Annotated Bibliography of Energy Resources

Energy Basics – Uses & Applications - Energy and Work, Energy Uses, Secondary Energy Sources - What is Electricity, Kinetic vs. Potential Energy

America's Climate Choices, and National Research Council. *Advancing the Science of Climate Change*. Washington, D.C.: National Academies, 2010. Print.

Climate change is occurring and it is caused largely by human activities. Climate change poses significant risks for a broad range of human and natural systems and is already affecting this group. The compelling case for these conclusions is provided in a five-part series of the America's Climate Choices project, the National Research Council's most comprehensive study of climate changes to date. There are several authors contributing to the five-part study: America's Climate Choices –Panel on Advancing the Science of Climate Change. The National Research Council has worked with the Board on Atmospheric Sciences and Climate (BASC) and Earth and Life Studies (DELS).

Ardley, Neil. *The Science Book of Electricity.* San Diego: Harcourt Brace Jovanovich, 1991. Print.

This book is packed full of fun science experiments and projects that introduce young readers to elementary science principles. The color photographs and basic instructions lead children through creative experiments that can be easily related to the world around them.

Baines, John. *Water*. London: Wayland, 1993. Print.

Water, filled with full-color photographs and illustrations, explains why water is our most precious resource and explores the many ways it affects and infleunces people's lives.

Berger, Melvin. *Switch On, Switch Off*. New York: Harper & Row, 1990. Print.

This science concept book explains the production and transmission of electricity in language that young readers will understand. The clear illustrations and diagrams will help children to construct their own electrical circuit using household materials.

Bradley, Kimberly Brubaker., and Paul Meisel. *Energy Makes Things Happen*. New York: HarperCollins, 2003. Print.

Bradley introduces young readers to the concept of energy through the use of familiar examples. The book includes a simple game and experiment to help children gain a general understanding of what energy is.

Challand, Helen J. *Experiments with Magnets*. [S.l.]: Scholastic, 1986. Print.

Part of the "New True Books" series, *Experiments with Magnets* works well alongside the science curriculum for early elementary students. The photographs and large print aid young learners in conducting experiments, showing them not only *what* happens, but also *why*.

Cheshire, Gerard. *Energy and Matter*. North Mankato, Minn.: Smart Apple Media, 2007. Print.

Energy and Matter serves as an introduction to the ways in which we use energy in our daily lives. Energy sources, forms, and energy conservation are addressed. Appropriate for older students.

Fife, John. *Watered-down Electricity*. Huntington, W. Va.: University Editions, 1996. Print.

Watered-down Electricity provides a basic explanation of electricity, with plenty of graphics, that is great for all ages.

Gershon, David, Steven Connolly, and Dan Wetzel. *Journey for the Planet: a Kid's Five Week Adventure to Create an Earth Friendly Life*. Woodstock, NY: Empowerment Institute, 2007. Print.

A fun, engaging illustrated workbook for every child who wants to make a difference for the world. A step-by-step program that gives children a way to translate their caring for the earth into effective action.

Glover, David. *Batteries, Bulbs, and Wires*. New York: Kingfisher, 2002. Print.

Glover engages upper elementary students in a variety of experiments that illustrate the connections between electricity and magnetism. With every turn of the page, there is another activity designed to illustrate scientific concepts, from building a battery circuit to designing your own burglar alarm.

Maze, Stephanie, and Catherine O'Neill Grace. *I Want to Be an Environmentalist*. San Diego: Harcourt, 2000. Print.

The colorful photographs in Maze's book will engage upper elementary and middle school students who are interested in learning about the history, important issues, and influential people in the environmental movement. A brief overview of types of environmental careers is also provided.

McGough, Roger, and Chris Riddell. *Until I Met Dudley: How Everyday Things Really Work*. New York: Walker and, 1997. Print.

A young girl used to have fantastic ideas about how things work, but Dudley tells her how it really is and explains the workings of mechanical objects such as vacuum cleaners, refrigerators, dishwashers, toasters, and garbage trucks. The mixture of cartoon humor and real facts would be particularly appealing for Grades K-4.

Morgan, Sally. *Energy*. Chicago, IL: Heinemann Library, 2008. Print.

Part of a series designed for younger readers, Morgan introduces many forms of energy and a wide range of topics. Included are heat, light, chemical and electrical energy, solar cells and photosynthesis. Simple experiments reinforce the scientific information.

Rauzon, Mark J., and Cynthia Overbeck. Bix. *Water, Water Everywhere*. San Francisco: Sierra Club for Children, 1993. Print.

Rauzon introduces the importance of water and the hydrologic cycle for beginning readers. Colorful photographs and descriptions make the concepts understandable and relatable for even the youngest students.

Riley, Peter. *Forces and Movements*. London: Franklin Watts, 2008. Print.

Riley introduces the basic concepts behind forces and movement through the combination of scientific explanation, historical information, and experimentation. The practical experiments are perfect for elementary students.

Solway, Andrew. *Exploring Energy (Exploring Physical Science)*. New York: Rosen Central, 2008. Print.

Describes what energy is, where it can be found, and how it is used in everyday life. Appropriate for ages 9 – 12.

Stringer, John. *Energy*. North Mankato, Minn.: Smart Apple Media, 2007. Print.

Good young adult treatment on a variety of topics and questions: What is a renewable energy source? Is nuclear power a good source of energy? Why are wind farms so controversial? How is energy linked to climate change? and much more.

Walker, Sally M. *Water Up, Water Down: the Hydrologic Cycle*. Minneapolis: Carolrhoda, 1992. Print.

A wealth of information on the hydrologic cyle and related concepts like humidity, rainbows, dew point, acid rain, and hailstones. Students in grades 3-6 will find the clear language and photographs a great resource for school reports.

Woodford, Chris. *Energy (See for Yourself)*. New York: DK Pub., 2007. Print.

