



Resources

Books

Aigner-Clark, Julie. *What Does Violet See? Raindrops and Puddles*. Hyperion Books for Children, 2002. 16 p. (978-0786808717, board book) Baby, Pre. In this Baby Einstein book, Violet explores the world around her on a rainy day.

Bailey, Jacqui. *A Drop in the Ocean: The Story of Water*. Picture Window Books, 2006. 32 p. (978-1404811270, pap.) Pri, Int. Bright colors, friendly format, and busy design invite kids to explore the water cycle, water as a precious resource, and the effect of human activity on our water supply.

Barrett, Judi. *Cloudy with a Chance of Meatballs*. Atheneum, 1978. 32 p. (978-0689306471) Pre, Pri. Life is delicious in the town of Chewandswallow where it rains soup and juice, snows mashed potatoes, and blows storms of hamburgers—until the weather takes a turn for the worse.

Berger, Melvin, and Gilda Berger. *Hurricanes Have Eyes but Can't See and Other Amazing Facts about Wild Weather*. Scholastic, 2004. 48 p. (978-0439625340, pap.) Pri, Int. This book shares lots of fun facts, safety tips, quizzes, and games about the weather.

Branley, Franklyn M. *Down Comes the Rain* (Let's-Read-and-Find-Out Science). HarperTrophy, 1997. 32 p. (978-0064451666, pap.) Pri, Int. Branley consistently produces simple, effective explanations of scientific concepts for kids. This nicely illustrated, inviting book introduces the water cycle and offers simple, hands-on activities to try.

Christian, Spencer. *Can It Really Rain Frogs? The World's Strangest Weather Events*. John Wiley & Sons, 1997. 121 p. (978-0471152903, pap.) Int. This title is full of interesting weather facts, myths, and experiments.

Cobb, Vicki. *I Get Wet* (Vicki Cobb Science Play). HarperCollins, 2002. 40 p. (978-0688178383) Pre, Pri. Picture book format offers easy experiments with water to do with preschoolers.

Collins, Heather. *Jack and Jill*. Kids Can Press, 2003. 12 p. (978-1553370758, board book) Babies, Toddlers. Jack and Jill are toy pigs in this retelling of the nursery rhyme.

Dayrell, Elphinstone. *Why the Sun and the Moon Live in the Sky*. Houghton Mifflin, 1968. 32 p. (978-0395296097) Pre, Pri. A Nigerian pourquoi story about how a visit from Ocean caused Sun and Moon to move to the sky. Caldecott Honor Book.

Ehlert, Lois. *Snowballs*. Harcourt, 1995. 40 p. (978-0152000745) Pre, Pri. Some children create a family out of snow. Includes labeled pictures of all the items they use, as well as information about how snow is formed.

Fleischman, Sid. *Here Comes McBroom*. HarperCollins, 1998. 80 p. (978-0688163648, pap.) Pri, Int. Share the tall tale, "McBroom the Rainmaker."

Frasier, Debra. *The Incredible Water Show*. Harcourt, 2004. 40 p. (978-0152162870) Pri, Int. A wonderful theatrical extravaganza about water science, conservation, and protection that you can stage as a play or puppet show. Try this as a kickoff or end-of-summer program. Visit Frasier's Web site at debrafrasier.com/pages/books/washo.html for details on performing the show.

Garland, Sarah. *Splash!* Frances Lincoln, 2006. 16 p. (978-1845073459, board book) Babies, Toddlers. This baby board book helps parents encourage the fun by following an infant through splashing activities.

Godwin, Sam. *The Drop Goes Plop: A First Look at the Water Cycle*. Picture Window Books, 2005. 32 p. (978-1404806573) Pre, Pri. Mama and baby seagull guide us through this overview of the water cycle, with a glossary, fun facts, and resources at the end.

Graham, Joan Bransfield. *Splish Splash*. Sandpiper, 2001. 32 p. (978-0618111237, pap.) Pre, Pri, Int. A collection of fun, brightly illustrated concrete poems about water in its various forms, from ice cubes to the ocean.

