

Grade 7: Module 4B:Overview





GRADE 7: MODULE 4B: OVERVIEW

Reading and Research:
Water is Life

This eight-week module focuses on a "science and society" topic, engaging students in reading compelling informational text about water sustainability, fresh water management, and how to make evidence-based decisions. In Unit 1, students read the article "Water Is Life" by Barbara Kingsolver as well as excerpts from The Big Thirst by Charles Fishman to build background knowledge about water sustainability and water management. Students determine main ideas and evidence in diverse media and clarify the issue of why humans need to manage water better. They also trace arguments and evaluate the soundness of reasoning and the sufficiency and relevancy of evidence in the texts and media that they engage with in this unit. In Unit 2, students participate in a robust research project in which they investigate the strategies of better agricultural and industrial water management. This research begins with students reading more excerpts from The Big Thirst to scaffold their research skills. Then students conduct internet-based research. To organize their research sources and information, students use a researcher's notebook. Once they have finished gathering information, students analyze the impact of water management strategies.

To help students grapple with this issue, Unit 2 introduces students to a decision-making process called "Stakeholder Consequences Decision-Making" (see the end of this document for details). This process will help students understand the implications of various choices, and will scaffold their ability to determine, based on evidence and their own values, what they themselves believe can and should happen. Unit 3 marks the transition from research to writing as students plan and draft a position paper, addressing the question: "Which category of water management, agricultural or industrial, would be a good place to begin to improve our use of fresh water?" Students have several opportunities for feedback and revision during this unit. As a final performance task, students publish and share a visual representation of their position paper. **This task centers on NYSP12 ELA CCLS RI.7.1, W.7.1, W.7.4, W.7.5, and L.7.6.**

Guiding Questions and Big Ideas

- How can we balance the needs of people and the environment?
- How does human activity influence the availability of our water resources?
- How should humans manage water resources in a way that is sustainable?
- Human activity can affect the availability of useable, fresh water.
- Humans use water for many things and manage water in a variety of ways.
- Sustainable water management is important in order to ensure that the needs of people and the environment will continue to be met.
- Making an evidence-based decision relies on research and an analysis of consequences and stakeholders.



GRADE 7: MODULE 4B: OVERVIEW

Reading and Research:
Water is Life

Performance Task

This performance task gives students a chance to demonstrate the ideas and evidence of their sustainable water management position papers in a multimedia format. Students will be crafting and sharing a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. **This task addresses NYSP12 ELA CCLS RI.7.1, W.7.1, W.7.1, W.7.5, and L.7.6.**

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 Science concepts 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-capital consumption of natural resources impact Earth's systems.



CCS Standards: Reading—Literature	Long-Term Learning Targets
• RI.7.1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	I can cite several pieces of text-based evidence to support an analysis of informational text.
• RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.	 I can determine a theme or the central ideas informational text. I can analyze the development of central ideas in a text.
• RI.7.3. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).	I can analyze the interactions between individuals, events, and ideas in a text.
• RI.7.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.	 I can determine the meaning of words and phrases in text (figurative, connotative, and technical meanings). I can analyze the impact of word choice on meaning and tone in an informational text.
RI.7.5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.	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.7.8. Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	 I can identify the argument and specific claims in a text. I can evaluate the argument and specific claims in a text for sound reasoning and relevant, sufficient evidence.
RI.7.9. Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.	I can contrast how multiple authors emphasize evidence or interpret facts differently when presenting information on the same topic.
• RI.7.10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	 I can read grade-level informational texts proficiently and independently. I can read above-grade-level texts with scaffolding and support.



CCS Standards: Writing	Long-Term Learning Targets
• W.7.1. Write arguments to support claims with clear reasons and relevant evidence.	I can write arguments to support claims with clear reasons and relevant evidence.
a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.	
 Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. 	
 Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. 	
d. Establish and maintain a formal style.	
e. Provide a concluding statement or section that follows from and supports the argument presented.	
• W.7.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Gradespecific expectations for writing types are defined in standards 1–3 above.)	I can produce clear and coherent writing that is appropriate to task, purpose, and audience.
 W.7.5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. 	With support from peers and adults, I can use a writing process to ensure that purpose and audience have been addressed.
 W.7.7. Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. 	 I can conduct short research projects to answer a question. I can use several sources in my research. I can generate additional questions for further research.





CCS Standards: Writing	Long-Term Learning Targets
 W.7.8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. 	 I can gather relevant information from a variety of sources. I can use search terms effectively. I can evaluate the credibility and accuracy of each source. I can quote or paraphrase others' work while avoiding plagiarism. I can use a standard format for citation.
 W.7.9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply <i>grade 7 Reading standards</i> to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims"). 	I can select evidence from literary or informational texts to support analysis, reflection, and research.
• W.7.10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	I can adjust my writing practices for different timeframes, tasks, purposes, and audiences.

CCS Standards: Speaking and Listening	Long-Term Learning Targets
 SL.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. e. Seek to understand other perspectives and cultures and communicate effectively with audiences or individuals from varied backgrounds. 	 I can effectively engage in discussions with diverse partners about seventh-grade topics, texts, and issues. I can express my own ideas clearly during discussions. I can build on others' ideas during discussions.



CCS Standards: Speaking and Listening	Long-Term Learning Targets
• SL.7.2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.	 I can analyze the main ideas and supporting details presented in different media and formats. I can explain how ideas presented in different media and formats clarify a topic, text, or issue.
SL.7.3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	 I can outline a speaker's argument and specific claims. I can evaluate the reasoning and evidence presented for soundness, relevance, and sufficiency.
• SL.7.4. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	 I can present claims and findings with descriptions, facts, details, and examples. I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation).
SL.7.5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	I can include multimedia components and visual displays in a presentation to clarify claims and to add emphasis.
SL.7.6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate.



CCS Standards: Language	Long-Term Learning Targets
• L.7.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grade 7 reading and content</i> , choosing flexibly from a range of strategies.	I can use a variety of strategies to determine the meaning of unknown words or phrases.
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., <i>belligerent</i> , <i>bellicose</i> , <i>rebel</i>).	
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.	
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	
L.7.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	 I can accurately use seventh-grade academic vocabulary to express my ideas. I can use resources to build my vocabulary.





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. Daniel C. Edelson, Adam Tarnoff, Kathleen Schwille, Meridith Bruozas, and Anna Switzer, "Learning to Make Systematic Decisions," in *The Science Teacher* (Vol. 73, Issue 4), 2006.
- 4. Kathiann M. Kowalski, "Beyond Thirst: The Global Water Crisis". Faces Apr 2009, pp. 8-11.
- 5. CNN, "New York Bottled Water Ban," Riverkeeper (video), September 2, 2009. Accessed August 14, 2013, http://www.riverkeeper.org/campaigns/tapwater/.
- 6. Weekly Reader Corporation, "Wringing Dry." Current Events Apr 13, 2009: pp. 4+.
- 7. 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/.
- 8. 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.
- 9. 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.
- 10. Landmark Media Inc., "The Future of Water," YouTube (video), December 5, 2008. Accessed August 14, 2013. http://www.youtube.com/watch?v=-qpbWZRC_dw.
- 11. 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.
- 12. Various informational texts for an extensive research project.





Week	Instructional Focus	Long-Term Targets	Assessments		
Unit 1: Buildin	Unit 1: Building Background Knowledge: Management and Sustainability of Water				
Weeks 1–2	 Building background knowledge about water sustainability Read "Water Is Life" Introduce Domain-Specific Vocabulary anchor chart Listening for main ideas and supporting details Start Thinking Log and Reader's Notes Begin reading <i>The Big Thirst</i> 	 I can cite several pieces of text-based evidence to support an analysis of literary text. (RL.7.1) I can determine a theme or the central ideas of informational text. (RI.7.2) 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 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) 	• Mid-Unit 1: "The Water Crisis Isn't Global. It's Local": Listening for Main Ide Supporting Details (SL.7.2)		



Week	Instructional Focus	Long-Term Targets	Assessments
Weeks 1-2, continued	 Continue building background knowledge on water sustainability through reading informational texts, including <i>The Big Thirst</i> Trace the arguments of several informational texts Listen for arguments in informational videos Introduce Evaluating an Argument anchor chart 	 I can cite several pieces of text-based evidence to support an analysis of informational text. (RI.7.1) 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 evaluate the argument and specific claims in a text for sound reasoning and relevant, sufficient evidence. (RI.7.8) I can explain how ideas clarify a topic, text, or issue. (SL.7.2) 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) 	End of Unit 1: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (RI.7.8 and SL.7.3)



Week	Instructional Focus	Long-Term Targets	Assessments
Unit 2: Resear	ch Study: Industrial and Agricultural Water Ma	nagement	
Weeks 3-6	 Compare and contrast authors' use of evidence in several different text pairings Start research on agricultural and industrial water management including teaching the following skills: Evaluating the credibility of sources Generating supporting research questions Quoting or paraphrasing others' work Introduce the researcher's notebook and researcher's roadmap 	 I can analyze the interactions between individuals, events, and ideas in a text. (RI.7.3) I can contrast how multiple authors emphasize evidence or interpret facts differently when presenting information on the same topic. (RI.7.9) I can evaluate the credibility and accuracy of each source. (W.7.8) I can conduct short research projects to answer a question. (W7.7) I can generate additional questions for further research. (W 7.7) I can gather relevant information from a variety of sources. (W.7.8) I can use a variety of strategies to determine the meaning of unknown words or phrases. (L.7.4) 	



Week	Instructional Focus	Long-Term Targets	Assessments
Weeks 3-6, continued	 Practice comparing author's use of evidence Continue gathering information on agricultural and industrial water management from <i>The Big Thirst</i> Use search terms effectively Conduct internet-based research Use dictionaries to confirm or revise inferred meanings of words. 	 I can contrast how multiple authors emphasize evidence or interpret facts differently when presenting information on the same topic. (RI.7.9) I can conduct short research projects to answer a question. (W.7.7) I can generate additional questions for further research. (W.7.7) I can gather relevant information from a variety of sources. (W.7.8) I can use search terms effectively. (W.7.8) I can evaluate the credibility and accuracy of each source. (W.7.8) I can quote or paraphrase others' work while avoiding plagiarism. (W.7.8) I can use a variety of strategies to determine the meaning of unknown words or phrases. (L.7.4) 	Mid-Unit 2: Simulated Research Task: Water Management Strategies (RI.7.9, W.7.7, W.7.8, L.7.4c, and L.7.4d)