A colorful book about energy in the modern world. A good overview of science all around us: electricity, heat, power, sun, lightning, fire, combustion, fuel, calorie, radiation, force, etc.

Energy Forms and Sources - Renewable vs. Non-Renewable Resources, Energy Limits, Energy Transformation

Ardley, Neil. *The Science Book of Machines*. San Diego: Harcourt Brace Jovanovich, 1992. Print.

This book is packed full of fun science experiments and projects that introduce 9-12 year old readers to elementary mechanical principles. The color photographs and basic instructions lead children through creative experiments that can be easily related to the world around them.

Ardley, Neil. *The Science Book of Motion*. San Diego: Harcourt Brace Jovanovich, 1992. Print.

This book is filled with fun science experiments and projects that introduce 9-12 year old readers to elementary principles of motion. The color photographs and basic instructions guide children through experiments that they can easily apply to the world around them.

Ardley, Neil. *The Science Book of Sound*. San Diego: Harcourt Brace Jovanovich, 1991. Print.

The Science Book of Sound contains basic experiments that introduce upper elementary students to the principles of sound and music. The full-color graphics and clear instructions help readers relate the scientific concepts to their everyday world.

Ardley, Neil. *The Science Book of Water*. San Diego: Harcourt Brace Jovanovich, 1991. Print.

A practical activity book for upper elementary students that explains the basic science behind water and the hydrologic cycle through the use of clear, step-by-step experiments. Everyday household items are put to use in the construction of various models and toys to explain the book's scientific concepts in a new way.

Armentrout, David, and Patricia Armentrout. *Wind Energy*. Vero Beach, Fla..: Rourke Pub., 2009. Print.

An overview of wind energy, including advantages and disadvantages, how turbines work, wind farms, etc.

Bang, Molly. *My Light*. New York: Blue Sky Press, 2004.

This award-winning author and illustrator writes a first-person narrative in the voice of the sun. It investigates the various forms of energy on earth, all derived from the sun and is complete with stunning illustrations. A good choice for science-minded children in Grades 1-3. An ALA Notable book.

Benduhn, Tea. *Energy for Today: Ethanol and Other New Fuels*. Pleasantville, NY: Weekly Reader Pub., 2009. Print.

Part of a series of energy books by this author, including *Solar Power*, *Water Power*, *Wind Power*, and *Nuclear Power*. Addresses renewable versus nonrenewable resources, kinetic and potential energy, fossil fuels and pollution, global warming, and conservation.

Birch, Beverley, and Robin Bell Corfield. *Benjamin Franklin's Adventures with Electricity*. New York: Backpack, 2001. Print.

Part of the "Science Stories" series, *Benjamin Franklin's Adventures with Electricity* reveals how Franklin's experiments with lightning paved the way for our modern uses of electrical power. This text is appropriate for students in grades 2-5.

Bishop, Amanda. *Energy Conservation (Saving Our World)*. Tarrytown, NY: Marshall Cavendish Benchmark, 2009. Print.

Good basic content for ages 9-12. Also check out other titles by this author: *How to Reduce Your Carbon Footprint* and *Climate Change*.

Bowden, Rob. *Wind Energy*. North Mankato, Minn.: Stargazer, 2007. Print.

An easy-to-read introduction to a topic of interest to young readers.

Brown, Lester R. *Plan B 4.0: Mobilizing to save Civilization*. New York: W.W. Norton, 2009. Print.

Brown, president of the Earth Policy Institute, investigates the nature of the transition from fossil fuels to renewable energy sources, and explains how this change will affect people's lives. This text makes the complicated subject of energy sources and forms accessible to general readers, and offers helpful tips about how we can move toward a more sustainable future.

Conlon, Mara, and Dave Klug. *Brainiac's Go Green! Activity Book*. White Plains, NY: Peter Pauper, 2008. Print.

Presents fascinating scientific information about the earth and important concepts and ideas for being environmentally-conscious. Kids will love doing the word finds, crosswords, connect the dots, mazes, and countless other activities. Parents will love the green tips for families.

Earth Works Group, The, Michele Montez and Lorraine Bodger. *The New 50 Simple Things Kids Can Do to save the Earth*. Kansas City: Andrews McMeel Pub., 2009. Print.

Packed with simple (but inspiring) projects, tips, and little-known facts that put a kid's own carbon footprint into perspective. Easy-to-do and kid-friendly projects show that kids can make a difference. Provides children and their families the tools to take action

Félix, Monique. *The Wind*. New York: Stewart, Tabori & Chang, 1991. Print.

This text for toddlers and preschoolers follows the journey of a mouse who gets trapped in a book and discovers the wind. Felix , who has illustrated over 40 children's books, received the Octogone Prize from the International Center of Children's Literature in France.

Fowler, Allan. *Can You See the Wind?* New York: Children's, 1999. Print.

Part of the "Read About Science" series for beginning readers. Provides a basic discussion of wind, the cause of air movements, and the uses of wind power for children aged 4-8.

Fowler, Allan. *What Magnets Can Do*. Chicago: Children's, 1995. Print.

Part of the "Read About Science" series for beginning readers. Offers a basic discussion of magnets and magnetic principles for children aged 4-8.

Fridell, Ron. *Earth-friendly Energy (Saving Our Living Earth)*. Minneapolis, MN: Lerner Publications, 2009. Print.

Colorful illustrations and well-written narrative covering fairly sophisticated topics with age-appropriate vocabulary. Good choice for elementary and middle school media centers and young adult collections.

Gallant, Roy A. *Sand on the Move: the Story of Dunes*. New York: Franklin Watts, 1997. Print.

Detailed photographs and illustrations introduce children to habitats and the formation of dunes, including a list of sand dunes in North America. The Channel Forest in California is used to exemplify the power of sand and wind for readers. Children aged 9-12 will respond to the book's vivid photographs and answers to common questions, such as "why does sand come in different colors?"

