

Grade 7: Module 4B: Unit: 1: Overview





Building Background Knowledge:Management and Sustainability of Water

Unit 1: Building Background Knowledge: Management and Sustainability of Water

In this first unit, students are introduced to the concept of water sustainability. To build their background knowledge, they will read two informational texts: "Water Is Life" by Barbara Kingsolver and excerpts of *The Big Thirst* by Charles Fishman. Alongside a close reading of these texts, students will also practice their ability to listen for main ideas and details in diverse media. This will prepare them for the mid-unit assessment, in which they analyze the main ideas and details in a new video. In the second half of the unit, students will continue to build their knowledge

of water management and sustainability by shifting their focus to analyzing the argument of informational texts and videos. Students build this skill as they continue to engage with *The Big Thirst*, as well as supplemental informational texts and videos. The end of unit assessment asks them to analyze and evaluate two arguments: one presented in text and the other presented in a video.

Guiding Questions and Big Ideas

- What are the ways we manage water?
- Why are we running out of freshwater?
- How is the sustainability of water my responsibility?
- Human activity affects water sustainability.
- Freshwater is a critical resource that must be managed carefully.

Mid-Unit 1 Assessment	"The Water Crisis Isn't Global. It's Local": Listening for Main Ideas and Supporting Details This assessment centers on NYSP12 ELA CCLS SL.7.2. For this assessment, students will analyze the main idea and details in the video "The Water Crisis Isn't Global. It's Local," which features Charles Fishman, the author of <i>The Big Thirst</i> .		
End of Unit 1 Assessment	We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video This assessment has two parts. Students first watch the video "Corporations Need to Pay More Attention to Water: Charles Fishman" to trace and evaluate Fishman's argument. Then students read the article "Agriculture and Environment: Cotton" to trace and evaluate its argument. This assessment centers on NYSP12 ELA CCLS RI.7.8 and SL.7.3.		



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Content Connections

This module is designed to address English Language Arts standards as students read informational texts about water management and sustainability. However, the module intentionally incorporates Social Studies Practices and Themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

Big ideas and guiding questions are informed by the Next Generation Science Standards:

Influence of Engineering, Technology, and Science on Society and the Natural World All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment.

The Roles of Water in Earth's Surface Processes

• Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation and crystallization, and precipitation, as well as downhill flows on land. (MS-ESS2-4)

Earth and Human Activity

• Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources affect Earth's systems.



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Central Texts

- 1. Barbara Kingsolver, "Water Is Life," in National Geographic (April 2010), http://ngm.nationalgeographic.com/2010/04/water-is-life/kingsolver-text.
- 2. Charles Fishman, The Big Thirst: The Secret Life and Turbulent Future of Water (New York: Free Press, 2012), ISBN: 978-1-4391-0208-4.
- 3. Weekly Reader Corporation, "Wringing Dry." Current Events Apr 13, 2009: pp. 4+.
- 4. CNN, "New York Bottled Water Ban," Riverkeeper (video), September 2, 2009. Accessed August 14, 2013, http://www.riverkeeper.org/campaigns/tapwater/.
- 5. Kathiann M. Kowalski, "Beyond Thirst: The Global Water Crisis". Faces Apr 2009, pp. 8-11.
- 6. National Geographic, "Why Care about Water?" *National Geographic* (video), n.d. Accessed August 14, 2013. http://video.nationalgeographic.com/video/environment/freshwater/env-freshwater-whycare/.
- 7. The Lavin Agency, "Charles Fishman: Why College Students Should Start Paying Attention to Water," YouTube (video), February 25, 2013. Accessed August 14, 2013. http://www.youtube.com/watch?v=XM7S0_Qi3B4.
- 8. The Lavin Agency, "Charles Fishman: The Water Crisis Isn't Global. It's Local" YouTube (video), May 15, 2013. Accessed August 14, 2013. http://www.youtube.com/watch?v=lZxVyIiPDsA.
- 9. Landmark Media Inc., "The Future of Water," YouTube (video), December 5, 2008. Accessed August 14, 2013. http://www.youtube.com/watch?v=-qpbWZRC_dw.
- 10. The Lavin Agency, "Corporations Need to Pay More Attention to Water: Charles Fishman," YouTube (video), February 25, 2013. Accessed August 14, 2013. http://www.youtube.com/watch?v=8uWzIDMuM_U.
- 11. Various informational texts for an extensive research project.



This unit is approximately 2 weeks or 10 sessions of instruction.