Week	Instructional Focus	Long-Term Targets	Assessments
Weeks 3-6, continued	 Introduce the decision-making process including Cascading Consequence chart and Stakeholder chart Weighing the evidence: Fishbowl discussion on possible approaches to better water management Creating a visual display for a presentation Formal presentations of claims about whether we should begin addressing agricultural or industrial water management first 	 I can write arguments to support claims with clear reasons and relevant evidence. (W.7.1) I can select evidence from literary or informational texts to support analysis, reflection, and research. (W.7.9) I can self-select a text based on personal preferences and read it independently. (RI.7.11a) I can use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (RI.7.9a and SL.7.2a) I can come to discussions prepared to refer to evidence on the topic, text, or issue that probes and reflects on ideas under discussion. (SL.7.1 and SL.7.1a) I can present claims and findings with descriptions, facts, details, and examples, using effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.7.4) I can present claims and findings with descriptions, facts, details, and examples. (SL.7.4) I can include multimedia components and visual displays in a presentation to clarify claims and to add emphasis. (SL.7.5) 	End of Unit 2 Assessment: Making a Claim about Water Management (Part 1: SL.7.1, SL.7.1a, SL.7.1e; Part 2: SL.7.3a, SL.7.4, SL.7.5, SL.7.6, and RI.7.9a)





Week	Instructional Focus	Long-Term Targets (continued)	Assessments
Weeks 3-6, continued		I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.7.6)	
Unit 3: Performa	ance Task	'	
Weeks 7–8	 Analyze model position paper for argument and structure Plan position paper using Sustainable Water Management Position Paper Planner Introduce Steps to Writing a Position Paper anchor chart Engage in peer feedback to strengthen argument in position papers. Cite sources correctly Draft the position paper 	 I can cite several pieces of text-based evidence to support an analysis of informational text. (RI.7.1) 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 write arguments to support claims with clear reasons and relevant evidence. (W.7.1) I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.7.4) With support from peers and adults, I can use a writing process to ensure that purpose and audience have been addressed. (W.7.5) I can use a standard format for citation. (W.7.8) I can select evidence from literary or informational texts to support analysis, reflection, and research. (W.7.9) I can accurately use seventh-grade academic vocabulary to express my ideas. (L.7.6) 	Mid-Unit 3: First Draft of Position Paper (RI.7.1, W.7.1a,b,e, and W.7.4)





Week	Instructional Focus	Long-Term Targets (continued)	Assessments
Weeks 7-8, continued		• I can use resources to build my vocabulary. (L.7.6)	
	 Create final independent reading product Revise position paper based on teacher feedback Reflect on the steps to writing a position paper Craft visual representation of position paper Publish visual representations and share with class in a Gallery Walk 	 I can cite several pieces of text-based evidence to support an analysis of informational text. (RI.7.1) I can use established criteria to make informed judgments about the quality of texts, and interpret texts artistically. (RL.7.11b) I can write arguments to support claims with clear reasons and relevant evidence. (W.7.1) I can produce clear and coherent writing that is appropriate to task, purpose, and audience. (W.7.4) With support from peers and adults, I can use a writing process to ensure that purpose and audience have been addressed. (W.7.5) I can accurately use seventh-grade academic vocabulary to express my ideas. (L.7.6) I can use resources to build my vocabulary. (L.7.6) 	 Final independent reading product (RL.7.11b) End of Unit 3 Assessment: Final Draft of Position Paper and Reflection on the Writing Process (RI.7.1, W.7.1c,d, W.7.4, W.7.5, and L.7.6)





Preparation and Materials

Preparation and Materials

In advance, read the article about the Stakeholder Consequences Decision-Making (SCDM) process to build your own background knowledge about it. You can download the article "Learning to Make Systematic Decisions" at the following URL:

http://education.nationalgeographic.com/education/media/learning-make-systematicdecisions/?ar_a=1

This article is not used with students during the module, but it provides some examples of how students have used this process in a science curriculum. Also, note that in this module, students are not using the entire SCDM process; they will be learning only the Cascading Consequences and Stakeholders charts.

For schools with access to the complete book version of the The Big Thirst:

If your school has access to the complete book version of *The Big Thirst*, consider the following possibilities:

- The complete text may be used as an independent reading book for very strong readers. An alternative approach would be to create a "book club" where several strong readers apply themselves to the entire text at once. If you have students who wish to read the entire text, encourage them to start after the class has read the first excerpt (Unit 1, Lesson 6). Consider how you can help them apply the skills they use to read in class when reading other parts of the text that they read independently (e.g. re-reading, focusing on Fishman's purpose, types of evidence used, etc.).
- Consider asking students to read several additional excerpts from the chapters which are studied in class (Chapters 1, 5 and 7). Of these three, most of the in-class reading comes from Chapters 1 and 5; it may make sense to have students complete the entirety of chapter 1 as a springboard into the rest of the book's content.
- Consider also having students read Chapter 2, which is a treatment of the scientific particulars of where water comes from, and why.
- Fishman interweaves facts and analysis with anecdotal explanations of his theses. Consider assigning alternative sections in the book which specifically use anecdotes. Reading comprehension increases when facts are presented in a narrative format.
- A specific anecdote which may be put to good use can be located in Chapter 8, "Where Water Is Worshipped, But Gets No Respect" (about water use in India), beginning on page 239. This portion of the chapter describes the walking required to transport water to family homes in the village of Jargali, and is a direct parallel to the central narrative of *Long Walk to Water*, read in Module 1. This chapter may also be of interest as a whole to ELL students or students whose ethnic heritage originates in India or Asia.
- Consider also collaborating with your Science colleagues to identify other excerpts of the texts they might use with students to reinforce key scientific content or concepts.



Grade 7: Module 4B: Assessment Overview





Final Performance Task

Visual Representation of Position Paper

This performance task gives students a chance to demonstrate the ideas and evidence of their sustainable water management position papers in a multimedia format. Students will be crafting and sharing a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. This task addresses NYSP12 ELA CCLS RI.7.1, W.7.1, W.7.4, W.7.5, and L.7.6.

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 The Big Thirst. 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.



Mid-Unit 2 Assessment	Simulated Research Task: Water Management Strategies This assessment centers on NYSP12 ELA CCLS RI.7.9, W.7.7, W.7.8, L.7.4c, and L.7.4d. For this assessment, students will read an excerpt of <i>The Big Thirst</i> before the assessment and the article "Get the Salt Out" during the assessment itself as part of a simulated research task. Then students will answer selected response and short constructed response questions about the two texts and the research process.
End of Unit 2 Assessment	Making a Claim about Water Management This assessment has two parts. In the first part, students engage in a Fishbowl discussion of the two possible answers to the question: Which category of water management would be a good place to begin to make the way we manage water more sustainable? Part 1 of the assessment centers on NYSP12 ELA CCLS SL.7.1, SL.7.1a, and SL.7.1e. In Part 2, students orally present their position in answer to the same question. The second part of the assessment centers on NYSP12 ELA CCLS SL.7.3a, SL.7.4, SL.7.5, SL.7.6, and RI.7.9.

Mid-Unit 3 Assessment	First Draft of Position Paper This assessment centers on NYSP12 ELA CCLS RI.7.1, W.7.1a, b, e, and W.7.4. For this assessment, students will write their best first draft of their position paper in response to the question Which category of water management would be a good place to begin to make the way we manage water more sustainable? In the position paper, students craft a claim based on their research and using reasons, evidence, and sound reasoning to form an argument.
End of Unit 3 Assessment	Final Draft of Position Paper and Reflection on the Writing Process This assessment has two parts. First, students turn in their final revised, edited position paper, which is assessed for NYSP12 ELA CCLS RI.7.1, W.7.1c, d, W.7.4, and L.7.6. In the second part, students reflect on the ways in which the steps of writing their position paper helped improve and strengthen their writing. They do this by responding to questions and using evidence from their own work including the essay planner, feedback forms, first draft, and final draft of their paper. Part 2 focuses on NYSP12 ELA CCLS W.7.5.



Grade 7: Module 4B: Performance Task





GRADE 7: MODULE 4B: PERFORMANCE TASK

Visual Representation of Position Paper

Summary of Task

• This performance task gives students a chance to demonstrate the ideas and evidence of their sustainable water management position papers in a multimedia format. Students will be crafting and sharing a visual representation of their position papers, including their claim, reasons, and evidence based on their research and the decision-making process in Unit 2. **This task addresses NYSP12 ELA CCLS RI.7.1, W.7.1, W.7.4, W.7.5, and L.7.6.**

Format

A visual representation of the position paper on large paper or poster board.

Students will include their claim, reasons, and evidence from their position paper.

Students will plan their visual representation using a template.

Final visual presentations will be shared in a Gallery Walk.

Standards Assessed through This Task

- R1.7.1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- W.7.1. Write arguments to support claims with clear reasons and relevant evidence.
- W.7.4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- W.7.5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
- L.7.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.



GRADE 7: MODULE 4B: PERFORMANCE TASK

Visual Representation of Position Paper

Student-Friendly Writing Invitation/Task Description

• Your task is to create a visual representation of your argument from your position paper. To do so, you will use your claim and at least three of your key reasons and pieces of evidence. You will then select images that represent your key pieces of evidence and organize them on a page or poster, using either paper and markers or a computer. You will share your performance task with the rest of the class in a classroom Gallery Walk.

Key Criteria for Success (Aligned with NYSP12 ELA CCLS)

Below are key criteria students need to address when completing this task. Specific lessons during the module build in opportunities for students to understand the task, plan their visual representation, and share their final product.

Your visual representation of the position paper will include:

- Your claim that you made in your position paper.
- The reasons you used to support your claim.
- Evidence from your position paper that supports your reasons and claim.
- Your visual representation will also include images to support your argument.
- You must organize your visual representation so that it is easy to read and easy to follow your argument.
- You must use domain-specific vocabulary.