Gibbons, Gail. *Recycle!: a Handbook for Kids*. Boston: Little, Brown, 1992. Print.

An older title that is still relevant. An informational book on recycling that helps kids learn new and interesting facts, including how to recycle, why it's necessary, and its benefits.

Lippman, David. *Energy from Hydrogen (Power Up!)*. Ann Arbor, MI: Cherry Lake Pub., 2008.

Print.

Discusses the country's addiction to oil and the use of hydrogen as a fuel. Appropriate for ages 9-12.

Mahaney, Ian F. *Solar Energy (Energy in Action).* New York: PowerKids, 2007. Print.
Solar energy fundamentals for ages 9-12.

Includes how plants and animals use solar energy, clean electricity, solar energy applications, and the future of solar energy.

Morgan, Sally. *Alternative Energy Sources (Science at the Edge)*. Chicago: Heinemann Library, 2010. Print.

Introduces the underlying science and techniques behind alternative energy, reviews the issues and opinions involved, and uses a variety of examples and evidence.

Morgan, Sally. *From Windmills to Hydrogen Fuel Cells: Discovering Alternative Energy*. Chicago: Heinemann Library, 2007. Print.

How long will the world's oil and gas reserves last? Which countries make the most use of alternative energy sources? How will we heat our homes and power our cars in the future? This title tells the amazing story of alternative energy.

Morgan, Sally. *Future Energy*. Mankato, MN: Stargazer, 2006. Print.

Examines our use of energy and what we can do to develop alternate fuel sources.

Morris, Neil. *The Energy Mix*. Mankato, MN: Smart Apple Media, 2010. Print.

Energy use, one of the most important issues today, is examined in this text for middle readers. Morris examines the different sources of energy used for power.

Muschal, Frank. *Energy from Wind, Sun, and Tides*. Ann Arbor, Mich.: Cherry Lake, 2008. Print.

This text explores solar energy, wind power, and tidal power for elementary readers.

Nardo, Don, Ashlee Schultz, and Farhana Hossain. *Kinetic Energy: the Energy of Motion*. Minneapolis, Minn.: Compass Point, 2008. Print.

Examines energy as it relates to light, atoms, and waves. A helpful glossary of key terms, as well as a list of relevant websites for readers keen to learn more about the topic, are also provided. Suitable for middle readers.

O'Neal, Claire. *How to Use Waste Energy to Heat and Light Your Home*. Hockessin, Del.: Mitchell Lane, 2010. Print.

No matter how hard we try to reuse, reduce, and recycle, we will still end up making some trash. O'Neal explains how to make our trash work for us. The text provides interesting examples of how to turn trash into energy for readers aged 9-12.

Orme, Helen. *Energy for the Future*. New York: Bearport Pub., 2008. Print.

Readers from ages 9-12 will respond to Orme's clear explanations and energy-saving tips. An array of environmentally-friendly methods for generating energy are outlined.

Orr, Tamra. *Geothermal Energy*. Ann Arbor, Mich.: Cherry Lake Pub., 2008. Print.

This illustrated guide to the energy of earth's internal heat is appropriate for children aged 9-12.

Orr, Tamra. *Hydroelectric Energy*. Ann Arbor, Mich.: Cherry Lake Pub., 2008. Print.

An exploration of the ways people are using water, an inexpensive, environmentally safe power source, for energy. Appropriate for 9-12 year olds.

Parker, Steve. *Electricity*. New York: DK Pub, 2005. Print.

Parker brings to life two centuries of electricity exploration and experimentation. Shows children from ages 9-12 how electricity powers not only machines and toys, but also the muscles and nerves in their own bodies.

Parker, Steve. *Rocks and Minerals*. Milwaukee, WI: Gareth Stevens Pub., 2002. Print.

Part of the "Eye Wonder" series, this text introduces interesting geologic facts to young scientists, offering sharp and detailed photographs of a variety of rocks and minerals. Appropriate for children aged 9-12.

Peppas, Lynn. *Ocean, Tidal and Wave Energy*. St. Catharines ON: Crabtree, 2008. Print.

This colorful text, targeted at children from 9-12 years old, explains the history behind water power and also shows the new advances being made to harness this clean energy source.

Rau, Dana Meachen. *Alternative Energy: beyond Fossil Fuels*. Mankato, MN: Compass Point, 2010. Print.

Shows children how they can make a difference. From fighting global warming to protecting wildlife, this book contains the information young environmentalists need to change the world.

Richardson, Joy, and Linda Costello. *The Water Cycle*. New York: F. Watts, 1992. Print.

Part of the "Lift Off" series of books, designed to stimulate young readers' minds. This installment explains many aspects of the water cycle, from its origin to how water makes its way into our homes.

Rybolt, Thomas R., and Robert C. Mebane. *Environmental Experiments about Renewable Energy*. Hillside, NJ: Enslow, 1994. Print.

This text contains dozens of environmental experiments for young scientists, making use of household materials. Perfect for elementary students who are looking for science fair project ideas.

Saunders, Nigel. *Geothermal Energy*. Pleasantville, NY: Gareth Stevens Pub., 2008. Print.

Correlated to the middle school science curriculum and developed in consultation with a science curriculum assistant, *Geothermal Energy* explains key energy concepts, as well

as brand-new developments in energy production. Full-color photographs, detailed diagrams, and a glossary of helpful terms make this a great text for middle school scientists.

Saunders, Nigel. *Nuclear Energy*. Pleasantville, NY: Gareth Stevens Pub., 2008. Print.

This text is developed in consultation with a science curriculum assistant and correlated to the middle school science curriculum. Explains key energy concepts using full-color photographs and detailed diagrams.

Saunders, Nigel and Steven Chapman. *Energy Transfers*. Chicago, IL: Raintree, 2006. Print.