Lesson	Lesson Title	Long Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 1	Introducing Module 4: "Water Is Life"	 I can cite several pieces of text-based evidence to support an analysis of informational text. (RI.7.1) I can determine a theme or the central ideas of informational text. (RI.7.2) I can analyze the main ideas and supporting details presented in different media and formats. (SL.7.2) 	 I can analyze photos, videos, and quotes to find a main idea. I can determine central ideas in the reading "Water Is Life." 	Notices and Wonders note- catcher Thinking Log	Gallery Walk protocol
Lesson 2	Close Reading: Paragraphs 1–5 of "Water Is Life"	 I can analyze the development of central ideas in a text. (RI.7.2) I can determine the meaning of words and phrases in text (figurative, connotative, and technical meanings). (RI.7.4) I can analyze the impact of word choice on meaning and tone in an informational text. (RI.7.4) 	 I can analyze the development of central ideas in "Water Is Life." I can determine the meaning of figurative language in "Water Is Life." I can analyze the impact of word choice on meaning in "Water Is Life." 	 Reader's Notes "Water Is Life" Paragraphs 1–5 (from homework) Answers to Paragraphs 1–5 text-dependent questions 	Domain-Specific Vocabulary Back-to-Back and Face-to- Face protocol
Lesson 3	Analyzing Text Structure: "Water Is Life" Paragraphs 6–9	 I can determine the meaning of words and phrases in text (figurative, connotative, and technical meanings). (RI.7.4) I can analyze the organization of an informational text (including how the major sections contribute to the whole and to the development of the ideas). (RI.7.5) 	 I can determine the meaning of figurative and technical language in "Water Is Life." I can analyze how a major section of "Water Is Life" contributes to the development of ideas. 	Paragraphs 6–9 text-dependent questions Thinking Log	



Lesson	Lesson Title	Long Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 4	Analyzing Main Ideas and Details: "Why Care about Water?"	 I can analyze the organization of an informational text (including how the major sections contribute to the whole and to the development of the ideas). (RI.7.5) I can analyze the main ideas and supporting details presented in different media and formats. (SL.7.2) I can explain how ideas presented in different media and formats clarify a topic, text, or issue. (SL.7.2) 	 I can analyze how a major section of "Water Is Life" contributes to the development of ideas. I can analyze the main ideas and supporting details in the video "Why Care about Water?" I can articulate how a text and a video clarify my thinking on the issues of water sustainability and water management. 	Reader's Notes "Water Is Life" Paragraphs 10–14 (from homework) Reader's Notes "Water Is Life" Paragraphs 6–9 (from Lesson 2 homework) Answers to Paragraphs 10–12 text-dependent questions Main Ideas and Details note-catcher	Domain-Specific Vocabulary
Lesson 5	Mid-Unit Assessment: Listening for Main Ideas and Supporting Details	 I can analyze the main ideas and supporting details presented in different media and formats. (SL.7.2) I can explain how ideas presented in different media and formats clarify a topic, text, or issue. (SL.7.2) 	 I can analyze main ideas and supporting details in video clips featuring Charles Fishman. I can articulate how my thinking has been clarified on the issue of water sustainability. 	Analyzing Main Idea and Details note-catcher Mid-Unit 1 Assessment	
Lesson 6	Analyzing the Central Claim in The Big Thirst	I can analyze the interactions between individuals, events, and ideas in a text. (RI.7.3) I can identify the argument and specific claims in a text. (RI.7.8)	 I can analyze the interaction between people and water in <i>The Big Thirst</i>. I can identify a central claim in pages 1–5 of <i>The Big Thirst</i>. 	The Big Thirst Pages 1–5 Text-Dependent Questions Thinking Log	
Lesson 7	Evaluating an Argument in <i>The</i> Big Thirst	 I can identify the argument and specific claims in a text. (RI.7.8) I can evaluate the argument and specific claims in a text for sound reasoning and relevant, sufficient evidence. (RI.7.8) 	 I can evaluate an argument's use of evidence and reasoning in ""Beyond Thirst: The Global Water Crisis". I can identify a main claim on page 9 of <i>The Big Thirst</i>. 	Tracing an Argument note- catcher	Evaluating an Argument