GRADE 7: MODULE 4B: PERFORMANCE TASK

Visual Representation of Position Paper

Options for Students

- Students will create their posters individually. They will primarily base their visual representation on their position paper; however, they may also be looking back at their researcher's notebooks, Cascading Consequences charts, Stakeholder charts, and their Sustainable Water Management Position Paper Planners.
- Students might have a partner to assist as they work on their visual representations, but the final version will be an individual's product.
- Student visual representations might be laid out differently.
- Students may draw their images rather than use existing images.
- Students could participate in a hosted Gallery Walk, where they move around the room in a group and, when they come to their own visual representation, they explain it to other students in their group.

Options for Teachers

- Students may share their visual representations with their own class, with other classes in the school, with parents or other adults, or in a community center or public library.
- Students may create a digital visual representation. These could be posted on an internal school Web site or, with parental permission, posted on a publicly accessible Web site.

Resources and Links

• http://search.creativecommons.org/ (a site to search for images with licenses to reuse)

Central Text and Informational Texts

- $\bullet \ \ Barbara\ Kingsolver,\ "Water\ Is\ Life,"\ in\ \textit{National\ Geographic}\ (April\ 2010),\ http://ngm.nationalgeographic.com/2010/04/water-is-life/kingsolver-text.$
- Charles Fishman, *The Big Thirst: The Secret Life and Turbulent Future of Water* (New York: Free Press, 2012), ISBN: 978-1-4391-0208-4.
- · Various research sources.

Note: Additional informational texts listed in each separate Unit Overview document.



Grade 7: Module 4B: Recommended Texts





The list below includes texts with a range of Lexile® text measures about water conservation. Note that districts and schools should consider their own community standards when reviewing this list. Some texts in particular units or modules address emotionally difficult content.

It is imperative that students read a high volume of texts at their reading level in order to continue to build the academic vocabulary and fluency demanded by the CCLS.

Where possible, texts in languages other than English are also provided. Texts are categorized into three Lexile measures that correspond to Common Core Bands: below grade band, within band, and above band. Note, however, that Lexile measures are just one indicator of text complexity, and teachers must use their professional judgment and consider qualitative factors as well. For more information, see Appendix 1 of the Common Core State Standards.

Common Core Band Level Text Difficulty Ranges:

(As provided in the NYSED Passage Selection Guidelines for Assessing CCSS ELA)

- Grade 4-5: 740-1010L
- Grade 6-8: 925-1185L

Title	Author And Illustrator	Text Type	Lexile Measure		
Lexile text measures in Grade 2–3 band level (below 740L)					
Clean Water	Elizabeth Thomas (author)	Informational	630		
Making Water Clean	Rebecca Olien (author)	Informational	640		
Keeping Water Clean	Courtney Farrell (author)	Informational	720*		
Water	Alexandra Fix (author)	Informational	720		

^{*}Lexile based on a conversion from Accelerated Reading level



Title	Author And Illustrator	Text Type	Lexile Measure			
Lexile text measures in Grade 4–5 b	Lexile text measures in Grade 4–5 band level (740–925L)					
Water Conservation	Saddleback Educational Publishing (publisher)	Informational	800			
Down the Drain: Conserving Water	Anita Ganeri, Chris Oxlade (authors)	Informational	810*			
Water Supply	Rebecca Hunter (author)	Informational	860*			
The Earth and the Role of Water	Shirley Smith Duke (author)	Informational	900			
Lexile text measures within Grade 6-8 ba	and level (925–1185L)					
Clean Water	Clean Water Beth Geiger (author) Informational 930					
One Well: The Story of Water on Earth	Rochelle Strauss (author)	Informational	960			
Clear Choices: The Water You Drink	Matt Higgins (author)	Informational	1010			
Not a Drop to Drink: Water for a Thirsty World	Michael Burgan (author)	Informational	1130			
Safeguarding Water and Food Supplies	Joe Craig (author)	Informational	1130			
Water: Our Precious Resource	Roy A. Gallant (author)	Informational	1150*			



Title	Author And Illustrator	Text Type	Lexile Measure
Lexile text measures above band lev	vel (over 1185L)		
Water: The Fate of Our Most Precious Resource	Marq de Villiers (author)	Informational	No LXL‡
Water Under Threat	Larbi Bouguerra (author)	Informational	No LXL‡
Water in the News	Yael Calhoun (author)	Informational	No LXL‡
When the Rivers Run Dry: Water—the Defining Crisis of the Twenty-first Century	Fred Pearce (author)	Informational	NoLXL‡

Suggested Web Sites for Research			
http://www.teachersdomain.org/resource/ess05.sci.ess.earthsys.waterdist/			
http://water.org/			
http://www.usgs.gov/water/			
http://antenna.sciencemuseum.org.uk/waterwars/drench/			
http://www.sophia.org/water-resources-in-the-world-tutorial			
http://water.epa.gov/			

Suggested Articles for Research

Libby Tucker, "Toxic Water Is Poisoning the People of Bangladesh," in Science World (Vol. 62, Issue 13), April 17, 2006.

Mary Harvey, "Crisis in East Africa," in Scholastic News (Vol. 68, Issue 22), April 23, 2012

Brigitte Aftalo-Calderon, "A World Thirsty for Clean Water," in Faces (Vol. 23, Issue 7), March 2007.

"Running Low," in *Weekly Reader News* (Vol. 87, Issue 25), May 5, 2006, 4–5.

Kathiann Kowalski, "Beyond Thirst," in Faces (Vol. 25, Issue 7), April 2009, 8–11.

"Wringing Dry," in *Current Events* (Vol. 108, Issue 22), April 13, 2009, 4–5.

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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.		



Building Background Knowledge: Management and Sustainability of Water

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.



Building Background Knowledge:
Management and Sustainability of Water

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 <i>The Big Thirst</i> 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.



Grade 7: Module 4B: Unit 1: Lesson 1 Introducing Module 4B: "Water Is Life"



Introducing Module 4B:

"Water Is Life"

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
 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

Introducing Module 4B:

Agenda	Teaching Notes
 Opening A. Entry Task: How Do We Use Water? (8 minutes) B. Reviewing Learning Targets (2 minutes) Work Time A. Gallery Work (10 minutes) B. Initial Reading of "Water Is Life" (15 minutes) Closing and Assessment A. Introduction to Reader's Notes for Paragraphs 1-5 of "Water Is Life" (5 minutes) B. Introducing Thinking Log (5 minutes) Homework A. Reread Paragraphs 1-5 and complete the Reader's Notes for Paragraphs 1-5. 	 This lesson introduces students to Module 4: "Water Is Life." Students consider questions about water use and then participate in a modified Gallery Walk to preview and connect the learning that will follow in future lessons. The Gallery Walk protocol has been modified, since its purpose here is to pique interest and curiosity, not to share text-based information. Students carefully and silently study the display of video and images, and then record observations and questions to help build background knowledge, foster community, and spark curiosity. Building background knowledge in this way promotes equity, since it "levels the playing field" for students: No matter what level of knowledge students have about the topic when they walk in, all get to learn before sharing with peers. The success of this lesson depends on building suspense and piquing the students' interest. Therefore, do not give away too much information about the module, its texts, or its themes until the class has completed the Gallery Walk. Students will revisit the Gallery Walk in Lesson 9, as they think back on what they have learned in Unit 1 and what questions they still have that will inform their research in Unit 2. In Lesson 9, students will again use their Notices and Wonders note-catcher from this lesson; be sure they have a place to keep the completed chart until then, or consider keeping the note-catchers for the class and returning them during Lesson 9. This lesson ends with a read-aloud of one of the central texts of this module, "Water Is Life" by Barbara Kingsolver. This text is complex and rich with imagery and metaphors. The purpose of the first read-aloud is for students to get the gist of the article and to start thinking more deeply about the central themes of the text, sustainability and water management. Students then reread Paragraphs 1–5 for homework, which will allow you to monitor their initial comprehension of that section of the text. A teacher guide will accompa
	immediately following the Reader's Notes.
	• Students will continue to work with this text throughout many lessons in Unit 1 and again in Unit 2.
	• In class, students informally hear vocabulary words during the read-aloud. As a part of their homework (Reader's Notes), they focus on specific words from Paragraphs 1–5. In future lessons, students will use a variety of strategies, both in class and as homework, to process new vocabulary, including a Domain-Specific Vocabulary anchor chart, which is introduced in Lesson 2.

Introducing Module 4B:

Agenda	Teaching Notes (continued)
	• During read-alouds, read slowly, fluently, and without interruption or explanation while students look at the text and actively read. This promotes fluency and comprehension for students, since they are hearing and reading the text as a whole.
	 This lesson focuses on SL.7.2 and RI.7.2 and gives students an opportunity to interact with different media and text to find main ideas, central ideas, and details. SL.7.2 is a new standard and will be emphasized throughout Unit 1. Students will become familiar with the Main Ideas and Details note-catcher, which they will use when watching and listening to sources, by using the same structure to track the gist of "Water Is Life" in their Reader's Notes.
	• This lesson also introduces the Thinking Log, which is used throughout Units 1 and 2 as a way for students to track and reflect on their understanding of the issues of water sustainability and water management. This Thinking Log helps students track their learning and serves as a scaffold to SL.7.2—how new information has helped them clarify the issues.
	• In advance: Prepare the Gallery Walk items for display around the room (on chart paper or taped to the wall). Some items are images, and some are quotes.
	 When you set up for the Gallery Walk, post or place the items around the room in a way that will allow students to move freely and comfortably from one to the next.
	• Item 1 is a short video, which students can watch on a computer in the classroom. Cue up the Web page before class starts so that students can click "play" as they get to the station. Choose whether students will use headphones or listen at the station in small groups, quietly so that it will not disrupt others.
	 Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom.
	• Review the Gallery Walk protocol (see Appendix)
	Post: Learning targets.