Hannah, Julie, and Joan Holub. *The Man Who Named the Clouds*. Albert Whitman, 2006. 40 p. (978-0807549742, lib. bdg.) Pri, Int. This is a biography of Luke Howard, an 18th-century chemist whose fascination with weather and clouds led him to introduce a classification system for clouds. It incorporates lots of weather science and an example of a weather journal kids could keep.

Hiaasen, Carl. *Flush*. Knopf, 2005. 263 p. (978-0375821820) Int. Another award-winning eco-adventure by the author of *Hoot*, this time about young people catching the manager of a floating casino who is dumping waste into Florida's coastal waters.



Hirschmann, Kris. *Sponges* (Creatures of the Sea). KidHaven Press, 2005. 48 p. (978-0737730135) Int. Introduces sponges and their unique relationship with water during and after their lives through clear text and bright, appealing photos.

Hopkins, Lee Bennett, selector. *Weather: Poems for All Seasons* (I Can Read Book). HarperCollins, 1995. 64 p. (978-0064441919, pap.) Pre, Pri, Int. A nice collection of weather poems by various poets. Read some poems and have children illustrate them.

Intrater, Roberta G. *Splash!* (Baby Faces). Cartwheel, 2002. 10 p. (978-0439420051, board book). Babies, Pre. Simple rhymes caption photos of expressive young children playing in water. Also available in Spanish as *Splash: Al Agua Patos*.

Jaffe, Nina. *The Golden Flower: A Taino Myth from Puerto Rico*. Piñata Books, 2005. 32 p. (978-1558854529) Pre, Pri, Int. Illustrated by Enrique O. Sanchez, this pourquoi story explains how water came into our world and how Puerto Rico came to be.

Johns, Linda. *Hannah West in Deep Water: A Mystery*. Puffin, 2006. 160 p. (978-0142407004, pap.) Int. Likeable series hero Hannah West tackles the mystery of who is polluting the waters of Lake Washington.

Kerley, Barbara. *A Cool Drink of Water*. National Geographic Children's Books, 2002. 32 p. (978-0792267232) Pre, Pri. Stunning photographs and simple text show people around the world drinking water. Includes a map and a note on conservation.

Kimmel, Eric A. *Anansi and the Magic Stick*. Holiday House, 2001. 32 p. (978-0823414437) Pre, Pri, Int. Everyone's favorite trickster Anansi steals a magic stick to do his chores for him. But when he falls asleep while watering his garden, the stick keeps watering and creates a flood that threatens the neighborhood.

Koss, Amy Goldman. *Kailey* (American Girl Today). American Girl, 2003. 160 p. (978-1584855910, pap.) Pri, Int. Ten-year-old Kailey launches an art protest to keep a developer from spoiling the cove and its tide pools that are special to her and her family and friends.

Levine, Shar, and Leslie Johnstone. *Bathtub Science*. Sterling Publishing, 2001. 80 p. (978-0806971858) Pri, Int. Photos and cartoon drawings illustrate this fun collection of water experiments from simple to complicated.

Levy, Constance. *Splash! Poems of Our Watery World*. Orchard Books, 2002. 48 p. (OP) Pre, Pri, Int. This nicely illustrated book of poems about water could be used in many programs and to inspire kids to write their own.

Martin, Jacqueline Briggs. *Snowflake Bentley*. Houghton Mifflin, 1998. 32 p. (978-0395861622) Pri. In this Caldecott Medal book, Martin and Azarian offer a dreamy and lyrical, yet informative, version of Bentley's lifelong love affair with snow.

McCloskey, Robert. *Time of Wonder*. Viking, 1957. 64 p. (978-0670715121) Pri, Int. Two children spending their summer on an island off the coast of Maine experience a hurricane. Send this Caldecott Medal book home with families this summer. Display it with a nonfiction title about hurricanes.

Milord, Susan. *Tales of the Shimmering Sky: Ten Global Folktales with Activities*. Williamson Publishing Company, 1996. 128 p. (978-1885593016, pap.) Pri, Int. Beautifully illustrated tales with related activities, including stories about clouds, rain, and rainbows.