Lesson	Lesson Title	Long Term Targets	Supporting Targets	Ongoing Assessment	Anchor Charts & Protocols
Lesson 8	Tracing and Evaluating Arguments: "The Future of Water" and <i>The Big Thirst</i>	 I can outline a speaker's argument and specific claims. (SL.7.3) I can evaluate the reasoning and evidence presented for soundness, relevance, and sufficiency. (SL.7.3) I can identify and then evaluate an argument and specific claims in a text for sound reasoning and relevant, sufficient evidence. (RI.7.8) 	• I can evaluate the argument in "The Future of Water" and in pages 12–15 of <i>The Big Thirst</i> .	Reader's Notes The Big Thirst Page 9 (from homework) Tracing an Argument note-catcher Text-dependent questions Thinking Log	
Lesson 9	Clarifying Thinking on Water Management: Revisiting the Gallery Walk	 I can explain how ideas clarify a topic, text, or issue. (SL.7.2) I can cite several pieces of text-based evidence to support an analysis of informational text. (RI.7.1) 	 I can explain how the video "The Future of Water" and excerpts from <i>The Big Thirst</i> clarified my thinking on the issue of water sustainability. I can cite several pieces of text-based evidence to find places on a map. I can analyze photos, videos, and quotes to find a main idea. 	Thinking Log World maps (from homework) Notices and Wonders note-catcher	 Domain-Specific Vocabulary Quiz-Quiz Trade protocol Gallery Walk protocol
Lesson 10	End of Unit Assessment: Tracing and Evaluating Arguments	 I can identify the argument and specific claims in a text. (RI.7.8) I can evaluate the argument and specific claims in a text for sound reasoning and relevant, sufficient evidence. (RI.7.8) I can outline a speaker's argument and specific claims. (SL.7.3) I can evaluate the reasoning and evidence presented for soundness, relevance, and sufficiency. (SL.7.3) 	I can identify the argument and specific claims in the text "Agriculture and Environment: Cotton, Environmental Impacts of Production: Water Use". I can evaluate the argument and specific claims in the text "Agriculture and Environment: Cotton, Environmental Impacts of Production: Water Use". I can outline the argument and specific claims in the video "Corporations Need to Pay More Attention to Water: Charles Fishman." I can evaluate the argument and specific claims in the video "Corporations Need to Pay More Attention to Water: Charles Fishman."	• End of Unit 1 Assessment	



Building Background Knowledge:

Management and Sustainability of Water

Optional: Experts, Fieldwork, and Service

Experts:

- · Invite experts in water management to come speak to your class about local water issues.
- Invite business people or farmers who have focused on managing their company's or farm's water more efficiently.

Fieldwork:

· Arrange for a visit to a local dam or river to investigate water management and water use.

Service:

Students could create brochures, infographics, or other media to raise local awareness of the importance of water sustainability and efficient water management.

Optional: Extensions

- A study of water issues in the local community or state of New York. There are numerous issues related to the growing industry of natural gas extraction by "fracking."
- A more focused case study on one of the many places mentioned in *The Big Thirst* where water sustainability is an issue. For instance, students could learn more about water management in Perth, Australia; Las Vegas, Nevada; or Saharan Africa.
- A research project focused on water management of the Great Lakes. Since the water is used by both the United States and Canada, this topic would delve into the issue of how water is shared among many people.



Preparation and Materials

This unit includes a number of routines that involve stand-alone documents.

In Lessons 1–9, students frequently read a section of "Water Is Life' or *The Big Thirst* for homework. Once the routine is fully implemented (starting in Lesson 1), students will be completing Reader's Notes.

1. Reader's Notes

Students will usually read or reread a section of "Water Is Life" or *The Big Thirst* for homework. Along with the reading, they will complete the Reader's Notes for that section.

The Reader's Notes are formatted differently depending on the section of text and the purpose for reading. Often, they use the Main Idea and Details note-catcher to support students as they read for gist. Then, there will often be room for vocabulary work and/or text-dependent questions to support students' understanding of these complex texts.

Set up a place for students to keep their completed Reader's Notes (such as a folder) so that they can return to them as needed for comprehension.

Consider collecting the Reader's Notes occasionally to check for completion and informally assess student understanding.

2. Thinking Log

Starting in Lesson 1, students also use the Thinking Log frequently to synthesize their understanding of water management and sustainability. It also serves to scaffold the skills required by SL.7.2, especially focusing on explaining "how the ideas clarify a topic, text, or issue under study."

The Thinking Log has space for each lesson where its use is planned in both Unit 1 and Unit 2 of this module. Both units are included in the same packet so that students have a place to record and reflect on their understanding of water management and sustainability as they continue to read, watch videos, and research about the topic. Be sure to have a place where students can easily store and retrieve their Thinking Logs.

Create one packet for students to use in Units 1 and 2.

- In Lesson 3, collect the Thinking Log to check students' ability to clarify a topic.
- After that, consider collecting the Thinking Log periodically to check students' understanding of the issue.







You will find the Reader's Notes in the supporting materials section of each lesson in which they are assigned.

The entire Thinking Log is in the supporting materials of Lesson 1. Prepare the Thinking Log as a packet for each student.

Review these documents before you launch the unit and decide which method of organizing these assignments and checking homework will work best for you and your students. The recommended approach, described below, reduces the amount of paper that students are handling and gives them feedback on homework partway through the routine.

You may need to modify this plan to meet the needs of your students. Your routine should allow you to look closely at student work several days into the homework routine to make sure they are on track.

Your routine also needs to allow students to use these notes in class daily and to keep track of them.