Introducing Module 4B:

Lesson Vocabulary	Materials
main idea, detail, analyze; aqueous, primordial (Paragraph 1), thrall, runnel, aquifer, irrigate, briny, saline (Paragraph 2), levees, grave (Paragraph 3), arid, evaporation, blighted, sodden, purchase (Paragraph 4), gale (Paragraph 5)	 Entry Task: How Do We Use Water? (one per student) Entry Task: How Do We Use Water? (answers, for teacher reference) Notices and Wonders note-catcher (one per student) Suggested Gallery Walk items (for teacher reference; print and post these in advance) "Water Is Life" by Barbara Kingsolver (one per student) Reader's Notes "Water Is Life" Paragraphs 1–5 (one per student and one to display) Reader's Notes "Water Is Life" Paragraphs 1–5, Teacher Guide (for teacher reference) Document camera Thinking Log (one per student)

Introducing Module 4B:

Opening	Meeting Students' Needs
 A. Entry Task: How Do We Use Water? (8 minutes) Distribute the Entry Task: How Do We Use Water? Allow students to answer the questions individually as best they can. Read each question and call on students to give their thoughts on the answers. Give them the answer or confirm their correct answers; refer to Entry Task: How Do We Use Water? (answers, for teacher reference). 	 Checking in with learning targets helps students self-assess their learning. This research-based strategy supports struggling learners most. Allowing students to discuss with a partner before writing or sharing with the whole class is a low-stress strategy to help students process in a risk-free situation.
 B. Reviewing Learning Targets (2 minutes) Ask a student to read the learning targets aloud. 	
Ask students to turn and talk to a partner:	
* "Based on the entry task, what do you think might be a main idea of the module?"	
• Tell students that today they will participate in a Gallery Walk, during which they will listen to and examine diverse media (images, quotes, video) to better understand what this module will be about.	



Introducing Module 4B:

Work Time	Meeting Students' Needs
 A. Gallery Walk (10 minutes) Distribute the Notices and Wonders note-catcher. Explain that during the Gallery Walk, students should write anything they observe or that is new or interesting in the Notices column. They also may find some of the information surprising or may have questions that are not answered in the image or quote. They can write these questions in the Wonders column. Tell them that they also should try to figure out what they will learn about in this new module. 	
• Review the Gallery Walk protocol with students as needed. Remind students of the norms for moving calmly around the room and moving to those images, quotes, and video where there are fewer classmates. Form small groups of students.	
• Give directions: Students will silently wander to each image, quote, or the video and write down what they notice and what they wonder for about 8 minutes. They may linger at any item and not worry if they get to all of them. Invite students to play the video, which should be already on the class computer screen. Tell them the video runs about 2 minutes, but they do not have to stay for the whole 2 minutes.	
 Ask each small group to bring their Notices and Wonders note-catchers and a pen or pencil and stand by one of the Gallery Walk items. 	
• Invite students to begin the Gallery Walk. Circulate to listen in and clarify procedures as needed. If all groups are working smoothly, consider participating in this step and writing your own Notices and Wonders.	
• After 8 minutes, invite students to sit and finish writing their thoughts. Focus them in particular on the space at the bottom of the handout, where they can add to their initial thinking.	
• Refocus students whole group. Starting with Notices, allow students to "popcorn" discuss any of the ideas they have written down.	
• Repeat with Wonders, inviting students to discuss the questions that they have after the Gallery Walk.	
• Ask students to think silently about this question:	
* "What might the module be about?"	
Have them turn and talk to their partner and share their idea.	
• Next, cold call students to share initial ideas and thoughts on what the module will be about.	
• Give students specific positive feedback for ways you saw them working well during the Gallery Walk or the discussion. Congratulate them for being willing to ask questions and think about information presented in diverse media; point out that this is something they will do a lot in this module.	

Introducing Module 4B: "Water Is Life"

Work Time (continued)	Meeting Students' Needs
• Collect students' Notices and Wonders note-catcher (see Teaching Note; students will need these note-catchers again in Lesson 9).	
 B. Initial Reading of "Water Is Life" (15 minutes) Distribute the article "Water Is Life." Tell students this is an important article that they will spend a lot of time with in this unit. Today, they will hear it read aloud as they read along in their heads. Set a clear purpose: Tell them that their task is to think about ideas in the article that seem important. 	
• Read aloud all 14 paragraphs of "Water Is Life" as students follow along in their heads.	
After finishing, have students think and then talk with a partner:	
* "Based on just this initial read, what are two important ideas from the article?"	
• Reiterate that they will work with this article across several lessons, and their thinking certainly will deepen and change as they understand the text more fully.	



Introducing Module 4B:

Closing and Assessment	Meeting Students' Needs
 A. Introduction to Reader's Notes for Paragraphs 1–5 of "Water Is Life" (5 minutes) Tell students that while reading "Water Is Life," they will use Reader's Notes for homework to write down the main ideas and details in a section of text. 	
• Distribute Reader's Notes "Water Is Life" Paragraphs 1–5 and display a copy on a document camera . Remind students that they have kept similar Reader's Notes in other modules. Review the structure and purpose of the Reader's Notes. They first will read the paragraphs listed and then write down the main idea of what they read and any supporting details.	
Ask students to think and discuss with a partner:	
* "What is a main idea, and what is a supporting detail?"	
• Cold call students to explain their thinking. Listen for them to define <i>main idea</i> as "what the paragraph is mostly about" or "the most important part," and <i>supporting details</i> as "the smaller ideas that describe the main idea," "reasons to support the main idea," and "facts or other information that relate to the main idea and make it stronger."	
• Point out that there will always be about five vocabulary words that are part of the reading. Sometimes the definitions will be given, but most of the time they will be words students will need to figure out based on context clues. Remind them that they will share their homework the next day in class.	
B. Introducing Thinking Log (5 minutes)	
• Distribute the Thinking Log . Tell students that this log will contain questions that will be completed each day throughout the unit. The purpose of the log is to help them reflect on and clarify their thinking on the issue of water management based on their learning each day.	
• Read aloud the two questions for Lesson 1 and ask students to answer based on their current thinking. Ask them to put their logs in a place where they can retrieve them easily each day.	
Homework	Meeting Students' Needs
• Reread Paragraphs 1–5 of "Water Is Life" and complete the Reader's Notes.	
Note: In Lesson 2, you will use the "definition of sustainability" Gallery Walk items. All other Gallery Walk items can be taken down and stored until Lesson 9.	
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Grade 7: Module 4B: Unit 1: Lesson 1 Supporting Materials







Entry Task: How Do We Use Water?

Name:			
Date:			

- 1) How much water does the average person use per day?
 - a. 10-20 gallons
 - b. 40-50 gallons
 - c. 80-100 gallons
 - d. 120-140 gallons
- 2) Circle the approximate amount of water used for each activity (in gallons):

a.	taking a bath	1–5	5–10	10-20	20–30	>30
b.	taking a 5-minute shower	1-5	5-10	10-20	20-30	>30
c.	brushing your teeth	1-5	5-10	10-20	20-30	>30
d.	flushing the toilet	1-5	5-10	10-20	20-30	>30

- 3) How much more does bottled water cost than tap water in the United States?
 - a. 100 times more
 - b. 1,000 times more
 - c. 10,000 times more
 - d. 100,000 times more
- 4) How much did a Tyrannosaurus rex pee?
 - a. 10-20 gallons
 - b. 40-50 gallons
 - c. 80-100 gallons
 - d. 120-140 gallons



Ent	rv	Ta	sk:

How Do We Use Water? (Answers for Teacher Reference)

Name:			
Date:			

- 1) How much water does the average person use per day?
 - a. 10-20 gallons
 - b. 40-50 gallons
 - c. 80-100 gallons
 - d. 120-140 gallons

The correct answer is c) 80–100 gallons per day, although estimates vary. This includes bathing, showering, teeth brushing, hand/face washing, shaving, dishwashing, washing clothes, toilet flushing, drinking, and outdoor watering.

Source: http://ga.water.usgs.gov/edu/qa-home-percapita.html

2) Circle the approximate amount of water used for each activity (in gallons):

a.	taking a bath	1-5	5–10	10-20	20 - 30	>30
b.	taking a 5-minute shower	1-5	5-10	10-20	20-30	>30
c.	brushing your teeth	1-5	5-10	10-20	20 - 30	>30
d.	flushing the toilet	1-5	5-10	10-20	20-30	>30

- 3) How much more does bottled water cost than tap water in the United States?
 - a. 100 times more
 - b. 1,000 times more
 - c. 10,000 times more
 - d. 100.000 times more

Source: http://www.midwestmultisportlife.com/2012/08/bottled-water-vs-tap-water.html

- 4) How much did a *Tyrannosaurus rex* pee?
 - a. 10-20 gallons
 - b. 40-50 gallons
 - c. 80-100 gallons
 - d. 120-140 gallons



Notices and Wonders

Notices	Wonders



Notices and Wonders

My initial thoughts: 1. What do you think are some of the ideas that we will explore in this module?			
2. Which quiz question or Gallery Walk item made you most curious to learn more? Why?			



(For Teacher Reference)

Items 1–13 are essential. Items 14–26 are included as optional pieces, depending on space and class size.

Item 1

CNN video on N.Y. bottled water ban 2009 (2:21) http://www.riverkeeper.org/campaigns/tapwater/

Item 2

EPA definition of sustainability (see Lesson 2) http://www.epa.gov/sustainability/basicinfo.htm

Item 3

 $Image\ of\ stone-washed\ blue\ jeans \\ http://www.nytimes.com/2011/11/02/science/earth/levi-strauss-tries-to-minimize-water-use.html?pagewanted=all\&_r=0$

Item 4

Image "Of the World's..." http://www.pwf.co.im/watershortage.htm

Item 5

Image of woman carrying water http://ibnlive.in.com/news/ap-water-shortage-hits-tirumala-again/272254-62-127.html

Item 6

And we only have that one allotment of water—it was delivered here 4.4 billion years ago. No water is being created or destroyed on Earth. So every drop of water that's here has seen the inside of a cloud, and the inside of a volcano, the inside of a maple leaf, and the inside of a dinosaur kidney, probably many times (Fishman, 17).