This text shows children that energy is all around them. Facts about the types of energy and ways energy can change are linked to real-world examples, making the connection clear for middle school students.

Schaefer, Lola M. *Back and Forth (The Way Things Move)*. Ed. Gail Saunders-Smith. Mankato, MN: Pebble, 1999. Print.

This text provides photographic examples of back and forth movement that are easy to understand for children aged 4-8.

Snedden, Robert. *Energy from Fossil Fuels*. Chicago: Heinemann Library, 2002. Print.

Explores the role of fossil fuels in today's world, including how they were formed, discovered, and transformed. Appropriate for intermediate students.

Snedden, Robert. *Nuclear Energy*. Chicago: Heinemann Library, 2006. Print.

Explores the role of nuclear energy in today's world, while emphasizing the renewable energy sources and sustainable development. Appropriate for intermediate students.

Tickell, Joshua, and Kaia Roman. *From the Fryer to the Fuel Tank: the Complete Guide to Using Vegetable Oil as an Alternative Fuel*. New Orleans, LA: Joshua Tickell Media Productions, 2003. Print.

The first and only book that describes all parts of the process of running diesel engines on vegetable oil. Filled with historic details as well as additional resources for readers. Appropriate for advanced readers.

Energy and Our Environment - Climate Change, Carbon Cycle and Greenhouse Gases, Advantages and Disadvantages of Energy Sources

Asimov, Isaac. *Is Our Planet Warming Up?* Milwaukee, WN: Gareth Steven's Children's Books, 1992. Print.

Part of the "Ask Isaac" series, this text tackles the issue of global warming, including causes and possible solutions to keep the problem from getting worse.

Cherry, Lynn and Gary Braasch. *How We Know What We Know About Our Changing Climate: Scientist and Kids Explore Global Warming*. Nevada City, CA: Dawn Publications, 2008. Print.

The authors introduce readers to scientists around the world whose research contributes to an understanding of global warming. They also describe the work of citizen scientists, including children. Small color photographs show the fieldwork and experiments of scientists and students. (An educator's resource supplement by the same title is also available.)

Cole, Joanna and Bruce Degen. *The Magic School Bus and the Climate Challenge*. New York: Scholastic Press, 2010. Print.

Part of the popular "Magic School Bus" children's series, this installment accompanies Ms. Frizzle's class around the earth and through the atmosphere to explore climate change, greenhouse gases, alternative energy sources, and C02 emissions. Appropriate for children in grades 2-4.

David, Laurie and Cambria Gordon. *The Down-to-Earth Guide to Global Warming.* New York: Orchard Books, Scholastic Inc, 2007. Print.

This text will engage students aged 9-12 with its colorful photographs and illustrations, giving them a greater understanding of the consequences of global warming and empowering them to take action.

Gleick, Peter H. *Bottled and Sold: the Story behind Our Obsession with Bottled Water*. Washington, DC: Island, 2010. Print.

Gleick makes a passionate appeal for a change in our country's water management. Gleick argues for stiffer regulations on bottled water companies, such as the inclusion of the true environmental cost on water bottle labels, to deter consumers from this expensive option.

Gore, Albert. *An Inconvenient Truth: the Crisis of Global Warming*. New York: Viking, 2007. Print.

Inspired by a series of lectures on global warming that Gore delivered worldwide, this groundbreaking work from Gore reveals cutting edge research from the world's top scientists, illustrated through charts, diagrams, and anecdotes. This accessible text presents the truth to the global warming issue and its consequences if left unchecked.

Gore, Al. *Our Choice: How We Can Solve the Climate Crisis.* New York: Melcher Media, 2009. Print.

Gore continues to educate readers about the causes and effects of global warming, as well as possible solutions. As he did in *An Inconvenient Truth*, Gore matches his clear explanations with detailed diagrams, illustrations, and photographs. The text avoids blame in favor of concrete answers and encouragement.

Graham, Ian. *Fossil Fuels: a Resource Our World Depends on*. Chicago: Heinemann Library, 2005. Print.

Part of the series "Earth's Precious Resources," this text explains where fossil fuels are found, how they are retreived and processed, and how they are used. Appropriate for children aged 9-12.

Grant, Tim and Gail Littlejohn. *Teaching About Climate Change.* Gabriola Island, BC: New Society Publishers, 2001.

Compiled from the pages of North America's leading green educator journal, this book is packed with lesson plans, activities, experiments, and worksheets that teach about global warming. Provides the tools to get any classroom or community involved in making their school cool.

Grant, Tim and Gail Littlejohn. *Teaching Green: The Middle Years.* Gabriola Island, BC: New Society Publishers, 2004.

Fifty of the best activities and teaching strategies for Grades 6-8 contributed to *Green Teacher* magazine. Ideas for hands-on learning about biodiversity, ecology, resource consumption, green technology and the world around us.

Green, Jen, and Mike Gordon. *Why Should I save Energy?* Hauppauge, NY: Barrons Educational Series, 2005. Print.

Author Jen Green has written an amazing, four-part series of books which demonstrate the importance of protecting nature. The other titles include *WHY SHOULD I Protect Nature? WHY SHOULD I Recycle?*, and *WHY SHOULD I Save Water?* This series answers these questions through stories and illustrations in a fun, light-hearted way. Notes in the back of the books provide suggestions for ways to use this book for parents and educators.

Greenberg, Keith. *Hurricanes and Tornadoes*. New York: Twenty-First Century, 1994. Print.

Part of the “When Disaster Strikes Series,” this text examines some of North America’s worst hurricanes and tornadoes. Greenberg shows that by examining the causes and effects of these catastrophes, the next generation will be better prepared to deal with future natural disasters.

Hall, Julie and Sarah Lane. *A Hot Planet Needs Cool Kids: Understanding Climate Change and What You Can Do About It*. Bainbridge Island, WA: Green Goat Books, 2007. Print.