Morrison, Gordon. *A Drop of Water*. Houghton Mifflin, 2006. 32 p. (978-0618585571) Pre, Pri. Follow water's journey from rain through mountain brook, waterfall, bog, river, swamp, and stream, nourishing plants and animals along the way.

Moss, Marissa. *Rose's Journal: The Story of a Girl in the Great Depression*. Silver Whistle/Harcourt, 2001. 56 p. (978-0152024239) Int. This series of first-person accounts, in the form of hand-written journals, brings historical periods to life. Here, Rose's Kansas family tries to save their farm in the throes of the 1930s drought and dust storms.

Murphy, Bryan. *Experiment with Water*. Two-Can Publishing, 1997. 32 p. (978-1587281198, pap.) Int. Bits of history and brightly colored photos enhance this collection of water experiments. Also available in Spanish as *El Agua*.

New Book of Popular Science, editors. *Just Add Water: Science Projects You Can Sink, Squirt, Splash, Sail*. Children's Press, 2008. 32 p. (978-0531187623, pap.) Pri, Int. Fairly simple experiments about the states, solvent properties, density, buoyancy, and natural phenomena of water. Kid-friendly and inviting.

Olien, Rebecca. *Sources of Water* (First Facts). Capstone Press, 2006. 24 p. (978-0736851800, pap.) Pri. Learn how water filters through Earth's layers, being cleaned and stored, using the Groundwater experiment on p. 21.

Olien, Rebecca. *Water and the Weather* (First Facts). Capstone Press, 2006. 24 p. (978-0736851817, pap.) Pri. A good basic overview with nice photos and "Fun Facts."

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Olien, Rebecca. *The Water Cycle* (First Facts). Capstone Press, 2005. 24 p. (978-0736851824, pap.) Pri. Companion to the previous title in the First Facts: Water All Around series.

Olien, Rebecca. *What Is Water?* (First Facts). Capstone Press, 2005. 24 p. (978-0736851831, pap.) Pri. Another companion to the previous titles.

Osborne, Mary Pope, and Natalie Pope Boyce. *Polar Bears and the Arctic* (Magic Tree House Research Guide). Random House, 2007. 128 p. (978-0375832222, pap.) Int. This nonfiction companion to *Polar Bears Past Bedtime* introduces readers to animals and people who live in the Arctic, with a focus on the effects of global warming on their present and future.

Polacco, Patricia. *Thunder Cake*. Putnam, 1990. 32 p. (978-0399222313) Pre, Pri. Grandma finds a way to dispel her grandchild's fear of thunderstorms.

Prelutsky, Jack. *It's Snowing! It's Snowing! Winter Poems* (I Can Read Book). HarperCollins, 2006. 48 p. (978-0060537173, pap.) Pre, Pri. Lovely short poems about the joys and trials of winter.

Quinn, Zoe. *Totally Toxic* (The Caped 6th Grader). Yearling, 2009. 148 p. (978-0307498366, pap.) Int. This lightweight, entertaining series title has superhero Zoe Richards taking on a factory that is dumping toxic waste in a river.

Relf, Pat, and Carolyn Bracken. *The Magic School Bus Wet All Over: A Book about the Water Cycle*. Scholastic Paperbacks, 1996. 32 p. (978-0590508339, pap.) Pri. Another Ms. Frizzle adventure, in which the gang learns all about the water cycle, up close and personal. Also available in Spanish as *El autobus magico—se salpica todo*.

Roth, Susan L. *The Biggest Frog in Australia*. Aladdin, 2000. 32 p. (978-0689833144, pap.) Pre, Pri. In this tall tale, when a thirsty frog drinks up all the water in Australia, the other animals must think of a way to make him give it up.

Sacks, Janet. *Weather & Art Activities* (Arty Facts). Crabtree Publishing Company, 2002. 48 p. (978-0778711469) Int. Twenty fun art activities featuring weather themes.