Item 7

Infographic on agriculture use of water http://inhabitat.com/seametrics-infographic-sheds-light-on-how-much-water-is-used-infographic-farm-water/





(For Teacher Reference)

Item 8

Image of New York State watersheds http://www.dec.ny.gov/lands/26561.html

Item 9

How much water did a *Tyrannosaurus rex* drink each day? It may not be known for sure, but scientists have found a spot where a dinosaur paused one day in the Mesozoic era to pee on a sandy patch of ground. The resulting trench, from just a single squat, is at least the size of a modern bathtub, 40 to 50 gallons (Fishman, 17).

Item 10

So at least 40 percent of the world either doesn't have good access to water, or has to walk to get it. Forty percent—look to your left and your right, that's four out of ten people (Fishman, 13).

Item 11

Even while we take Mother Water for granted, humans understand in our bones that she is the boss. We stake our civilizations on the coasts and mighty rivers. Our deepest dread is the threat of having too little moisture—or too much (Paragraph 3, "Water Is Life" by Barbara Kingsolver).

Item 12

It is an ancient, dazzling relic, temporarily quarantined here in my glass, waiting to return to its kind, waiting to move a mountain. It is the gold standard of biological currency, and the good news is that we can conserve it in countless ways ("Water Is Life" by Barbara Kingsolver).

Item 13

Cascading Consequences chart Use sample anchor chart from Unit 2.

Optional items depending on space and class size:

Item 14

Image of mudflats (Note: Consider putting a caption under this image, "MUDFLAT," as this will be a vocabulary word later in the module.

http://www.tree hugger.com/corporate-responsibility/120-nations-meet-in-attempt-to-avert-global-water-crisis.html





(For Teacher Reference)

Item 15

Infographic on global distribution of the world's water http://threeninetyeight.com/2010/04/29/water-infographics/

Item 16

Infographic on the water-rich and water-poor http://www.seametrics.com/blog/wp-content/uploads/2012/06/waterrichvswaterpoor.jpg

Item 17

The number of children who die every year just for lack of a daily glass of clean water is equal to the number of elementary school children in Florida. It's like losing every kid in Florida between the ages of five and twelve—every year, year after year (Fishman, 13).

Item 18

Water itself isn't becoming more scarce, it's simply disappearing from places where people have become accustomed to finding it—where they have built communities assuming a certain availability of water—and reappearing somewhere else (Fishman, 19).

Item 19

Image of graphic "The Price of H2O"

 $http://www.forbes.com/2008/07/14/california-supply-demand-oped-cx_dz_0715 water.html$

Item 20

Image of people in Delhi around a water tanker

http://cdnworldissues.edublogs.org/files/2012/05/water-shortage-in-delhi-1tdznv8.jpg

Item 21

Infographic on why you should stop drinking bottled water http://visual.ly/why-you-should-stop-drinking-bottled-water



(For Teacher Reference)

Item 22

Almost every community in the United States has water problems. The good news is, water problems can be solved, and the sooner we start thinking about them, the less expensive those solutions are. The bad news is, water problems can't be solved quickly, and when there's a water crisis, the quick solutions are expensive. Water requires thinking about the future not in sunny, optimistic terms but in frankly realistic terms (Fishman, 80-81).



(For Teacher Reference)

Item 23

If there is one truly arresting sign that our relationship to water is about to shift in fundamental ways ... it comes from Monsanto, the agri-conglomerate, and from Royal Caribbean, the cruise-ship company, it comes from Coca-Cola and Campbell Soup and Intel, from Levi Strauss and IBM, from GE and MGM Resorts. They all have that same tickle of anxiety—in corporate terms—about water security (Fishman, 117).

Item 24

It's a funny moment in the world of water—big companies, water-dependent companies, companies with a particular risk or a particular sensitivity are ahead of the rest of us in worrying about water.... It's good because it's a clear signal to the rest of us to start paying attention to water; it's good in the simplest terms of all: When the water crises start to break out more routinely, at least someone will be ready. But it should also make us nervous (Fishman, 141).

Item 25

Despite their utter reliability, our water systems are anything but robust. They are durable. But they are rigid, locked into their own assumptions of where the water will come from and where it will be needed (Fishman, 209).

Item 26

Beyond population and climate change, the other huge and growing pressure on water supplies is economic development.... Economic development requires rivers full of water, not just because people want more secure and more abundant water as their incomes improve but because modern factories and businesses use such huge volumes of water (Fishman, 16).

Item 27

The first is, water can be cleaned, always.... The second point is, you can't use up water (Fishman, 17-18).

Item 28

All water problems are local (Fishman, 19).

The problems are local, but the consequences, the damage, and the costs are anything but local. The distance we imagine between ourselves and other people's water problems is just another case of not seeing water, and our relationship to water, clearly (Fishman, 20).



Published April 2010, *National Geographic* magazine http://ngm.nationalgeographic.com/2010/04/water-is-life/kingsolver-text

The amount of moisture on Earth has not changed. The water the dinosaurs drank millions of years ago is the same water that falls as rain today. But will there be enough for a more crowded world?

- We keep an eye out for wonders, my daughter and I, every morning as we walk down our farm lane to meet the school bus. And wherever we find them, they reflect the magic of water: a spider web drooping with dew like a rhinestone necklace. A rain-colored heron rising from the creek bank. One astonishing morning, we had a visitation of frogs. Dozens of them hurtled up from the grass ahead of our feet, launching themselves, white-bellied, in bouncing arcs, as if we'd been caught in a downpour of amphibians. It seemed to mark the dawning of some new aqueous age. On another day we met a snapping turtle in his *primordial* olive drab armor. Normally this is a pond-locked creature, but some murky ambition had moved him onto our gravel lane, using the rainy week as a passport from our farm to somewhere else.
- The little, nameless creek tumbling through our hollow holds us in *thrall*. Before we came to southern Appalachia, we lived for years in Arizona, where a permanent *runnel* of that size would merit a nature preserve. In the Grand Canyon State, every license plate reminded us that water changes the face of the land, splitting open rock desert like a peach, leaving mile-deep gashes of infinite hue. Cities there function like space stations, importing every ounce of fresh water from distant rivers or fossil *aquifers*. But such is the human inclination to take water as a birthright that public fountains still may bubble in Arizona's town squares and farmers there raise thirsty crops. Retirees from rainier climes *irrigate* green lawns that impersonate the grasslands they left behind. The truth encroaches on all the fantasies, though, when desert residents wait months between rains, watching cacti tighten their belts and roadrunners skirmish over precious beads from a dripping garden faucet. Water is life. It's the *briny* broth of our origins, the pounding circulatory system of the world, a precarious molecular edge on which we survive. It makes up two-thirds of our bodies, just like the map of the world; our vital fluids are *saline*, like the ocean. The apple doesn't fall far from the tree.



- Even while we take Mother Water for granted, humans understand in our bones that she is the boss. We stake our civilizations on the coasts and mighty rivers. Our deepest dread is the threat of having too little moisture—or too much. We've lately raised the Earth's average temperature by .74°C (1.3°F), a number that sounds inconsequential. But these words do not: flood, drought, hurricane, rising sea levels, bursting levees. Water is the visible face of climate and, therefore, climate change. Shifting rain patterns flood some regions and dry up others as nature demonstrates a grave physics lesson: Hot air holds more water molecules than cold.
- The results are in plain sight along pummeled coasts from Louisiana to the Philippines as superwarmed air above the ocean brews superstorms, the likes of which we have never known. In arid places the same physics amplify evaporation and drought, visible in the dust-dry farms of the Murray-Darling River Basin in Australia. On top of the Himalaya, glaciers whose meltwater sustains vast populations are dwindling. The snapping turtle I met on my lane may have been looking for higher ground. Last summer brought us a string of floods that left tomatoes blighted on the vine and our farmers needing disaster relief for the third consecutive year. The past decade has brought us more extreme storms than ever before, of the kind that dump many inches in a day, laying down crops and utility poles and great sodden oaks whose roots cannot find purchase in the saturated ground. The word "disaster" seems to mock us. After enough repetitions of shocking weather, we can't remain indefinitely shocked.
- How can the world shift beneath our feet? All we know is founded on its rhythms: Water will flow from the snowcapped mountains, rain and sun will arrive in their proper seasons. Humans first formed our tongues around language, surely, for the purpose of explaining these constants to our children. What should we tell them now? That "reliable" has been rained out, or died of thirst? When the Earth seems to raise its own voice to the pitch of a gale, have we the ears to listen?



- A world away from my damp hollow, the Bajo Piura Valley is a great bowl of the driest Holocene sands I've ever gotten in my shoes. Stretching from coastal, northwestern Peru into southern Ecuador, the 14,000-square-mile Piura Desert is home to many endemic forms of thorny life. Profiles of this eco-region describe it as dry to drier, and Bajo Piura on its southern edge is what anyone would call driest. Between January and March it might get close to an inch of rain, depending on the whims of El Nino, my driver explained as we bumped over the dry bed of the Rio Piura, "but in some years, nothing at all." For hours we passed through white-crusted fields ruined by years of irrigation and then into eye-burning valleys beyond the limits of endurance for anything but sparse stands of the deep-rooted Prosopis pallida, arguably nature's most aridadapted tree. And remarkably, some scattered families of Homo sapiens.
- They are economic refugees, looking for land that costs nothing. In Bajo Piura they find it, although living there has other costs, and fragile drylands pay their own price too, as people exacerbate desertification by cutting anything living for firewood. What brought me there, as a journalist, was an innovative reforestation project. Peruvian conservationists, partnered with the NGO Heifer International, were guiding the population into herding goats, which eat the protein-rich pods of the native mesquite and disperse its seeds over the desert. In the shade of a stick shelter, a young mother set her dented pot on a dung-fed fire and showed how she curdles goat's milk into white cheese. But milking goats is hard to work into her schedule when she, and every other woman she knows, must walk about eight hours a day to collect water.
- Their husbands were digging a well nearby. They worked with hand trowels, a plywood form for lining the shaft with concrete, inch by inch, and a sturdy hand-built crank for lowering a man to the bottom and sending up buckets of sand. A dozen hopeful men in stained straw hats stood back to let me inspect their work, which so far had yielded only a mountain of exhumed sand, dry as dust. I looked down that black hole, then turned and climbed the sand mound to hide my unprofessional tears. I could not fathom this kind of perseverance and wondered how long these beleaguered people would last before they'd had enough of their water woes and moved somewhere else.



