



Science

Common Core State Standards

Recommended Books

Teaching Resources Center, Joyner Library A Selective Annotated Bibliography

Titles in the Teaching Resources Center are cataloged with Dewey call numbers and are preceded by Curric. Please ask someone at the Teaching Resources Service Desk if you need any assistance.

Grade Level	Title Information	Call Number
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BIG BOOKS

K	Dotlich, Rebecca Kai. <i>What is Science?</i> Boston: Houghton Mifflin, 2006.	BB D7424W
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Introduces young children to the ever-changing world of science and about curiosity, asking questions, and exploring possible answers.

PreK	Ehlert, Lois. <i>Planting a Rainbow</i> . San Diego, CA: Harcourt Brace & Company, 1988.	BB EH56PL
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A mother and child plant a rainbow of flowers in the family garden.

EASY

PreK – 1	Aston, Dianna Hutts. <i>An Orange in January</i> . New York: Dial Books for Young Readers, 2007.	E AS86O
	An orange begins its life as a blossom where bees feast on the nectar, and reaches the end of its journey, bursting with the seasons inside it, in the hands of a child.	
K - 3	Barnett, Mac. <i>Oh No! Or, How My Science Project Destroyed the World</i> . New York: Disney-Hyperion Books, 2010.	E B2646O
	After winning the science fair with the giant robot she has built, a little girl realizes that there is a major problem.	
K - 3	Cherry, Lynne. <i>The Great Kapok Tree: A Tale of the Amazon Rain Forest</i> . San Diego, CA: Harcourt Inc., 2000.	E C4244G.A
	The many different animals that live in a great kapok tree in the Brazilian rainforest try to convince a man with an ax of the importance of not cutting down their home.	
K - 3	Davies, Nicola. <i>Bat Loves the Night</i> . Cambridge, MA: Candlewick Press, 2004.	E D2883B
	Bat wakes up, flies into the night, uses the echoes of her voice to navigate, hunts for her supper, and returns to her roost to feed her baby.	
K - 2	Ehlert, Lois. <i>Holey Moley</i> . New York: Beach Lane Books, 2015.	E EH56HO
	After digging holes and munching on crawly bugs, a chubby mole settles in her cozy burrow for winter. Includes glossary identifying all of the different worms, caterpillars, moths, and butterflies included in the illustrations.	
PreK - 2	Fogliano, Julie. <i>And Then It's Spring</i> . New York: Roaring Brook Press, 2012.	E F689A
	Simple text reveals the anticipation of a boy who, having planted seeds while everything around is brown, fears that something has gone wrong until, at last, the world turns green.	
K - 3	Grigsby, Susan. <i>In the Garden with Dr. Carver</i> . Chicago, IL: Albert Whitman, 2010.	E G878I
	A fictionalized account of how plant scientist George Washington Carver came to an Alabama school and taught the children how to grow plants and reap the rewards of nature's bounty. Includes factual note about George Washington Carver.	

PreK - 2	Ray, Mary Lyn. <i>Stars</i> . New York: Beach Lane Books, 2011.	E R2127S
	Explores the wonder of stars, whether they are in the night sky, on a plant as a promise of fruit to come, or in one's pocket for those days when one does not feel shiny.	
K - 2	Rubin, Adam. <i>Robo-Sauce</i> . New York: Dial Books for Young Readers, 2015.	E R8241R
	A special sauce turns a boy into a robot, and he then transforms everyone and everything into robots, including the book.	
PreK - 3	Sidman, Joyce. <i>Swirl by Swirl: Spirals in Nature</i> . Boston: Houghton Mifflin Harcourt, 2011.	E SI139S
	Celebrates the shape of a spiral in nature, from rushing rivers to flower buds and even the shape of an ear.	
K – 2	Spires, Ashley. <i>The Most Magnificent Thing</i> . Toronto, ON: Kids Can Press, 2014.	E SP4819M
	A little girl has a wonderful idea. With the help of her canine assistant, she is going to make the most magnificent thing! She knows just how it will look. She knows just how it will work. But making the most magnificent thing turns out to be harder than she thinks.	