Kids, parents, and teachers will find the very latest information about the causes and effects of climate change, how people are working to reduce it, and ways kids and their families and schools can join the fight. This book teaches and inspires through clear and accessible writing, engaging illustrations, hands-on activities, cool and hot facts, eco-hero features, and a hopeful and empowering message to get kids involved in confronting global warming and developing their best selves through such work. Suitable for home and classroom use, it meets national science and social studies curriculum standards. Additional teacher resources are available.

Jenkins, Jerry. *Climate Change in the Adirondacks: the Path to Sustainability*. Ithaca: Comstock Pub. Associates, 2010. Print.

Jenkins combines information from across the spectrum of sciences to create this text, which examines the devastating effects our climate changes will have on the Adirondacks if nothing is done to stop them. This text brings the focus of climate change from the global to the local level. Aided by colorful illustrations, diagrams, and maps, Jenkins clearly explains the toll that global warming could have on the culture, biology, and economy of the Adirondacks.

Langholz, Jeffrey and Kelly Turner. *You Can Prevent Global Warming (and save money!).* Kansas City, MO: Andrews McMeel Publishing, 2003.

Contains hundreds of tips and strategies to turn public concern about global warming into positive action. By following the easy, straightforward tips provided in this text, you can save up to $2,000 a year and prevent 25,000 pounds of carbon dioxide emissions.

McKibben, Bill. *Earth: Making a Life on a Tough New Planet.* New York: Times Books, 2010.

McKibben argues that we are living through climate change right now, and that even our best attempts to go green will not stop our planet from getting warmer and our weather from getting more extreme. McKibben's wit keeps his arguments about how to survive in our new hostile climate from becoming too bleak.

Malnor, Carol, and Lynne Cherry. *A Teacher's Guide to "How We Know What We Know about Our Changing Climate: Lessons, Resources, and Guidelines about Global Warming".* Nevada City, CA: Dawn Publications, 2008. Print.

Helps teachers explore global warming through engaging lessons and classroom activities. Lessons and activities are correlated to science standards for grades 5-8.

Mann, Elizabeth, and Alan Witschonke. *Hoover Dam*. New York: Mikaya, 2001. Print.

Brings to life the story behind the Hoover Dam's construction for readers aged 9-12. First person accounts, photographs, and illustrations make this book a wonderful resource for a research paper, as well as an enjoyable read.

Masters, Nancy R. *How Did That Get to My House? Natural Gas.* Ann Arbor, MI: Cherry Lake, 2009. Print.

Introduces topic to children aged 4-8 through the use fictional children who ask the questions all children want to know. Simple language and engaging photographs will encourage critical thinking in the youngest readers.

Minor, Wendell. *Grand Canyon: Exploring a Natural Wonder*. New York: Blue Sky, 1998. Print.

In Minor's "visual diary" of his twelve-day trip through the Grand Canyon, he re-traces the route of 19th Century explorer Thomas Moran. He captures the experience for readers through his stunning watercolors and vivid descriptions. Appropriate for readers of all ages.

Oxlade, Chris. *Global Warming.* Mankato, MN: Bridgestone Books, 2003.

Part of the "Our Planet in Peril" series, Oxlade provides the statistics behind the global warming trend, and offers suggestions for solving the problem. The text's photographs and diagrams are complemented by "Science in Action" panels that encourage children from 9-12 to conduct simple experiments that bring to life the scientific topics described in the book.

Pearce, Fred. *Global Warming*. New York: DK Pub., 2002. Print.

Part of the "Essential Science Series," *Global Warming* examines the causes behind global warming and explains the often disastrous results. Makes the challenging topic more accessible for middle and high school students through the use of full-color photographs and clear text from top scientists.

Plimer, Ian R. *Heaven and Earth: Global Warming, the Missing Science*. Lanham, MD: Taylor Trade, 2009. Print.

Plimer's evidenced-based text attacks the current theory that humans' choices have caused global warming. In this fearless and well-argued book, Plimer contends that nature, not human activity, rules climate change. A great resource for readers who want to look beyond man-made causes of global warming.

Pringle, Laurence. *Global Warming: The Threat of Earth's Changing Climate.* New York: Sea Star Books, 2001. Print.

This title, for fourth through eighth graders, explains the concept of global warming through engaging, full-color photographs and diagrams. Includes information about key concepts, such as nuclear power, the carbon cycle, and the dangers of aerosols. This straightforward text, complete with an ample glossary, is an excellent resource for school reports.

Rockwell, Anne F., and Paul Meisel. *Why Are the Ice Caps Melting?: the Dangers of Global Warming*. New York: Collins, 2006. Print.

Rockwell takes on the controversial subject of global warming in this effective entry in the Let's-Read-and-Find-Out series. The book begins by introducing Earth as a remarkable place that may be the only spot where conditions are right for life. She goes on to explain in simple language the greenhouse effect, the sources of global warming, what the effects of warming have been so far and what they might be in the future. Some solutions are also offered, good ideas like planting trees, riding bikes instead of driving, and buying foods that aren't prepackaged. Global warming criticism gets about a half page of rebuttal, but Rockwell notes, even if the critics are right, it is still a good idea to try to stop the increase of greenhouse gasses.

Rothschild, David de. *The Global Warming Survival Handbook.* New York: Rodale Books, 2007. Print.

The official companion to the Live Earth concerts on July 7, 2007. This text offers 77 compelling tips for stopping climate change. This fun guide blends humor with practical advice and factual statistics.

Simon, Seymour. *Earthquakes*. New York: Morrow Junior, 1991. Print.

Engaging, full-color photographs, accessible design, and simple language make Simon's text appropriate for children 4-8. The text covers topics ranging from fault lines, the Richter scale, and the Pacific Ring of Fire.

