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Author's Website and Curriculum Guide

Minneapolis: Millbrook Press, 2014
48 Pages
AR Level: 6.1 **Lexile:** 900

Curriculum Connections: *Conservation, Lands and Water, Scientific Process, Environmental Impact, Ocean Currents, Scientific Exploration*

Excellent for close reading, review of text features, understanding of narrative text structures, building band 3-5 complex vocabulary, and understanding of scientific process.

A team of three scientists set out on a research ship to investigate the Great Pacific Garbage Patch where millions of pieces of plastic have collected in the sea. The plastic has drifted there from rivers, beaches, and ocean traffic all over the world. The scientists and their team of assistants gathered samples of plastic and ocean organisms, then conducted studies to see what they could discover.

Text Features: Table of Contents, headings, captions, diagrams, photographs, text boxes, maps, glossary, index, further reading and source notes.

CCSS for Primary Grades

Due to the complexity of content, this text may not be suitable for second grade students except as examples of text features and photographs.

CCSS for Intermediate Grades:

- *RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for answers.*
- *RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, . . . using language that pertains to time, sequence, and cause/effect.*
- *RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and words in a text to demonstrate understanding . . .*
- *RI.3.8 Describe the logical connection between particular sentences and paragraphs in a text.*

CCSS for Intermediate Grades

- *RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.*
- *RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.*
- *RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text . . . based on specific information in the text.*
- *RI.5.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.*
- *RI.5.10 . . . read and comprehend informational texts, including historical/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.*

TOWNER AWARD NOMINEE BOOKS FOR 2016

Lesson Ideas	Text Set Options
Intermediate:	This book is most suitable for grades 4-6, although the diagrams and maps may be used with 3 rd grade with teacher guidance.
<p>Students design a decomposition experiment following the scientific method. Students bring a variety of packaging materials such as plastic, cardboard, paper, plastic bags, etc., and put them in three different mediums, including a tub of water, a tub of saltwater, and a tub of dirt. They check each day for a week and record results in experiment journals. Then they evaluate whether their hypotheses are correct and discuss the implications.</p> <p>Cause & Effect Lesson using related Scholastic News Article "Oceans of Trash" & grade leveled skills page. Read each sentence. Underline the cause. Circle the Effect. Then discuss each.</p> <p>Create a food web to illustrate the sequential phases of photosynthesis and the ocean's life cycle in a concrete, manipulative manner. See pages 9-12 of online guide: https://www.lernerbooks.com/digitalassets/Assets/Title%20Assets/13185/9781467712835/Online%20Scavenger%20Hunt.pdf</p> <p>Conduct an Online Scavenger Hunt searching for more information about the Great Pacific Garbage Patch. See: https://www.lernerbooks.com/digitalassets/Assets/Title%20Assets/13185/9781467712835/Online%20Scavenger%20Hunt.pdf</p> <p>Hypothesis Formulation Exercise: Construct a hypothesis based on information presented in the text and inductive reasoning using the question "<i>Is it possible that the rotted squid's death (p.15) could have been caused by the plastic contaminating the North Pacific Central Gyre?</i>" See Page 17: https://www.lernerbooks.com/digitalassets/Assets/Title%20Assets/13185/9781467712835/Teaching%20Guide.pdf</p>	<p><i>Plastic Ahoy!</i> Book Trailer: https://www.youtube.com/watch?t=14&v=j9s6JWdLLg4 http://www.scholastic.com/content/collateral_resources/pdf/s/snonline/sn_causeeffect_oceantrash_gr3.pdf Related magazine article: <i>Oceans of Trash</i> http://www.scholastic.com/browse/subarticle.jsp?id=4624 http://www.scholastic.com/browse/article.jsp?id=3752034 Scholastic News Online.</p> <p><i>Flotsam</i> by David Weisner Houghton Mifflin 2006 A book without words.</p> <p><i>Ocean Sunlight: how tiny plants feed the seas</i> by Molly Bang Blue Sky Press 2012 AR 4.5 Lexile 770 Website: National Geographic Education – Food Webs: http://education.nationalgeographic.com/education/encyclopedia/food-web/?ar_a=1 Video: Plankton Revealed http://education.nationalgeographic.com/education/media/plankton-revealed/?ar_a=1</p> <p>Website: Mission page of the Project Kaisei website: Projectkaisei.org Video Scientist Annie Crawley's YouTube channel: http://www.youtube.com/playlist?list=PL93615C0CBE9D7ACA</p> <p><i>Giant Squid: searching for a sea monster</i> by Mary Cerullo Capstone Press 2012 AR 7.0 Lexile 1090 Website & video: first-ever footage of a live giant squid was filmed in 2012 http://ocean.si.edu/giant-squid Video of Giant Squid https://www.youtube.com/watch?v=jCWop491Q9Y</p> <p><i>Tracking Trash: Flotsam and Jetsam and the Science of Ocean Movement</i> by Loree Griffin Burns Houghton Mifflin 2007 AR 8.5 Lexile 1200</p>