Sharpe, Susan. *Waterman's Boy*. Aladdin, 2007. 176 p. (978-1416964537, pap.) Int. Two boys from a small town on the Chesapeake Bay help a scientist interested in cleaning up the water while risking parental disapproval. Also available in Spanish as *Suspenseo en la bahia*.

Sherman, Josepha. *Splish! Splash! A Book about Rain*. Picture Window Books, 2004. 24 p. (978-1404803398, pap.) Pre, Pri. Colorful illustrations form the backdrop for straightforward text full of action words that draw readers in to explore the water cycle and rain. Also available in a bilingual English/Spanish edition, *Splish! Splash! Un libro sobre la lluvia*.

Silverstein, Alvin, and Virginia Silverstein. *A World in a Drop of Water: Exploring with a Microscope*. Dover, 1998. 64 p. (978-0486403816, pap.) Int. This title shows a menagerie of microscopic creatures found in a single water drop.

Skurzynski, Gloria, and Alane Ferguson. *Deadly Waters* (National Park Mysteries) National Geographic Children's Books, 2007. 160 p. (978-1426300936, pap.) Pri, Int. While visiting the Everglades National Park with their parents, the Landon children uncover the mystery of dying manatees and learn important lessons about the natural environment.

Speed, Toby. *Water Voices*. Putnam, 1998. 32 p. (OP) Pre, Pri. Water, in all its poetry and whimsy, is the subject of this lovely collection of poems and riddles.

Stewart, Melissa. *The Wonders of Water*. Compass Point Books, 2004. 32 p. (978-0756506377, lib. bdg.) Pri, Int. Nicely designed and illustrated with color photos, this book involves kids in simple, observation-based activities to learn about water.

Strauss, Rochelle. *One Well: The Story of Water on Earth*. Kids Can Press, 2007. 32 p. (978-1553379546) Int. In picture book format, Strauss presents a beautiful and effective overview of the importance and uses of water, how water systems operate, and how we can conserve and protect them.

Tekavec, Heather. *Storm Is Coming!*. Dial, 2002. 32 p. (978-0803726260) Pre, Pri. The animals misunderstand the farmer's "storm" warning and expect someone scary and mean in this picture book.

Trapani, Iza. *The Itsy Bitsy Spider*. Charlesbridge, 1998. 30 p. (978-1580890144, board book.) Pre. A board book version of the nursery rhyme.

Waldman, Neil. *The Snowflake: A Water Cycle Story*. Millbrook Press, 2003. 32 p. (978-0761323471) Pri, Int. Lovely, emotive pastel illustrations add charm to this month-by-month "travelogue" approach to the water cycle, starting with and "starring" a snowflake rather than the traditional raindrop.

Walker, Nick. *Sing Along with the Weather Dude*. Small Gate Media, 2000. 20 p. (978-0964338913, pap.) Pre, Pri. TV meteorologist Walker's pleasant voice and



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clever songs are perfect for background, sing-along, and consolidating concepts. Book/CD set.

Weeks, Sarah. *Splish, Splash!* (My First I Can Read). HarperCollins, 2000. 32 p. (978-0064442824, pap.) Pre, Pri. How many animals can fit in a bathtub? Find out in this fun, silly beginning reader.

Wells, Robert E. *Did a Dinosaur Drink this Water?* Albert Whitman, 2006. 32 p. (978-0807588406, pap.) Pri. Picture book format introduces the water cycle. Also available in Spanish as *Bebio un dinosaurio de esta agua?*

Wick, Walter. *A Drop of Water*. Scholastic, 1997. 40 p. (978-0590221979) Pri, Int. Great photos are the highlight of this oversized book that illustrates the properties of water.

Williams, Judith. *Why Is It Raining?* (I Like Weather) Enslow Publishers, Inc. 2005. 24 p. (978-0766023185, lib. bdg.) Pre, Pri. Simple questions and answers about raindrops, snow, clouds, and water vapor with a rain gauge experiment at the end.

Woods, Michael, and Mary B. Woods. *Droughts*. Lerner Publishing Group, 2006. 64 p. (978-0822565765, lib. bdg.) Pri, Int. Stories, images, facts, and figures about droughts.

