth's elliptical orbit, and the distances between planets. Cool home demo shows how to make Mars soil.	

Bill Nye: The Planets DVD \$45-50

Disney Education Products

<http://www.edustation.disney.com>
77A17VL00

Bill Nye gets up close and personal with each set of the solar system's planets and moons. Bill goes planet gazing and takes a serious look at Jupiter's features, Earth's elliptical orbit, and the distances between planets. In addition to the complete 26-minute episode of "The Planets," this disk is loaded with incredible DVD features like:

*Fully indexed "chapters" correlated to National Science Standards.

*Interactive glossaries and quizzes.

*Bonus footage of never-before-seen segments, interviews, and

Bill Nye: The Sun \$35-40

Disney Education Products

<http://www.edustation.disney.com>
68A57VL00

Shed some light on the solar flares, eclipses, sunspots, fusion, and solar energy, and visit an enormous solar energy farm outside Sacramento to demonstrate how the sun is the source for all living things on Earth.

Bill Nye: Water Cycle \$35-40

Disney Education Products

<http://www.edustation.disney.com>
68A55VL00

Did you know that most of the water on the planet is the same water that's been here since the earth was formed? Using a whimsical model made of a tiny staircase, wind-up penguins, and a bicycle tire, Bill demonstrates the phases of the water cycle: evaporation, condensation, precipitation, and collection. Science kids hit the streets to show us some easy things all of us can do to keep the water supply clean and healthy- after all, it's the only water we've got.

Bill Nye: Water Cycle DVD \$45-50

Disney Education Products

<http://www.edustation.disney.com>
77A20VL00

Did you know that most of the water on the planet is the same water that's been here since the Earth formed? In "Water Cycle," Bill uses a whimsical model to demonstrate the phases of the water cycle: evaporation, condensation, precipitation, and collection. In addition to the complete 26-minute episode of "Water Cycle," this disk is loaded with incredible DVD features like:

*Fully indexed "chapters" correlated to National Science Standards.

*Interactive glossaries and quizzes.

*Bonus footage of never-be

Bill Nye: Wind \$35-40

Disney Education Products

<http://www.edustation.disney.com>
68A90VI00

There's a lot more blowing around than hot air when Bill Nye goes parachuting and sailing to show the relationship between the sun, Earth, wind, and weather. Visit a wind farm and check out windsurfers harnessing the power of the wind.

Cosmic Voyage	\$10-15
Amazon.com	
<i>http://www.amazon.com</i>	
ASIN: B000060MZE	
Academy Award nominated IMAX film. This item will be released on July 29, 2003. You may order it now and we will ship it to you when it arrives. As a primer on up-to-date scientific theory about the nature of the universe and our place in it, Cosmic Voyage is visually sumptuous and just plain fun. Shot in the mind-blowing IMAX process, this combined live-action and computer-generated production has (even in video format) an immensity of scope befitting its grand subject. Beginning, lyrically if unexpectedly, in Italy's magnificent Venice, Cosmic Voyage draws inspiration from airborne perspectives on the city's famed network of canals and streets, leading to further appreciations of dense systems in nature. From the subnuclear to the physical limits of the known universe, Cosmic Voyage explores a resonance between all things while making sense of such inscrutable phenomena as the birth of stars and planets, black holes, supernovas, etc. The marvels of cosmology are rarely so accessible as this. Quicktime film clips available at http://www.nasm.si.edu/nasm/pa/CV/	
Dragonfly TV Series One - DVD	\$350-400
GPN Educational Media	
<i>http://shopgpn.com/</i>	
SKU #: 897.1000D	
DragonflyTV is devoted entirely to science for kids grades 4-7. But it's not like any science show you've ever seen - because it's real kids doing real science! In every episode, real kids tell about their own investigations - how they explore the science in the things they love to do.	
This unit includes:	
897.1001D - Investigate ! & 897.1002D - Wheels & 897.1003D - Animal Behavior & 897.1004D - Water & 897.1005D - Rocks & 897.1006D - Flight & 897.1007D - Weather & 897.1008D - Technology I & 897.1009D - Plants & 897.1010D - Air & 897.1011D - Human Behavior & 897.1012D - Space & 897.1013D - Human Body I	
Earth Science for Students: Changes in Weather	\$35-40
Amazon.com	
<i>http://www.amazon.com</i>	
A scientific look at weather changes	
Earth Science for Students: What is Weather? (2000)	\$35-40
Amazon.com	
<i>http://www.amazon.com</i>	
A scientific look at weather	
Eyewitness Pond and River DVD	\$10-15
Acorn Naturalists	
<i>http://www.acornnaturalists.com/store/EYEWITNESS-POND-AND-RIVER-DVD-P5085C0.aspx</i>	
#DVD-15227	
This breathtaking DVD takes you down the great rivers of the world, and to the headwaters of others. Take side trips into pond environments depicting creatures so strange that you may think you are watching a science fiction film. From fish that climb waterfalls to the saga of the Mississippi floods, this film imparts both a sense of wonder and a deeper understanding of the role ponds and rivers play on this water-based planet. For all ages, 35 minutes.	