Smith, Trevor. *Earth's Changing Climate: Understanding Global Issues.* Mankato, MN: Smart Apple Media, 2004. Print.

Offers a balanced presentation of the global warming debate for middle school students. Straightforward language presents both sides without bias, allowing readers to form their own opinions. The text is complemented by photographs, diagrams, biographies, a timeline, and a quiz.

Strauss, Rochelle, and Rosemary Woods. *One Well: the Story of Water on Earth*. Toronto: Kids Can Press: 2007. Print.

Strauss explains how every lake, river, ocean, and single raindrop are part of a single global well. This colorful book explains water's role for earth's creatures, how much of it is needed for survival, and what the consequences are for polluting it. Offers helpful solutions to help readers use water more wisely. Appropriate for students age 12 and up.

Stille, Darleen. *The Greenhouse Effect: Warming the Planet.* Minneapolis, MN: Compass Point Books, 2007. Print.

A brief introduction to the global warming debate for readers aged 9-12. Covers six main topics, including the natural greenhouse effect and the differences between weather and climate.

Thornhill, Jan. *This is my Planet: The Kids' Guide to Global Warming*. Toronto: Maple Tree Press, 2007.

What can *I* do about global warming? A comprehensive look at climate change, beginning with basic information about how the planet works and moving three specific environments — polar, ocean, and land. Shows where action can make a difference.

Van Rose, Susanna, and Clive Streeter. *Earth*. London: DK, 2005. Print.

Brief, introductory text to the history of Earth, supported by full-color photographs. Information ranging from inter-species interactions to the planet's formation and composition is clearly organized and presented, though the descriptions are not in-depth enough for school reports. Appropriate for students in grade 7 and above.

Walker, Sally. *Earthquake.* Minneapolis, MN: Lerner Publications, 2008. Print.

An engaging overview for children from ages four through eight. Explains how and where earthquakes happen, and how scientists predict them. Includes a glossary and index that will prove helpful for students writing research reports.

Wick, Walter. *A Drop of Water: a Book of Science and Wonder*. New York: Scholastic, 1997. Print.

Wonderful photographs of water in its various phases teach about the hydrologic cycle, evaporation, condensation, surface tension, and more.

Winner, Cherie. *Erosion.* Minneapolis, MN: Carolrhoda Books, 1999. Print.

Winner's text, directed at children aged 9-12, explains the forces of erosion, such as wind, water, and glaciers, and how they affect the earth's surface. The text also describes measures for reducing harmful effects of erosion.

Energy Efficiency & Conservation – The Importance of Saving Energy, Conservation Efforts at Home and at School, Recycling – *Energy Action Activities (yellow)* has many Take Action challenges

Barnham, Kay. *Save Energy*. New York: Crabtree Pub., 2008. Print.

This text explains the dangers of fossil fuels for young readers. Barnham highlights the perks of switching from fossil fuels to renewable sources of energy in language easy for 4-8 year-olds to understand.

Clift, Jon and Amanda Cuthbert. *Energy, use less—save more: 100 Energy-Saving Tips for the Home.* White River Junction, VT: Chelsea Green Publishing Co., 2007. Print.

Did you know lowering the temperature of your house's thermostat by just two degrees could save you 10 percent on your heating bill? This guide has over a 100 helpful tips like this one, allowing readers to save money while fighting global warming.

Getz, Jeanine Behr, and Jane Nightingale. *Think Green!* Greenwich, CT.: Kids Think Big, LLC, 2008. Print.

This colorful and educational book encourages children to "Think Green" with its simple delivery and empowering message. Offers sixteen everyday tips for children to help keep the planet clean.

Grant, Tim, and Gail Littlejohn. *Teaching Green--the Elementary Years : Hands-on Learning in Grades K-5*. Gabriola, B.C.: Stenhouse, 2005. Print.

50 kid-tested teaching strategies on environmental issues, both local and global. Includes project and activity ideas on a variety of green themes.

Gutman, Dan, ed. *Recycle This Book: 100 Top Children's Book Authors Tell You How to Go Green.* New York: Yearling, 2009. Print.
Contains short essays from 100 leading children and young adult authors about the ways they are working to keep the planet clean. Most essays conclude with practical suggestions for how readers can go green. Useful for classroom discussion and science project ideas. Appropriate for students aged 9-12.

Harlow, Rosie, and Sally Morgan. *Garbage and Recycling*. New York: Kingfisher, 1995. Print.

Filled with interesting facts and information about recycling. One of the best is the "How Can I Help?" boxes, which give helpful suggestions for children who want to recycle at home.

Hayes, Denis. *The Official Earth Day Guide to Planet Repair*. Washington, D.C.: Island Press, 2000. Print.

Hayes, a veteran environmentalist and CEO of the International Earth Day Network, suggests changes that can be made on the individual, local, and national levels to slow or stop the greenhouse effect in this well-written how-to guide for improving the planet.

Morris, Neil. *Saving Energy*. Laguna Hills, CA.: QED Pub., 2008. Print.

Part of the "Green Kids" series, *Saving Energy* guides children aged 7-10 through the basics of saving energy using bright graphics, easy-to-follow text, and an engaging energy mascot. Helpful "Did You Know?" sections engage and empower young scientists, while an additional notes section is provided for parents and teachers.

Nelson, Sara Elizabeth. *Let's save Energy!* Mankato, MN.: Capstone, 2007. Print.

Part of the "Caring for the Earth" series, *Let's Save Energy!* begins by addressing the problem of using too much energy, and then spends time teaching children ways that they

can help to solve it. The simple text, suggestions, and bright photographs are appropriate for younger readers.

Schwartz, Linda, and Beverly Armstrong. *Earth Book for Kids: Activities to Help Heal the Environment.* Santa Barbara, CA: Learning Works, 1990.

