# Unit of Inquiry Recommended Reading List How the World Works

Below you will find a list of books related to the Unit of Inquiry, "How the World Works". Each book is related to the Central Idea. Included with each book title is a short summary. All titles are carried at the BCA2 Library unless otherwise indicated. This list is not exhaustive, but suggestions based on reviews and the librarian's knowledge of children's literature.

#### Pre-K

- Rocco, John. Blackout. New York: Disney, 2011.
  - The author and illustrator recount a neighborhood in a city and what they do during a blackout.
- Dorros, Arthur. A Tree is Growing. New York: Scholastic, 1997.
  - Tells about the structure of trees and how they grow. It also talks about how we use trees. Excellent illustrations enhance the text.
- Worth, Bonnie. If I Ran the Rain Forest. New York: Random House, 2003.
  - With the use of rhyming text, the author introduces the tropical rainforest. It also includes the animals and plants and how they interact. Very engaging.
- Whipple, Laura. Eric Carle's Animals, Animals. New York: Philomel Books, 1989.
  - A classic illustrator, Eric Carle, and a collection of poems work together to celebrate the diversity of animals. A very fun and engaging look at the animal kingdom.
- Sayre, April Pulley. *Thank You, Earth: A Love Letter to our Planet.* New York: Greenwillow Books, 2018.
  - A thank you letter to the earth for all of its natural aspects. Contains a section giving advice on being environmentally active.

#### Kindergarten

- Murphy, Stuart J. Earth Day—Hooray! New York: Harper Collins, 2004.
  - A drive to recycle cans on Earth Day teaches children of the Maple Street School Savethe-Planet Club about place value.
- Parr, Todd. *The Earth Book.* New York: Little, Brown Company, 2010.
  - This book has simple language structure, saturated colors, and includes recommendations on how to conserve energy.
- Webb, Barbara L. Trees: Earth's Lungs. Vero Beach, FL: Rourke Publishing, 2011.
  - Explains how trees create oxygen needed to help us breathe. It describes how trees breathe and the importance of caring for them.
- Gibbons, Gail. Recycle!: A Handbook for Kids. New York: Little Brown, 1992.
  - This non-fiction book explains the process of recycling from start to finish. In kidfriendly graphics, it explains what happens to paper, glass, aluminum cans, and plastic.

- Davies, Nicola. Many: The Diversity of Life on Earth. Somerville, MA: Candlewick Press, 2017.
  - What happens to the many different forms of life on earth when humans start to interfere? Folk art images and plain text makes this title a must-read.

#### 1<sup>st</sup> Grade

- Lin, Grace. Ling & Ting: Together in All Weather. New York: Little, Brown, 2015.
  - A great beginner reader series, this entry is specifically about how humans deal with weather changes every day.
- Martin, Jacqueline Briggs. Snowflake Bentley. Boston: Houghton Mifflin, 1998.
  - An award-winning book it illustrates the story of a self-taught scientist and how he discovered that all snowflakes are unique.
- Gibbons, Gail. Weather Words and What They Mean. New York: Holiday House, 1990.
  - You can never go wrong with a book written by Gail Gibbons. This one introduces fundamental weather terms.
- Boothroyd, Jennifer. What Is a Forecast? Minneapolis, MN: Lerner Publications, 2015.
  - An easy-to- read look at weather forecasting. How it is done and used is discussed. Lots
    of images assist in understanding.
- Bodden, Valerie. Tornadoes. (Series: Our Wonderful Weather). Mankato, MN: Creative Paperbacks, 2014.
  - This series provides simple explanations for several extreme weather conditions, including tornadoes, hurricanes, and thunderstorms.

#### 2<sup>nd</sup> Grade

- Richardson, Adele. *Electricity: A Question and Answer Book.* Mankato, MN: Capstone Press, 2006.
  - This book introduces electricity in a question and answer format. The generation of electricity, how it moves and functions is discussed. Also includes facts and instructions for building a circuit.
- Barretta, Gene. Timeless Thomas: How Thomas Edison Changed Our Lives. New York: Henry Holt, 2012.
  - An engaging look at the many ideas of Thomas Edison. Many of his inventions are shown.
- Rau, Dana Meachen. Electricity and Magnetism. Ann Arbor, MI: Cherry Lake Publishers, 2009.
  - An introduction to electricity and magnetism. It explains how electricity is made and why some objects attract while others repel. It also touches on how both forces impact daily life.
- Thomas, Isabel. Experiments With Electricity. Chicago: Heinemann Resources, 2015.
  - Another great option to continue the learning at home. The page is uncluttered and focused.
- Drummond, Allan. Energy Island. New York: Farrar, Straus and Girroux, 2011.
  - A community inspired by a teacher and his class, work to convert their island to 100% renewable energy in 10 years.