Eyewitness Weather \$10-15
Amazon.com
<http://www.amazon.com>

For kids. PBS Eyewitness general look at weather

Eyewitness Weather \$6-7
Acorn Naturalists
<http://www.acornnaturalists.com/store/EYEWITNESS-WEATHER-VIDEO-P2032C0.aspx>
V-5193

This whirlwind tour of Earth's turbulent atmosphere reveals the forces that are at work constantly altering weather patterns, causing floods, heat waves, hurricanes, tornadoes, snow, hail, and lightning! Dramatic photographs for which Eyewitness videos are famous. Ages 8-adult.

How It's Made: Hydroponic Lettuce, Construction Wood, Recycling, and Fish \$50-60
Discovery Education
[http://www.discoveryeducation.com/](http://www.discoveryeducation.com/#23346)
#23346

How It's Made: Hydroponic Lettuce, Construction Wood, Recycling, and Fishing Flies
Have you ever wondered how things are made? Find out how the everyday objects people use become the things they are. Watch as HOW IT'S MADE reveals the methods and materials of everyday items in a behind-the-scenes look at the manufacturing process.

National Geographic's Nature's Fury \$15-20
Amazon.com
<http://www.amazon.com>

Earthquakes, hurricanes, tornadoes, and floods - these colossal powers of nature have had dramatic consequences for human kind. Now in dramatic scenes of cataclysmic destruction and human courage, you'll journey with National Geographic Video as we learn how earthquakes create and shape our landscapes, even as they destroy cities like San Francisco and Tokyo. Discover how rotating updrafts can build into towering tornadoes that sweep the Midwest's "Tornado Alley", or how cloud disturbances can grow into the

NOVA/Frontline - What's Up With the Weather? \$15-20
Amazon.com
<http://www.amazon.com>

Video discusses whether or not human released greenhouse gases are responsible for global warming. The views of the skeptics and people who believe greenhouse gases warm the earth are presented.

Powers of 10 Video \$35-40
Powersof10.com
<http://www.powersof10.com>
HVN-01

Undoubtedly the most famous of the Eames Films, Powers of Ten is probably one of the most seen short films of the post-war era. Volume 1 also includes Rough Sketch - - the first version, made 9 years earlier. The volume includes A Rough Sketch. 21 minutes. The website offers interactive activities.

Rain & Snow

\$25-30

Library Video Company

<http://www.libraryvideo.com>

N6645

23 min, grades 4-8. In this program, concise explanations of the various types of precipitation provide students with insight into how rain, snow, sleet, hail, fog and mist form, as well as how the water cycle - evaporation, condensation and precipitation - constantly "recycles" water around the world. Students will also learn how the density of water changes in different states. See typical weather patterns across North America, and watch how a ski resort keeps slopes looking white. One of the 6 volumes in

Reading Rainbow: Desert Giant Family Literacy Kit - DVD

\$60-70

GPN Educational Media

<http://shopgpn.com/>

Family Literacy Kit Contents:

1 nylon backpack

1 30-minute DVD of The Desert Giant

1 feature book - The Desert Giant

1 laminated Family Activity Sheet

Episode Description

This is the story of the life cycle and ecosystem of the giant saguaro cactus and the animals it helps to support in the desert.

LeVar explains the life and seasons of the desert. Inhabitants including jack rabbits, bobcats, gila monsters, a javelina pig and woodpeckers are a few that this segment features. He explores how cacti adapt to the heat and scarcity of water, and explains the appropriate dress for people in a hot, dry climate. A "snake man" gives a close-up look at rattlesnakes.