- 9 Five years later they are still bringing up dry sand, scratching out their fate as a microcosm of life on this planet. There is nowhere else. Forty percent of the households in sub-Saharan Africa are more than a half hour from the nearest water, and that distance is growing. Australian farmers can't follow the rainfall patterns that have shifted south to fall on the sea. A salmon that runs into a dam when homing in on her natal stream cannot make other plans. Together we dig in, for all we're worth.
- Since childhood I've heard it's possible to look up from the bottom of a well and see stars, even in daylight. Aristotle wrote about this, and so did Charles Dickens. On many a dark night the vision of that round slip of sky with stars has comforted me. Here's the only problem: It's not true. Western civilization was in no great hurry to give up this folklore; astronomers believed it for centuries, but a few of them eventually thought to test it and had their illusions dashed by simple observation.
- 11 Civilization has been similarly slow to give up on our myth of the Earth's infinite generosity. Declining to look for evidence to the contrary, we just knew it was there. We pumped aquifers and diverted rivers, trusting the twin lucky stars of unrestrained human expansion and endless supply. Now water tables plummet in countries harboring half the world's population. Rather grandly, we have overdrawn our accounts.
- In 1968 the ecologist Garrett Hardin wrote a paper called "The Tragedy of the Commons," required reading for biology students ever since. It addresses the problems that can be solved only by "a change in human values or ideas of morality" in situations where rational pursuit of individual self-interest leads to collective ruin. Cattle farmers who share a common pasture, for example, will increase their herds one by one until they destroy the pasture by overgrazing. Agreeing to self-imposed limits instead, unthinkable at first, will become the right thing to do. While our laws imply that morality is fixed, Hardin made the point that "the morality of an act is a function of the state of the system at the time it is performed." Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons.



- Water is the ultimate commons. Watercourses once seemed as boundless as those pigeons that darkened the sky overhead, and the notion of protecting water was as silly as bottling it. But rules change. Time and again, from New Mexico's antique irrigation codes to the UN Convention on International Watercourses, communities have studied water systems and redefined wise use. Now Ecuador has become the first nation on Earth to put the rights of nature in its constitution so that rivers and forests are not simply property but maintain their own right to flourish. Under these laws a citizen might file suit on behalf of an injured watershed, recognizing that its health is crucial to the common good. Other nations may follow Ecuador's lead. Just as legal systems once reeled to comprehend women or former slaves as fully entitled, law schools in the U.S. are now reforming their curricula with an eye to understanding and acknowledging nature's rights.
- On my desk, a glass of water has caught the afternoon light, and I'm still looking for wonders. Who owns this water? How can I call it mine when its fate is to run through rivers and living bodies, so many already and so many more to come? It is an ancient, dazzling relic, temporarily quarantined here in my glass, waiting to return to its kind, waiting to move a mountain. It is the gold standard of biological currency, and the good news is that we can conserve it in countless ways. Also, unlike petroleum, water will always be with us. Our trust in Earth's infinite generosity was half right, as every raindrop will run to the ocean, and the ocean will rise into the firmament. And half wrong, because we are not important to water. It's the other way around. Our task is to work out reasonable ways to survive inside its boundaries. We'd be wise to fix our sights on some new stars. The gentle nudge of evidence, the guidance of science, and a heart for protecting the commons: These are the tools of a new century. Taking a wide-eyed look at a watery planet is our way of knowing the stakes, the better to know our place.



Reader's Notes:

"Water Is Life" Paragraphs 1-5

	Date:			
Directions: Use this note-catcher to get the gist of the reading. Remember that the main idea and supporting details are often not just a single sentence of the text; rather, they may involve multiple sentences.				
Main idea:				
Supporting detail:	Supporting detail:			
Supporting detail:	Supporting detail:			
Supporting detail:	Supporting detail:			

Name:





	Reader's Notes: "Water Is Life" Paragraphs 1-5
Name:	
Date:	

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
aqueous (Paragraph 1)		
runnel (Paragraph 2)		
aquifer (Paragraph 2)	A natural well	
saline (Paragraph 2)		
arid (Paragraph 4)		
evaporation (Paragraph 4)		



Reader's Notes: "Water Is Life" Paragraphs 1-5, Teacher's Guide (For Teacher Reference)

Main idea: People need to start paying attention to how	v our actions impact water in our world.
Supporting detail: Humans assume that water is a birthright, using it for fountains in Arizona and watering lawns that wouldn't otherwise grow there.	Supporting detail: Humans' activity has raised the Earth's temperature that has caused changes to weather.
Supporting detail: There are terrible 'superstorms' because the air above the oceans is warmer.	Supporting detail: Drought has gotten worse is dry place, like the Murray-Darling river basin in Australia.
Supporting detail: Floods happen more often, causing disasters for farmers and other people.	Supporting detail:



Reader's Notes: "Water Is Life" Paragraphs 1-5, Teacher's Guide (For Teacher Reference)

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
aqueous (Paragraph 1)	Related to water	
runnel (Paragraph 2)	A small stream	
aquifer (Paragraph 2)	A natural well	
saline (Paragraph 2)	Salty	
arid (Paragraph 4)	Dry	
evaporation (Paragraph 4)	The process of liquid turning into gas	



	Unit 1		
	Name:		
	Date:		
	nd reflect on your understanding of the sustainability of your Thinking Log will ask you to explain your current		
Lesson 1 : "Water Is Life" Based on what you know so far, why are we ru	unning out of fresh water?		
What are you wondering so far about the issue	e of running out of fresh water?		





Lesson 2 : "Water Is Life" Paragraphs 1–5				
Based on Paragraphs 1–5 of "Water Is Life," why is water sustainability an issue?				
What else are you wondering about water sustainability?				



Lesson 3: "Water Is Life" Paragraphs 6–9 Reread what you wrote in Lesson 2. Based on what you read today, how have you expanded your understanding of water sustainability?				
What else are you wondering about water sustainability?				





Lesson 3: " Water Is Life" Paragraphs 6–9 Reread what you wrote in Lesson 2. Based on what you read today, how have you expanded your understanding of water sustainability?	
What else are you wondering about water sustainability?	





Lesson 4: "Water Is Life" Paragraphs 10–14 and "Why Care about Water?" Reread what you wrote in Lesson 3. Based on what you read and watched today, how have you expanded your understanding of water sustainability?	
What else are you wondering about water sustainability?	
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Lesson 6: The Big Thirst Pages 1–5 Reread what you wrote in Lesson 4. Based on what you read today, how have you expanded your understanding of water sustainability?
What else are you wondering about water sustainability?





Lesson 8: The Big Thirst Pages 12–15 and "The Future of Water" How did today's video and reading help clarify your thinking about the issue of water sustainability?		
What else are you wondering about water sustainability?		





Lesson 9: The Big Thirst Pages 12–15 and "The Future of Water" In class, you revisited the Gallery Walk from the beginning of the unit. How has revisiting the resources in the Gallery Walk clarified your thinking about the issue of water sustainability and water management?
What else are you wondering about water sustainability?





Lesson 1 : <i>The Big Thirst</i> and "Water Is Life" Using the analysis you have just completed in this lesson, decide which set of evidence (Fishman or Kingsolver) you think is stronger, and give one reason why.



Lesson 5 : <i>The Big Thirst</i> Paragraphs 112–116 Based on what you read for homework, how have you expanded your understanding of water sustainability?	
What else are you wondering about water sustainability?	



Lesson 6 : The Big Thirst Paragraphs 112–116 Based on what you read for homework, how have you expanded your understanding of water sustainability?	
What else are you wondering about water sustainability?	





Lesson 15 : End of Unit 2 Assessment: Part 1 How did the Fishbowls clarify your thinking about better ways to manage the agriculture and industrial use of water more sustainably?	



Grade 7: Module 4B: Unit 1: Lesson 2
Close Reading: Paragraphs 1–5 of "Water Is Life"





Close Reading:

Paragraphs 1-5 of "Water Is Life"

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
 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

Close Reading:

Paragraphs 1-5 of "Water Is Life"

Agenda	Teaching Notes
 Opening A. Defining "Sustainable": Frayer Model (15 minutes) Work Time A. Introducing Domain-Specific Vocabulary Anchor Chart (5 minutes) B. Text-Dependent Questions on Paragraphs 1-5 of "Water Is Life" (20 minutes) Closing and Assessment A. Thinking Log: How Has Your Thinking about Water Management Been Clarified by Reading Paragraphs 1-5? (3 minutes) B. Reviewing Learning Targets (2 minutes) Homework A. Read Paragraphs 6-9 and complete the Reader's Notes for Paragraphs 6-9 of "Water Is Life" 	 In this lesson, students begin to define the key term sustainable through the use of a Frayer model. This vocabulary work is designed to support students as they build a deeper understanding of sustainable water management, the overarching theme of the module. Be sure students hold on to this handout to refer to in future lessons. Students begin to formally focus on key vocabulary through the use of the Domain-Specific Vocabulary anchor chart. The class will add to the chart throughout Units 1 and 2. Sometimes you will define words for students, and sometimes they will need to use context clues to build a working definition of important words. In this lesson, students continue to work with Paragraphs 1–5 of "Water Is Life." They have already heard the entire article read aloud and have reread the first five paragraphs for homework (focusing on main ideas and details plus vocabulary). The close reading in this lesson guides students through text-dependent questions that focus on the central ideas of the first five paragraphs and the use of figurative language to affect the author's meaning. Along the way, students add domain-specific words to the anchor chart. The homework focuses on RI.7.2 and also helps scaffold toward the skills necessary for SL.7.2, by having students practice using the same note-catcher that students will use when listening for main ideas and details. In advance: Create and cut out the guiding question strips (one strip per student); create the Domain-Specific Vocabulary anchor chart. Post: Guiding questions, learning targets.