Web Sites

Alphabet Soup. www.alphabet-soup.net/mini/rain.html. "The Rain Storm" participation story.

American Science Surplus. www.sciplus.com/index.cfm/go/front.tagged/tag/cast. Purchase PerfectCast™, a plaster substitute for making casts of kids' footprints.

Be Amazing Toys. www.beamazing.com. Sells Insta Snow Powder, a substance that expands to 100 times its original size to make a white fluffy fake snow.

Boy Scout Trail. www.boyscouttrail.com/content/song/if_its_raining-1337.asp. Words to "If It's Raining" song, sung to the tune of "If You're Happy and You Know It."

Droplet and the Water Cycle. kids.earth.nasa.gov/droplet.html. This NASA site has an interactive game about the water cycle. Bookmark it at a computer station for children to play independently.

EEK. www.dnr.state.wi.us/org/caer/ce/EEK/earth/groundwater/index.htm. EEK (environmental activities for kids) Web site activities for kids grades 4-8. Check out Water Wonders.

Enchanted Learning. www.enchantedlearning.com/rt/weather/watercycle.shtml. This site has a short Reader's Theater script for up to 19 children called Water Cycle Adventure.

Environmental Protection Agency. Drinking Water and Ground Water Kids Stuff. www.epa.gov/safewater/kids/index.html. Lots of information, activities, and lesson plans that you can use or adapt for summer programs. You'll find a word scramble, a question and answer quiz, and many other activities about water.

Expert Village. www.expertvillage.com/video/9867/surface-tension-demo.htm. A short video that demonstrates the surface tension of water.

General Chemistry Online: Water to Wine. antoine.frostburg.edu/chem/senese/101/features/water2wine.shtml. Explains the chemistry behind the classic water to wine magician's trick.

How Stuff Works. Science Projects for Kids. home.howstuffworks.com/science-projects-for-kids-weather-and-seasons4.htm. Project on making fog.

How to Make Fog in a Bottle. www.wikihow.com/Make-Fog-in-a-Bottle. This site explains what fog is.

Hummingbird Educational Resources. www.hummingbirded.com/winter-snow.html. Songs about snow.

Kiddiddles. www.kiddiddles.com/lyrics/s103.html. Lyrics to the song "Splash! Fall the Raindrops."

KinderNature. kindernature.storycounty.com. Nature songs and fingerplays including the "Water Cycle" song referred to on page 85.

Magic School Bus. Simple Science. www.scholastic.com/magicschoolbus/simplescience/archive/labs/rain.htm. "Make Rain Indoors" experiment.

National Geographic Kids. Experiment with Water Tricks. www.nationalgeographic.com/ngkids/trythis/trythis_water/floating-paper-clip.html. Can a paper clip float? Try this easy experiment to find out.

National Geographic Kids. Experiment with Water Tricks. www.nationalgeographic.com/ngkids/trythis/trythis_water/floating-egg.html. This easy experiment makes an egg float.

Oceans Alive! Water on the Move: Wind and Waves. mos.org/oceans/motion/wind.html. Explains how waves are created and includes an easy experiment to show how water moves.

The Preparedness Center. www.preparedness.com/assnac.html. Offers freeze-dried Astronaut Space Snacks to which you "just add water."



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Safety Central. www.safetycentral.com/assnac.html. Sells freeze dried food products like "Freeze Dried Astronaut Ice Cream" to which you "just add water."

Thirstin's Questions and Answer Game. www.epa.gov/safewater/kids/flash/flash_qgame.html. This EPA site has a 25-question quiz about water.

Thirstin's Word Scramble Game. www.epa.gov/safewater/kids/flash/flash_wordscramble.html. This EPA site is a word scramble in which water-related questions are asked.

A Trip with Drip. www.cceindia.org/drip/movie.html. An animated movie about the water cycle.

U.S. Geological Survey. Water Science for Schools. ga.water.usgs.gov/edu. Offers information on many aspects of water, along with pictures, data, maps, and an interactive center where you can give opinions and test your water knowledge.