NONFICTION

2 - 6	Drummond, Allan. <i>Energy Island: How One Community Harnessed the Wind and Changed Their World</i> . New York: Farrar, Straus and Giroux, 2011.	333.9 D8443E
	It's windy on the Danish island of Samsø. Meet the environmentally friendly folks who, in a few short years, worked together for energy independence, and who now proudly call their home Energy Island.	
3 - 4	Simon, Seymour. <i>Our Solar System</i> . Washington, DC: Smithsonian, 2007.	523.2 SI554O
	Describes the origins, characteristics, and future of the sun, planets, moons, asteroids, meteoroids, and comets.	
K - 3	Lyon, George Ella. <i>All the Water in the World</i> . New York: Atheneum Books	551.48

	for Young Readers, 2011.	L994A
	Introduces young children to the water cycle with simple text and illustrations.	
3 - 4	Martin, Jacqueline Briggs. <i>Snowflake Bentley</i> . Boston: Houghton Mifflin, 1998.	551.57 M364S
	A biography of a self-taught scientist who photographed thousands of individual snowflakes in order to study their unique formations.	
4 - 6	Howell, Laura. <i>The Usborne Internet-Linked Introduction to Weather & Climate Change</i> . London, UK: Usborne, 2004.	551.6 H8391U
	Learn what causes the wild, wonderful and sometimes weird weather we experience every day. Delve into the controversy of global warming, and learn how people may affect the weather. Explains the natural forces behind the weather and investigates the conditions that may be bringing about changes in the climate.	
2 - 3	Anholt, Laurence. <i>Stone Girl, Bone Girl: The Story of Mary Anning</i> . New York: Orchard Books, 1999.	560.92 AN49S
	A brief biography of the English girl whose discovery of an Ichthyosaurus skeleton in 1811 when she was twelve led to a life-long interest in fossils and other important discoveries.	
1 - 4	Bang, Molly. <i>Living Sunlight: How Plants Bring the Earth to Life</i> . New York: Blue Sky Press, 2009. (Also by author: <i>Buried Sunlight: How Fossil Fuels Have Changed the Earth</i>)	572 B2243L
	Explains the cyclical relationship between photosynthesis in plants and respiration in animals.	
2 - 5	Ray, Deborah Kogan. <i>The Flower Hunter: William Bartram, America's First Naturalist</i> . New York: Farrar, Straus and Giroux, 2004.	580.92 R211F
	Young Billy Bartram keeps a journal of his experiences learning about the plants of the colonial United States from his father, John Bartram, as they travel together gathering specimens and planting seeds.	
1 - 3	Peterson, Cris. <i>Seed, Soil, Sun: Earth's Recipe for Food</i> . Honesdale, PA: Boyds Mills Press, 2010.	581.467 P44265S

Introduces children to the subject of agriculture, showing not only how plants germinate, grow and produce food, but also about the composition of soil and the creatures who live in it.

PreK - 2	Carle, Eric. <i>The Tiny Seed</i> . New York: Aladdin Paperbacks, 2001.	582 C192T.A
	A simple description of a flowering plant's life cycle through the seasons.	
1 - 4	Chin, Jason. <i>Redwoods</i> . New York: Roaring Brook Press, 2009.	585.5 C4411R
	A young city boy, riding the subway, finds an abandoned book about redwoods. He finds himself in the very forest described in the book. After finishing the book, he leaves it for someone else to read.	
2 - 6	Arnosky, Jim. <i>Wild Tracks! A Guide to Nature's Footprints</i> . New York: Sterling Pub. Co., 2008.	591.47 AR661W
	Learn how to read the secret language of animal tracks. Find out how to tell how fresh tracks are, which animals made the, how fast they might have been traveling, and more.	
2 - 5	Barretta Gene. <i>Now and Ben: The Modern Inventions of Benjamin Franklin</i> . New York: Henry Holt and Co., 2006.	609 B2759N
	What would you do if you lived in a community without a library, hospital, post office, or fire department? If you were Benjamin Franklin, you'd set up these organizations yourself. Franklin also designed the lightning rod, suggested the idea of daylight savings time, and invented bifocals-all inspired by his common sense and intelligence. In this informative book, Gene Barretta brings Benjamin Franklin's genius to life, deepening our appreciation for one of the most influential figures in American history.	
2 - 3	Stewart, David. <i>How Your Body Works: A Good Look Inside Your Insides</i> . New York: Children's Press, 2008.	612 ST492H
	Senses, teeth, bones, muscles, and major body systems and organs are described in turn, with boldfaced vocabulary such as bile defined at first use and also included in the glossary.	
PreK - 3	Rockwell, Lizzy. <i>Good Enough to Eat</i> . New York: HarperCollins Publishers,	613.2

1999.