Close Reading:

Paragraphs 1-5 of "Water Is Life"

Lesson Vocabulary	Materials
analyze, tone, characteristics, domain-specific vocabulary; sustainable, sustainability, aqueous, primordial (Paragraph 1), thrall, runnel, aquifer, irrigate, briny, saline (Paragraph 2), levees, grave (Paragraph 3), arid, evaporation, blighted, sodden, purchase (Paragraph 4), gale (Paragraph 5)	 Sustainable: Frayer Model (one per student and one to display) Document camera Sustainable: Frayer Model (for teacher reference) "What Is Sustainability?" quote (one to display) Domain-Specific Vocabulary anchor chart (new; teacher-created) Guiding question strips (one strip per student) Model Domain-Specific Vocabulary anchor chart (for teacher reference) "Water Is Life" by Barbara Kingsolver (from Lesson 1; one per student) Paragraphs 1–5 Text-Dependent Questions (one per student and one to display) Paragraphs 1–5 Close Reading Guide (for teacher reference) Thinking Log (begun in Lesson 1; one per student) Reader's Notes "Water Is Life" Paragraphs 6–9 (one per student) Reader's Notes "Water is Life" Paragraphs 6-9, Teacher's Guide (for teacher reference)

Close Reading:

Paragraphs 1-5 of "Water Is Life"

Opening

A. Defining "Sustainable": Frayer Model (15 minutes)

- Distribute the **Sustainable: Frayer Model** handout and display it using the **document camera**. Orient students to each of the four boxes and explain that they will begin to develop a deeper understanding of what *sustainable* means over the course of the module, and they will use this Frayer model organizer to help them. Refer to **Sustainable: Frayer Model (for teacher reference)** as you guide students.
- Focus them on the lower left box, Examples. Ask:
 - * "What might be done to create a sustainable environment?"
- Let the students know that you will give them a list of examples to include in the Examples box:
 - A farmer harvests his corn, but instead of eating it all, he saves some to plant next year.
 - A town gives out free rainwater collection barrels.
 - A state creates tax breaks for businesses that install solar panels on their buildings.
- · Next, focus students on the Non-Examples box in the lower right-hand corner. Ask:
 - * "What might a person do that's the opposite of sustainable?"
- Give them this list to record:
 - In Haiti, people have cut down so many of the trees for firewood that there are not enough trees to hold the soil in place.
 - A country's government places all of its energy funding into fossil fuels.
 - $\,-\,$ A family throws all their garbage into one bin without sorting or recycling.
- Draw students' attention to the Definition box in the upper left-hand corner. Say:
 - * "Using the examples I just gave you, write the definition of the word *sustainable* in your own words. Use your knowledge from the Gallery Walk as well."
- Give students 1 or 2 minutes to complete this.
- Using the document camera, project the "What Is Sustainability?" quote (one of the Gallery Walk items from Lesson 1). Ask students to read the quote silently and to use context clues to infer the meaning of the word *sustainable*.

Meeting Students' Needs

- Guiding questions provide motivation for student engagement in the topic and give a purpose to reading a text closely.
- Consider creating a large poster of the "What Is Sustainability" quote to post throughout the module.
- Consider filling in the Frayer model Examples box ahead of time for students who may need visual or physical modifications.
- Consider selecting students
 ahead of time to take on the role
 of responder to the cold call.
 Students who need practice in
 oral response or extended
 processing time can be told the
 prompt before class begins and
 prepare for their participation.
 This also allows for a public
 experience of academic success
 for those who may struggle with
 on-demand questioning, or for
 struggling students in general.

Close Reading:

Paragraphs 1-5 of "Water Is Life"

Meeting Students' Needs

Opening (continued)

- Ask them to turn and talk to a partner:
 - * "In your own words, what do you think sustainability or sustainable means?"
- Cold call pairs of students to share their ideas.
- Together, create a class definition of the word *sustainability*. Listen for students to suggest things like "Having enough of something for the future," or "Using natural resources in a responsible way." Write the word and its definition on the **Domain-Specific Vocabulary anchor chart**. Let students know that you will explain the chart in detail in a few minutes.
- Again display the Frayer model. Draw the class's attention to the Characteristics/Explanation box in the upper right-hand corner of the handout. Ask students to turn and talk with their partner:
 - * "What characteristics or qualities does something that is *sustainable* have?"
- Cold call several pairs to share. Listen for characteristics like: "thinking about the future," "not using more of something than is needed so that there is still some in the future," "keeping the earth healthy," "using resources wisely and protecting future generations."
- On the displayed copy of the Frayer model, write down some of the characteristics students suggested. Ask them to also write these characteristics down on their own copies of the Frayer model.
- Tell the students that now that they have a completed Frayer model for the word *sustainability*, they have only one more thing to add: one example of their own, in both the Examples and Non-Examples boxes. Ask students to turn and talk to a partner and discuss:
 - * "What examples or non-examples of sustainability can you add?"
- Cold call student pairs and record some of the examples. Listen for examples such as: "recycling plastics," "turning down the thermostat," "carbon taxes"; and non-examples like: "littering," "non-local foods," "leaky faucets," "watering lawns with sprinklers that are not aimed properly," "allowing cars to burn huge amounts of fossil fuel," "dumping pollution into the ocean and rivers."
- Tell students that they will be learning more about sustainability in the coming lessons and will need to refer to their Sustainable: Frayer Model handout.

• Whenever possible, have students who need physical activity take on the active roles of managing and writing on the anchor chart, handing out the materials, or perhaps even making the necessary notes on the teacher reference sheets under the document camera.

Close Reading:

Paragraphs 1-5 of "Water Is Life"

Work Time	Meeting Students' Needs
 A. Introducing Domain-Specific Vocabulary Anchor Chart (5 minutes) Formally introduce students to the Domain-Specific Vocabulary anchor chart. Remind students that domain-specific vocabulary includes words that are not necessarily common in everyday conversation. Instead, they would hear these words when talking about specific content, as in science or social studies class. Complex informational text often contains lots of domain-specific vocabulary words. Connect the purpose of the anchor chart to the first word you have placed on it: sustainability. Ask students to read silently the vocabulary from their homework, the Reader's Notes for Paragraphs 1–5. Cold call students to share their definitions and how they determined them. Write the answers on the anchor chart and clarify as needed by referring to the Model Domain-Specific Vocabulary anchor chart (for teacher reference). Tell students that they will continue to use this anchor chart throughout this module. 	Teachers should guide this close reading as much as needed to help students gain the skills necessary to independently read closely when doing research in Unit 2. Close reading of informational texts requires perseverance and teacher support.
 B. Text-Dependent Questions on Paragraphs 1–5 of "Water Is Life" (20 minutes) Ask students to retrieve their copies of "Water Is Life." Distribute Paragraphs 1–5 Text-Dependent Questions. Use the Paragraphs 1–5 Close Reading Guide (for teacher reference) to help students work through this handout. 	

Close Reading:

Paragraphs 1-5 of "Water Is Life"

Closing and Assessment	Meeting Students' Needs
A. Thinking Log: How Has Your Thinking about Water Management Been Clarified by Reading Paragraphs 1–5? (3 minutes)	
 Ask students to get out their Thinking Logs. Read the prompt aloud: 	
* "Reread what you wrote in Lesson 1. Based on what we did today, how	
• Distribute Reader's Notes "Water Is Life" Paragraphs 6–9 . Explain that students may not find the main idea or key supporting details of "Water Is Life" in single sentences in the text. Instead, encourage them to read the entire section first before trying to identify the main ideas and details.	
B. Reviewing Learning Targets (2 minutes) Read the learning targets aloud:	
* "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.'"	
Ask students to turn and talk with a partner:	
* "What is figurative language? How might it affect the meaning of a passage?"	
• Cold call a few students to share what their partner said. Listen for something like: "language that is not literal but helps build a picture of what the author is writing about." Clarify if needed.	
Homework	Meeting Students' Needs
• Read Paragraphs 6–9 and complete the Reader's Notes "Water Is Life" Paragraphs 6–9.	



Grade 7: Module 4B: Unit 1: Lesson 2 Supporting Materials





				Sustainable:
				Frayer Model
		Name:		
		Date:		
Definition			Charact	eristics/Explanation
Examples	Sus	stainable		Non-Examples



Sustainable:

Frayer Model

Definition

Sustainable means to meet the needs of the present without changing the ability of future generations to meet their own needs.

Sustainable water management is using only the freshwater that is needed so that future generations have enough.

Characteristics/Explanation

Sustainable has the characteristics of:

- thinking about the future
- not using more of something than is needed so that there is still some in the future
- · keeping the earth healthy
- global and local perspective
- using resources wisely
- evaluating risks
- encouraging innovation

Sustainable

Examples

Non-Examples

- A farmer harvests his corn, but instead of eating it all, he saves some to plant next year.
- A town gives out free rainwater collection barrels.
- A state creates tax breaks for businesses that install solar panels on their buildings.
- recycling
- composting
- reusing items
- inventing new technologies
- harvesting rainwater

- In Haiti, people have cut down so many of the trees for firewood that there are not enough trees to hold the soil in place.
- A country's government places all of its energy funding into fossil fuels.
- A family throws all their garbage into one bin without sorting or recycling.
- littering
- non-local foods
- leaky faucets
- watering lawns with sprinklers that are not aimed properly
- allowing cars and industries to burn huge amounts of fossil fuel



What is Sustainability?

Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations. Sustainability is important to making sure that we have and will continue to have the water, materials, and resources to protect human health and our environment.



Domain-Specific Vocabulary Anchor Chart

Word	Definition





Guiding Question Strips

How can we balance the needs of people and the environment?
How can we meet basic human needs for water in a <i>sustainable</i> system?
How does human activity influence the availability of water resources?
How should humans manage water resources in a way that is equitable and <i>sustainable</i> ?



Model Domain-Specific Vocabulary Anchor Chart

(For Teacher Reference)

Word	Definition
sustainability	being aware of and responsible with our natural resources.
aqueous (Paragraph 1)	made of, by, or with water
runnel (Paragraph 2)	a tiny river or stream
aquifer (Paragraph 2) saline (Paragraph 2) arid (Paragraph 4) evaporation (Paragraph 4)	a water-bearing layer of rock, sand, or gravel capable of absorbing water consisting of or containing salt very dry; especially: not having enough rainfall to support agriculture the process of passing off or causing to pass off into vapor from a liquid state





Paragraphs 1-5 Text-Dependent Questions

	Date:
Questions	Notes
1. In Paragraph 1, Barbara Kingsolver describes the wonders that she and her daughter experience. Underline in the text the four specific wonders you see.	