Visible Water Vapor. web2.airmail.net/kboyle/Vapor.htm. This experiment is from a Web site, Science Lesson Plans That Teach Literacy K-2.

The Water Cycle. www.epa.gov/safewater/kids/flash/flash_watercycle.html. An animated movie about the water cycle.

The Water Cycle. www.hardbargainfarm.org/hbf/watercycle/watercycle_puzzle2.html. Label parts of the water cycle in this online puzzle.

Water Cycle Puzzle. www.lakelandschools.org/lt/Technology/waterpuz.htm. Try this online, 16-piece jigsaw puzzle about the water cycle.

Utah Science. www.usoe.k12.ut.us/curr/science/sciber00/7th/cells/sciber/slidepre.htm. Directions for preparing a slide.



Program Ideas

Water Fair Kickoff/Finale



Audience: All Ages, Families

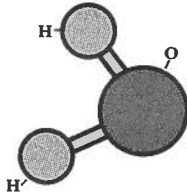
Review the science activities listed below and choose those you wish to use for your fair. Set up tables as science stations, both indoors and outdoors, using tarps or plastic floor protectors under tables indoors. The activity or activities at each table involve children in exploring one of the properties of water. Set materials and instructions on tables, so families can work independently as they move from table to table. Have a volunteer at each table to assist as needed. Have a sink and a freezer or cooler for ice nearby if possible. An additional print and/or online source of instructions is provided for most experiments:

1. Do You Know What's in H₂O?



What is water made of? What's in water?

Molecule Models. Make models of water molecules, showing one oxygen and two hydrogen atoms as seen in the illustration. Display a picture from any basic water book or print an image from the Internet. Provide different materials like Styrofoam balls and toothpicks, different sized marshmallows and pretzel sticks, different sizes and colors of pompoms, and glue.



View a Drop. What's in water besides hydrogen and oxygen? View a drop in a microscope for contaminants and tiny life forms. Borrow a microscope and make or borrow a properly prepared slide of a water drop. Use water from your tap or from a nearby river or pond. For more information check out *What Is Water?* by Rebecca Olien, p. 7. For step-by-step instructions on how to create a slide, go to www.usoe.k12.ut.us/curr/science/sciber00/7th/cells/sciber/slidepre.htm.

2. States of Water

Water is the only substance found naturally on earth as a solid, a liquid, and a gas.

Liquid, Solid, Gas. Demonstrate all three states using plastic cups, water, and ice cubes. Fill a plastic cup with hot water. Quickly cover it snugly with a matching plastic cup, and then place an ice cube on the top. Watch for evidence of the three states as the interaction of temperatures causes vapor to rise and condense into drops near the top of the connected cups. For more information check out *The Water Cycle* by Rebecca Olien, p. 21, or "Foggy Notions" at home.howstuffworks.com/science-projects-for-kids-weather-and-seasons4.htm.

Condensation. Demonstrate condensation by placing a glass of ice water (or water with ice cubes in it) on a warming tray. Watch water droplets form on the outside of the glass. For more information check out *A Drop of Water* by Walter Wick, p. 24, or web2.airmail.net/kboyle/Vapor.htm.

3. Shape of Water

Shape of a Drop. Explore the shape of a drop of water. Have children watch carefully as a few drops of water drip slowly from an eyedropper. As the drop grows heavier, then detaches and falls, they might see a bulge, a teardrop shape, a sphere, and even a horizontal football shape as forces of gravity, air pressure, and surface tension interact. For more information check out *I Get Wet* by Vicki Cobb, pp. 14-19, or *A Drop of Water* by Walter Wick, pp. 8-9.



Surface Tension. Demonstrate water's surface tension or "skin." Fill a glass to the very top with water. Have children gently add several small items, such as pennies, one at a time, watching the water level bulge above the top of the glass until it spills over. Or have them pour a little water onto a piece of wax paper and watch it form into separate drops. What sticks the water to itself in both cases? Surface tension. For more information check out *I Get Wet* by Vicki Cobb,