R594G

Describes the six categories of nutrients needed for good health, how they work in the body, and what foods provide each.

4 - 7

Kamkwamba, William. *The Boy Who Harnessed the Wind*. New York: Dial Books for Young Readers, 2012.

621.4
K1289B

When 14-year-old William Kamkwamba's Malawi village was hit by a drought in 2001, everyone's crops began to fail. His family didn't have enough money for food, let alone school, so William spent his days in the library. He came across a book on windmills and figured out how to build a windmill that could bring electricity to his village. Everyone thought he was crazy but William persevered and managed to create a functioning windmill out of junkyard scraps. Several years later he figured out how to use the windmill for irrigation purposes.

BIOGRAPHY

2 - 4

Wadsworth, Ginger. *Benjamin Banneker: Pioneering Scientist*. Minneapolis, MN: Carolrhoda Books, 2003.

B
B2268WA

Introduces Benjamin Banneker, a free black man of the eighteenth century who loved to learn and used his knowledge and observations to build a wooden clock, write an almanac, and help survey the streets of Washington, D.C.

2 - 5

Berne, Jennifer. *Manfish: The Story of Jacques Cousteau*. San Francisco, CA: Chronicle Books, 2008.

B
C8369B

Before Jacques Cousteau became an internationally known oceanographer and champion of the seas, he was a curious little boy. In this biography, poetic text and paintings combine to create a portrait of Jacques Cousteau.

1 - 2

Krull, Kathleen. *The Boy Who Invented TV: The Story of Philo Farnsworth*. New York: Alfred A. Knopf, 2009.

B
F237K

This picture-book biography explains how Farnsworth held on to his dream to develop television and the scientific concepts behind it.

K - 3

McCully, Emily Arnold. *Marvelous Mattie: How Margaret E. Knight*

B

Became an Inventor. New York: Farrar, Straus and Giroux, 2006.

K745M

Mattie Knight loved to make things ranging from a foot warmer for her mother or toys for her older brothers. Or, when she was 12, a metal guard to prevent shuttles from shooting off looms and hurting workers. Later, Mattie invented a machine that could cut and glue the square-bottomed paper bags we still use today. Meet the woman known as "the Lady Edison."

2 - 5

Barretta, Gene. ***Neo Leo: The Ageless Ideas of Leonardo Da Vinci.*** New York: Henry Holt, 2009.

B

L5535BA

Cleverly shows how Leonardo's ideas foreshadowed modern inventions. At once an artist, inventor, engineer, and scientist, Leonardo da Vinci wrote and drew detailed descriptions of what would later become hang gliders, automobiles, robots, and much more.

2 - 5

Rabinowitz, Alan. ***A Boy and a Jaguar.*** Boston: Houghton Mifflin Harcourt, 2014.

B

R1135R

The renowned cat conservationist reflects on his early childhood struggles with a speech disorder, describing how he only spoke fluently when he was communicating with animals and how he resolved at a young age to find his voice to be their advocate.

PreK - 4

Hopkins, H. Joseph. ***The Tree Lady: The True Story of How One Tree-Loving Woman Changed a City Forever.*** New York: Beach Lane Books, 2013.

B

SE72H

Learn about Katherine Olivia Sessions who brought trees to San Diego and created what eventually became Balboa Park.

2 - 5

Rusch, Elizabeth. ***Electrical Wizard: How Nikola Tesla Lit Up the World.*** Somerville, MA: Candlewick Press, 2013.

B

T284R

Here is the story of the ambitious young man who brought life-changing ideas to America, despite the obstructive efforts of his hero-turned-rival, Thomas Edison. From using alternating current, to lighting up the Chicago World's Fair, to harnessing Niagara to electrify New York City and beyond, Nikola Tesla was a revolutionary ahead of his time. Remote controls, fluorescent lights, X-rays, speedometers, cell phones, even the radio -- all resulted from Nikola Tesla's inventions.

Last Updated Aug-22 JDD