## 3<sup>rd</sup> Grade

- Levine, Sara. *Flower Talk: How Plants Use Color to Communicate*. Minneapolis, MN: Millbrook Press, 2019.
  - This is a wonderful side road to take when studying plants. This picture book illustrates how and why plants use the color of their flowers to communicate with animals.
- Page, Robin. Seeds Move! New York: Beach Lane Books, 2019.
  - Another great picture book! This book explores the question, how do seeds get to the perfect place to grow? A great way to learn about seed dispersal.
- Pipe, Jim. You Wouldn't Want to Live Without Trees! New York: Scholastic, 2017.
  - This series does a great job of presenting the facts in a kid-friendly fashion. The book looks at the importance of trees and how much we utilize them and need them.
- Cornell, Kari A. Dig In! 12 Easy Gardening Projects Using Kitchen Scraps. Minneapolis, MN: Millbrook Press, 2018.
  - The projects in this book are focused on reusing food scraps and turning them into a beautiful garden.
- Kalman, Bobbie. How a Plant Grows. New York: Crabtree Publishing, 1997.
  - An overview of how plants grow and reproduce. Includes the functions of various parts of a plant and plant-growing activities.

### 4<sup>th</sup> Grade

- Doeden, Matt. Finding Out About Solar Energy. Minneapolis, MN: Lerner Publications, 2015.
  - An introduction to how solar energy is produced and how it is used. Graphics are used to explain the process of harvesting solar energy.
- Saunders, Nigel & Steven Chapman. Nuclear Energy. Chicago: Raintree, 2006.
  - This book explains how we get nuclear energy, how it is used, and the problems related to its use. The Chernobyl disaster is an example of the challenges related to it.
- Farrell, Courtney. Using Alternative Energies. Ann Arbor, MI: Cherry Lake Publications, 2010.
  - What are the problems associated with our use of energy? What alternative forms of energy are available? How can we save energy? These questions are at the heart of this book.
- Bailey, Diane. How the Light Bulb Changed History. Minneapolis, MN: Abdo, 2016.
  - An indepth look at the invention of the light bulb and its impact on our lives. It is written in a very easy-to-understand way. Includes facts, a glossary and additional resources.
- Kamkwamba, William. The Boy Who Harnessed the Wind. New York: Dial Books for Young Readers, 2015.
  - There are several different editions of this book. I recommend the Young Readers' edition for 4<sup>th</sup> grade. A boy creates a windmill to generate electricity and help his village recover from a drought. This is based on a true story.

### 5<sup>th</sup> Grade

- Mosca, Julia Finley. *The Girl Who Thought in Pictures: The Story of Dr. Temple Grandin.* Seattle: The Innovation Press, 2017.
  - A brief account of the childhood and work of Temple Grandin. She is a high-functioning autistic who became an animal scientist. She used her experience as an autistic to create more humane treatment for animals.
- Guglielmo, Amy and Jacqueline Tourville. *How to Build a Hug: Temple Grandin and Her Amazing Squeeze Machine*. New York: Atheneum Books for Young Readers, 2018.
  - This biography highlights the machine that Temple Grandin created to bring more humane treatment to those animals raised to be slaughtered. It includes her childhood as well as her challenges as a person with autism.
- Balkwill, Fran. Have a Nice DNA. Woodbury, NY: Cold Spring Harbor Laboratory Press, 2002.
  - o This kid-friendly book explains the structure and function of DNA.
- Balkwill, Fran. Gene Machines. Woodbury, NY: Cold Spring Harbor Laboratory, 2002.
  - An introduction to how genes work, including basic information about cloning and gene therapy.
- Foxlee, Karen. Lenny's Book of Everything. New York: Alfred A. Knopf, 2019.
  - This book is a wonderful way for students to gain an understanding of living with a
    genetic disorder. It is told through the eyes of a sibling of a child with gigantism. After
    reading this book you gain more sensitivity to those who have a disability.