This cool activity book shows children how to care for the Earth. The book is divided into four sections: (1) Energy, Resources, and Recycling; (2) Air, Land, & Water; (3) Plant & Animal Habitat; and (4) More Ways to Make Every Day Earth Day. The simple format makes the book really easy to read, and the information is presented in a very kid-friendly way, which makes the main terms and ideas easy to understand.

Simons, Robin. *Recyclopedia: games, science equipment, and crafts from recycled materials.* Boston: Houghton Mifflin, 1976. Print.

Offers a great assortment of science equipment, games, and crafts that can be constructed from recycled items. The project ideas contained in the book, which are appropriate for children aged 8-12, are a wonderful resource for parents, teachers, and librarians alike.

Discussion and Debate

Dorion, Christiane. *Are We Running out of Energy?* Mankato, MN.: Arcturus Pub., 2008. Print.

Examines the worldwide trend of increasing energy production and consumption and explains some of the possible results. Covers key topics such as the ownership of energy resources and causes of global warming. Appropriate for children aged 10-12.

Friedman, Lauri S. *Energy Alternatives: an Opposing Viewpoints Guide*. Detroit, MI: Greenhaven, 2006. Print.

Essays explore opposing viewpoints on the viability of various alternative energy sources. Includes writing exercises and discussion questions for young adults.

Hodge, Deborah. *Simple Machines.* Buffalo, NY: Kids Can Press, 1998. Print.

Children in grades two through four will respond to the colorful pictures and clear directions provided for *Simple Machines*' thirteen different experiments. Topics introduced include the lever, pulleys, and gears.

Macaulay, David, and Neil Ardley. *The New Way Things Work*. Boston: Houghton Mifflin, 1998. Print.

Children in grades four and up will respond to award-winning author and illustrator Macaulay's explanations of the way things work. The text groups machines by their governing principles, with Ardley providing clear explanations, and Macaulay supplying abundant visual aids and a dose of humor.

Jakab, Cheryl. *Energy Use*. North Mankato, MN.: Smart Apple Media, 2008. Print.

Jakab addresses five major issues involved with energy use, outlining how each issue developed and offering possible solutions. Children aged 8-11 will respond to the photographs and "Fast Facts" that fill this text's pages.

Newmark, Ann. *Chemistry.* New York: DK Pub, 2005. Print.

This colorful book explores the planet's natural chemistry and how humans have understood and exploited it. The text explores chemistry's involvement in processes as diverse as dying clothing and purifying water, offering children aged 9-12 a stunning look at the chemical discoveries that shape our lives. Includes demonstrations of key experiments.

Petersen, David. *Solar Energy at Work.* Chicago: Childrens Press, 1985. Print.

A brief introduction to solar energy and its uses in the past and present. Contains three simple experiments and a glossary of key terms. Appropriate for children aged 5-9.

Royston, Angela. *Sustainable Energy*. Mankato, MN: Arcturus Pub., 2009. Print.

Focuses on the issue of electricity and its generation. Topics covered include nonrenewable resources, pollution, the pros and cons of different types of energy production, and methods of harnessing renewable energy sources. Targeted to children aged 8-12.

Sabin, Louis. *Thomas Alva Edison, Young Inventor*. Mahwah, NJ: Troll, 1983. Print.

A brief biography of the famous inventor, concentrating on his early years. Appropriate for children aged 9-11.

Experiments

Landau, Elaine. *The History of Energy*. Minneapolis, MN: Twenty-First Century, 2006. Print.

This brief volume examines different types of energy and how they are turned into usable resources. A helpful running timeline puts a chronological perspective to the discoveries outlined in the text. A great introduction to the subject for middle school students.

Plummer, Todd. *I've Discovered Energy!* New York: Marshall Cavendish Benchmark, 2008. Print.

Plummer provides a detailed look at the various scientists who have contributed to our understanding of energy and its principles. Brief biographies of each scientist are followed with examinations of different aspects of energy, with topics ranging from thermal energy to gamma rays. Also includes simple experiments employing household materials. Appropriate for older elementary students and middle schoolers.

Spilsbury, Richard, and Louise Spilsbury. *What Is Energy?: Exploring Science with Hands-on Activities*. Berkeley Heights, NJ: Enslow Elementary, 2008. Print.

This colorful book, aimed at children in second through fourth grade, offers experiment ideas that help to answer the titular question. Experiments instruct students in the construction of their own solar oven, convection tank, and biosphere, among others.

Reilly, Kathleen M. and Mary Takacs-Moore. *Energy: 25 Projects Investigate Why We Need Power & How We Get It*. White River Junction, VT: Nomad, 2009. Print.

The twenty-five projects contained in Reilly's fun, informative book give students the chance to learn about energy first hand. Projects range from a steam-powered boat to a geothermal geyser. Appropriate for children aged 9-12.

Way, Steve. *Energy: Discover Science through Facts and Fun*. Pleasantville, NY: Gareth Stevens Pub., 2009. Print.

A colorful introduction to the different types of energy children see every day. Appropriate for students aged 8-10.

Whitehouse, Patricia. *Matter and Energy*. Chicago: Heinemann Library, 2008. Print.

Part of the "Science Fair Projects" series, this volume offers nine great project ideas for budding scientists.

Fictional Literature

Asmus, Peter. *Reaping the Wind: How Mechanical Wizards, Visionaries, and Profiteers Helped Shape Our Energy Future*. Washington, D.C.: Island, 2001. Print.

Journalist Peter Asmus chronicles the history of commercial wind power in the U.S. Asmus' narrative is engaging, informative, and colorful and is a treat for anyone interested in renewable energy or the politics behind the development of new technologies.

Bethel, Ellie, and Alexandra Colombo. *Michael Recycle.* San Diego, CA: Worthwhile Books, 2009. Print.

Michael Recycle tells the adventures of a young superhero whose power allows him to teach people about recycling. After cleaning up a town, the people declare: "To Michael Recycle! The green-caped crusader, our super-green hero, the planet's new savior!"