Reading Rainbow: Come a Tide

\$25-30

GPN Educational Media

<http://shopgpn.com/>

Product Code: 126.0086V

This book by George Ella Lyon, read by Dixie Carter, tells the story of one quirky family's adventure during a spring flood. LeVar takes a look at dramatic weather—from blizzards to tornadoes, and everything in between. A news reporter gives an eyewitness account of Hurricane Hugo and the courageous people who weathered the storm. Closed-captioned.

Recycle More

\$60-70

The Video Project

<http://www.videoproject.org/>

#807

See exactly what happens to your recycled goods as you trace a bottle from a school recycling bin through the step-by-step process that transforms it into plastic lumber, carpet, or even filler for a sleeping bag! This video closely illustrates the process of recycling, and inspires viewers by showing real students learning about the 3Rs: Reduce, Reuse and Recycle.

Recycling is Fun!

\$180-200

Bullfrog Films

<http://www.bullfrogfilms.com>

\$25.00 rental \$195 purchase - Three captivating young children explore the three Rs of recycling -reduce, recycle, reuse. To educate themselves, they visit a landfill, a recycling center, and their local supermarket to find out what they can do to help with our solid waste crisis. At the landfill they see what the crisis looks (and smells) like, and what could be removed from the waste stream. The recycling center lets them separate and prepare recyclables to replace raw materials (saving landfill space, energy and trees) and even pays them for some of the recyclables they collected. Visiting the grocery store they have a treasure hunt, looking for new products made from, or packaged in, recycled paper or plastic containers. They discover their own power to recycle and chose what they buy, for the benefit of their world.

Tell Me Why Video #2 - Water and Weather (Spanish)

\$15-20

Amazon.com

<http://www.amazon.com>

Specify English/Spanish when ordering. Answers questions such questions as "How do we have different seasons?" "How does the weather man know what to say?" "What is a rainbow?" (Also Available in Spanish) Each video comes complete with its own printed Study Guide containing a glossary, additional questions and suggested learning strategies. Running time: 30 min.

The Water Cycle

\$5-6

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

\$5 to purchase or free 30 day rental It's amazing that we may be drinking the same water the dinosaurs drank millions of years ago due to the way the water cycle works. This lively entertaining video depicts the four phases of the water cycle and shows how water is cleaned and purified. Junior "scientists" demonstrate three easy experiments that children can do.

Grade K - 6; 12 minutes -- CC

Ask for a FREE Video Activity Packet

Trees

\$25-30

Teacher's Video Company

<http://www.teachersvideo.com>

Product # : 353867

From bonzais to huge sequoias, trees are amazingly strong, resilient, and resourceful life forms. How do trees communicate with each other? How do experts determine the age of trees? What is the primary function of bark? How do roots work? Why are trees important to human beings? Discover the answers!

Universe

FREE

Alameda County Public Libraries

<http://alam1.aclibrary.org/search~S5?/tuniverse/tuniverse/1%2C25%2C32%2CB/exact&FF=tuniverse&1%2C3%2C/inc>

23 minutes. Students will explore some big questions about the universe -- they'll learn about light years and the electromagnetic spectrum and a gamma ray telescope.

Water - Who Needs it?

\$5-6

California Dept. of Water Resources

<http://www.water.ca.gov/education/wffcatalog.cfm>

\$5 to purchase or free 30 day rental. Without water, life as we know it would be impossible. This colorful video shows children the importance of water in their lives and demonstrates ways they can conserve water around their home. Junior "scientists" in the video demonstrate activities that reveal why clean water is important for growing healthy plants.

Grade K - 6; 14 minutes -- CC
Ask for a FREE Video Activity Packet

Wonders of Weather (Spanish Version) VHS

\$50-60

United Learning

<http://teacherstore.discovery.com>

The weather is a constant source of amazement, amusement, and wonder. It can also be terrifying. Discover the secrets behind the weather's diverse manifestations. The Mechanics of Weather: What super highway does the sun's energy use to reach the earth? Surprised by hot winters and cold summers? Learn about global warming, solar energy, and the origin of the atmosphere. Hurricane Watch: Meteorologists use the latest technology to track these masters of destruction. View satellite images of these powerful forces, and marvel at the quiet eye at their center. Objects Falling from the Sky: The sky is falling! What causes hailstones the size of basketballs to fall? How are volcanic ash and gritty sand propelled thousands of miles from home?