WORLD BOOK

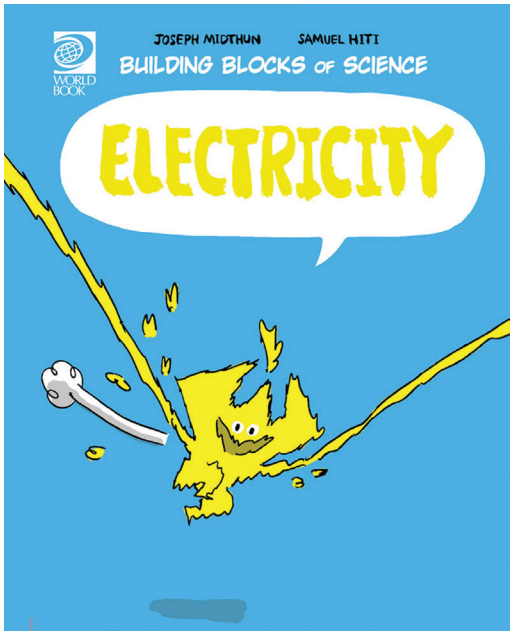
EXCITE EXPERIENCE EVOLVE ENLIGHTEN ENTERTAIN ENRICH ENGAGE EXPLORE ENERGIZE EDUCATE

BUILDING BLOCKS OF SCIENCE

PHYSICAL SCIENCE

LESSON PLAN & GUIDED DISCUSSION

Each of the 10 *Building Blocks of Science* volumes features a whimsical character which guides the reader through a physical science topic. This series is perfect for students across a spectrum of reading comprehension and science mastery levels.



* Technology required for this activity *

General Information	
Title:	It's Electric!
Materials:	• Computer with internet access • Index cards • Dark markers or pens
Objective:	Students will explore the history of electricity and basic electrical concepts though an online game on pbs.org. They will compare the information they gathered through reading *Building Blocks of Science: Electricity* to what they find out online.

Lesson	
Group discussion questions:	Make sure your students have grasped the major concepts of this lesson through an informal group discussion. This is an opportunity for you to highlight the most important points in the book to clarify any uncertainties your students may have. Use the questions below as a guideline but feel free to generate your own! • What things in this room are using electricity? • How do simple circuits work? • Where does electric power come from? • Why is it important to reduce use of electricity?
Procedure	After a group discussion of the highlights of *Building Blocks of Science: Electricity,* instruct students to visit http://www.pbs.org/benfranklin/explore.html to read more about Ben Franklin's pioneering work with electricity and to test their understanding of electrical concepts by trying out the demo entitled "How Shocking." (You will need a Flash plug-in for this activity.) Once every student has had an opportunity to complete the online demos and explore the Benjamin Franklin site, encourage kids to talk about what they discovered on the site about electricity and/or Ben Franklin that was new to them. Ask them to record some of these facts and observations on the index cards provided. When everyone has written a few cards, gather as a class again to talk about what they learned. **Extension activity:** If you have a little more time, ask students to go to http://www.worldbookonline.com/kids/home and look up the terms "electricity," "Benjamin Franklin," or some of the other key words they read in connection with the *Electricity* lesson. They should then do the same exercise of comparing details and information from each of the three sources.
Vocabulary for the Word Wall:	As a class, decide on a few vocabulary words that were particularly relevant to this activity. For example, • **charge** • **battery** • **electric shock** • **atom** Pass out a few index cards and ask students to write the vocabulary word on the front of the card and its definition on the back. Students can refer to the glossary on p. 30 as a reference. There are probably not enough words for everyone in the class to make a card so just be mindful that each kid gets a turn at some point during this unit. Post the cards on a "WORD WALL" bulletin board in your classroom.

Common Core Standards highlighted in this lesson	
Standards:	**ELACC4RI3** Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. **ELACC4RI7** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. **ELACC4RI9** Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. **ELACC4W 7** Conduct short research projects that build knowledge through investigation of different aspects of a topic. **ELACC4W 9** Draw evidence from literary or informational texts to support analysis, reflection, and research.