Cook, Nick. *Roller Coasters, or, I Had So Much Fun, I Almost Puked*. Minneapolis, MN: Carolrhoda Books, 1998. Print.

Children aged 8-11 will find this title to be an excellent resource for school reports. Contains the history, physics, and design of roller coasters, with color photographs of several famous examples.

Gove, Susan E. and Richa Kinra. *Kids Get It: Shrinking Our Carbon Footprint.* Bloomington, IN: AuthorHouse, 2010. Print.

Elementary students will enjoy this colorful book that teaches them how to reduce their carbon footprint and save energy. Colorful illustrations, clear text, and helpful charts will engage students, empowering them to take action. A helpful comparison chart of fluorescent and incandescent bulbs and a page of further resources are also included.

Inches, Alison, and Pete Whitehead. *The Adventures of a Plastic Bottle: A Story about Recycling*. New York: Little Simon, 2009. Print.

This book invites kids to learn about recycling from a new perspective, the diary of a plastic bottle. We travel with the bottle as it goes on a journey from the refinery plant, to the manufacturing line, to the store shelf, to a garbage can, and finally to a recycling plant where it emerges into its new life...as a fleece jacket! Told from the point of view of a free-spirited plastic bottle, kids can share in the daily experiences and inner thoughts of the bottle through his personal journal. The diary entries are fun and humorous yet point out the ecological significance behind each product and the resources used to make it. Readers will never look at a plastic bottle the same way again!

Lauber, Patricia. *Flood: Wrestling with the Mississippi*. Washington, D.C.: National Geographic Society, 1996. Print.

Lauber describes the massive flooding of the Mississippi in 1993, complete with maps and full-color photographs. Children aged 9-12 will enjoy the engrossing narrative.

Madden, Don. *The Wartville Wizard.* New York: Aladdin Books, 1993. Print.

A tidy old man spent his time cleaning up the litter that the thoughtless slobs of Wartville left behind. One day, tired of his lot, he gives up, and Mother Nature gives him ``power over trash." He then commands that litter ``go back and stick to the person who threw you." The townspeople are dismayed, and the Wizard agrees to release them from their trash if they promise not to litter again. Madden's ecology lesson is humorous, and his breezy, colorful illustrations add to the comic and trash-laden predicament in which the citizens of Wartville find themselves. Good for story hour and for reinforcing basic ecology principles, this book will be enjoyed by independent readers and by story hour groups.

Molzahn, Arlene Bourgeois. *Ships and Boat.* Berkeley Heights, NJ: Enslow, 2003. Print.

Molzahn covers topics from the Titanic to boat racing to careers working with ships in this fact-filled volume. Younger readers will enjoy the colorful photographs while older readers will appreciate the wealth of boating history. Includes a timeline, glossary, and list of suggested readings.

Okimoto, Jean Davies, and Jeremiah Trammell. *Winston of Churchill: the Story of One Bear's Battle Against Global Warming.* Seattle, WA: Sasquatch Books, 2007. Print.

This is a delightful, humorous picture book that presents the serious topic of global warming. The stately polar bear, based upon the historical English figure, inspires his fellow bears to convince the tourists visiting Churchill, Manitoba, the polar bear capital of the world, to save their Arctic home.

Pilkey, Dav. *Dragon's Fat Cat: Dragon's Fourth Tale*. New York: Orchard, 1992. Print.

In the fourth installment of Pilkey's series, Dragon adopts a cat and must learn how to care for it. Children in first and second grade will enjoy Pilkey's colorful illustrations and humorous narrative.

Pipe, Jim. *What Does a Wheel Do?* Brookfield, CT: Copper Beech, 2002. Print.

Pipe's text asks children to think about which objects roll and slide. The engaging format, which poses questions and offers four possible answers, encourages readers to guess the correct response. The introductory guesses are followed by experiments, explanations, and puzzles that make learning fun for children aged 5-7.

Readman, Jo, and Ley Honor. Roberts. *George Saves the World by Lunchtime*. London: Eden Project, 2006. Print.

George is determined to save the world by lunchtime but he's not quite sure how. Grandpa suggests they start by recycling his yogurt container, putting his banana peel in the compost pile, and hanging the wash to dry in the sun. On his bike, George discovers many more ways he can help save the world. A trip to the recycling bank, charity shop

and local farmers' market shows how recycling and reusing materials, and using less gas and more produce, can really help save the world.

Royston, Angela, Jane Cradock-Watson, Dave Hopkins, and Tim Ridley. *Diggers and Dump Trucks*. New York: Aladdin Books, 1991. Print.

The colorful illustrations and simple text introduce preschoolers to different earth-moving machines.

Seuss. *The Lorax*. New York: Random House, 1971. Print.

In Dr. Seuss' classic story, the Once-ler explains how his selfish actions destroyed a beautiful environment, addressing themes of deforestation and pollution. Children aged 6-9 will enjoy the colorful illustrations and rhyming text.

Simon, Seymour. *Storms*. New York: Morrow Junior Books, 1989. Print.

Seymour's wonderful photographs illuminate the causes of various weather phenomena for children aged 5-8. The superb photographs are accompanied by facts and clear descriptions.

Yolen, Jane, and Barbara Cooney. *Letting Swift River Go.* Boston: Little, Brown and Company, 1992. Print.

Yolen's narrative follows Sally Jane as she experiences the drowning of the Swift River towns in western Massachusetts to form the Quabbin Reservoir, illustrating the impact of modernization for children aged 4-8.

Wells, Robert E. *How Do You Lift a Lion?* Morton Grove, IL: A. Whitman, 1996. Print.

Introduces some basic physics principles to young readers. Children aged 9-12 will enjoy this clever book and its colorful illustrations, while learning about levers, pulleys, and wheels.