Name:

- 2. In Paragraph 1, Kingsolver uses really powerful descriptive language. For each of the wonders you underlined, what is the picture you see in your head? Describe it.
- 3. Kingsolver compares a "spider web drooping with dew" to a "rhinestone necklace." How does the simile affect the meaning of the sentence?





Paragraphs 1-5 Text-Dependent Questions

		Date:
Qı	ıestions	Notes
4.	In Paragraph 2, Kingsolver says, " water changes the face of the land, splitting open rock desert like a peach, leaving mile-deep gashes of infinite hue." What does "infinite hue" mean?	
5.	What image do you see when Kingsolver describes "mile-deep gashes of infinite hue"?	

Name:

deep gashes of infinite hue"?7. What famous landmark is Kingsolver describing?

6. What is responsible for "splitting open rock desert like a peach, leaving mile-

8. Kingsolver writes in Paragraph 2, "But such is the inclination to take water as a birthright that public fountains still may bubble in Arizona's town squares and farmers there raise thirsty crops." What examples does Kingsolver include to show that humans are not using water in a sustainable way?





Paragraphs 1-5 Text-Dependent Questions

Name:	
Date:	

Questions	Notes
9. In Paragraph 3, Kingsolver writes that "humans understand in our bones that she is the boss." Who is "she," and why does Kingsolver say she is the boss?	
10. Based on her use of the words "Mother Water" and "boss" to describe water, what does Kingsolver see as humans' relationship to water?	



Paragraphs 1-5 Close-Reading Guide

(For Teacher Reference)

Time: 20 minutes

Questions	Notes
1. In Paragraph 1, Barbara Kingsolver describes the wonders that she and her daughter experience. Underline in the text the	(10 minutes) Explain to students that today they are reading closely to examine how the author uses word choice, specifically the use of figurative words and phrases, to affect the meaning and tone of her writing and to convey the central ideas of the text.
four specific wonders you see. 2. In Paragraph 1, Kingsolver	Point out that Kingsolver sometimes uses <i>figurative language</i> in this essay and remind them that figurative language is not meant
uses really powerful descriptive language. For	to be taken literally. She also uses <i>technical language</i> that is specifically related to science.
each of the wonders you underlined, what is the picture you see in your	Explain that authors often use figurative language to help their readers "see" what they want them to see in vivid or imaginative ways.
head? Describe it. 3. Kingsolver compares a	Tell students that one way to make meaning of text that is filled with metaphors and images is to explore the meaning more deeply. For example, let's take a look at Paragraph 1.
"spider web drooping with dew" to a "rhinestone necklace." How does the simile affect the meaning of the sentence?	Ask the questions one at a time. For each question, ask students to think individually and then raise their hands when they know the answer. When most of the class has a hand up, cold call several students to share out.
	Listen for students to say: 1. spider web, heron, frogs, turtle 2. descriptions of the spider web, the heron, the frogs, the turtle 3. It makes an ordinary thing like a spider web seem like a beautiful, precious thing.



Paragraphs 1-5 Close-Reading Guide

(For Teacher Reference)

Qı	ıestions	Notes
4.	In Paragraph 2, Kingsolver says, " water changes the face of the land, splitting open rock desert like a peach, leaving mile-deep gashes of infinite hue." What does "infinite hue" mean?	(5 minutes) Listen for students to say: 4. many colors, many shades of the same color 5. a canyon with rocks that are many different shades 6. water, or a river 7. the Grand Canyon. Students may not know this, so consider being prepared with a photograph to show the Grand Canyon.
5.	What image do you see when Kingsolver describes "mile- deep gashes of infinite hue"?	
6.	What is responsible for "splitting open rock desert like a peach, leaving miledeep gashes of infinite hue"?	
7.	What famous landmark is Kingsolver describing?	
8.	Kingsolver writes in Paragraph 2, "But such is the inclination to take water as a birthright that public fountains still may bubble in Arizona's town squares and farmers there raise thirsty crops." What examples does Kingsolver include to show that humans are not using water in a sustainable way?	(2 minutes) 8. using clean water for public fountains, raising crops in the desert that need a lot of water



Paragraphs 1-5 Close-Reading Guide

(For Teacher Reference)

Questions	Notes
9. In Paragraph 3, Kingsolver writes that "humans understand in our bones that she is the boss." Who is	(3 minutes) 9. "She" is Mother Water, or water in general.
"she," and why does Kingsolver say she is the boss?	10. a parent who takes care of us, an authority figure, someone who takes control; we need water; humans are obedient to water
10. Based on her use of the words "Mother Water" and "boss" to describe water, what does Kingsolver see as humans' relationship to water?	





Reader's Notes: "Water Is Life" Paragraphs 6-9

	Date:	
Directions: Use this note-catcher to get the gist of the reading. Remember that the main idea and supporting details are often not just a single sentence of the text; rather, they may involve multiple sentences.		
Main idea:		
Supporting detail:	Supporting detail:	

Name:





"Water Is Life" Paragraphs 6-9

Name:	
Date:	

Vocabulary

	Definition	Context clues: How did you figure out this word?
endemic (Paragraph 5)		
holocene (Paragraph 6)	a geological time period that began about 12,000 years ago and continues to the present day	
El Niño (Paragraph 6)	a climate pattern in which warm air develops over the Pacific. It can affect weather throughout North and South America, as well as other parts of the world.	
desertification (Paragraph 7)		
exhumed (Paragraph 8)		
beleaguered (Paragraph 8)		



Reader's Notes:

"Water Is Life" Paragraphs 6-9 (For Teacher Reference)

Directions: Use this note-catcher to get the gist of the reading. Remember that the main idea and supporting details are often not just a single sentence of the text; rather, they may involve multiple sentences.

Main idea: Bajo Piura is an example of a place that doesn't have enough water.		
Supporting detail: It is a very dry region (arid), getting only a few inches of rain a year.	Supporting detail: People came there because the land was free, but their presence has caused more desertification (because they cut down trees for firewood).	
Supporting detail: People who live there have to walk 8 hours a day to collect water.	Supporting detail: People who live there are trying to dig wells for water, but it isn't working.	



Reader's Notes:

"Water Is Life" Paragraphs 6-9 (For Teacher Reference)

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
endemic (Paragraph 5)	originating or growing or found especially or only in a certain area	a type of (thorny) life
holocene (Paragraph 6)	a geological time period that began about 12,000 years ago and continues to the present day	a type of sand
El Niño (Paragraph 6)	a climate pattern in which warm air develops over the Pacific. It can affect weather throughout North and South America, as well as other parts of the world.	affects the amount of rainfall
desertification (Paragraph 7)	the process of becoming desert (as from land mismanagement or climate change)	something that happens when people cut down trees, and by looking at the word, I see "desert"
exhumed (Paragraph 8)	removed from a place of burial	what the men are doing with the sand as they remove it to dig for the well—taking it out
beleaguered (Paragraph 8)	harassed; subjected to troublesome forces	used to describe people who are tired after building a well



Grade 7: Module 4B: Unit 1: Lesson 3
Analyzing Text Structure: "Water Is Life"
Paragraphs



Analyzing Text Structure: "Water Is Life" Paragraphs

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment	
 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 	

Analyzing Text Structure: "Water Is Life" Paragraphs

Agenda	Teaching Notes
 Opening A. Entry Task (5 minutes) Work Time A. Text-Dependent Questions on Paragraphs 6-9 of "Water Is Life" (15 minutes) B. Analyze Text Structure (15 minutes) Closing and Assessment A. Thinking Log (5 minutes) Homework A. Reread Paragraphs 10-14 of "Water Is Life" and complete the Reader's Notes for Paragraphs 10-14. 	 In this lesson, students analyze how different sections of "Water Is Life" contribute to the overall meaning of the text. "Water Is Life," unlike some informational texts, does not mark sections with headers or breaks. Instead, the text is organized around different ideas; sections are signaled by transitions. The opening of this lesson asks students to make connections between "Water Is Life" and A Long Walk to Water, the central text of Module 1. In Work Time B, students revisit analysis of juxtaposition. If just a few students in your class did not complete Module 1, give them the alternate entry task provided in the supporting materials. If your class did not read A Long Walk to Water, consider using the alternate entry task for all the students. The alternate entry task asks students to look at juxtaposition in photographs to develop an understanding of what juxtaposition is (taught in Module 1). Students need to view two images along with the alternate entry task. The images suggested are used in Module 1, Unit 2, Lesson 4, when students are first introduced to the concept of juxtaposition. Review that lesson in advance, particularly if you did not teach Module 1. If using the alternate entry task, choose two images to print or display from http://www.dpreview.com/challenges/Entry.aspx?ID=672430&View=Results &Rows=4 (images 2 and 4 are particularly helpful. Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom. In advance: Decide how you would like to pair students in Work Time B. Post: Learning targets.

Analyzing Text Structure: "Water Is Life" Paragraphs

Lesson Vocabulary	Materials
figurative language, technical language; holocene, endemic, El Niño (Paragraph 6), exacerbate, desertification (Paragraph 7), exhumed, beleaguered (Paragraph 8), microcosm, homing in, natal (Paragraph 9)	 Entry task (one per student) Alternate entry task (optional; see Teaching Note) "Water Is Life" by Barbara Kingsolver (from Lesson 1; one per student) Paragraphs 6–9 Text-Dependent Questions (one per student) Document camera Paragraphs 6–9 Close Reading Guide (for teacher reference) Analyzing Juxtaposition recording form (one per student) Thinking Log (begun in Lesson 1; one per student) Reader's Notes "Water Is Life" Paragraphs 10–14 (one per student) Reader's Notes: "Water Is Life" Paragraphs 10–14, Teacher's Guide (for teacher reference)

Analyzing Text Structure: "Water Is Life" Paragraphs

Opening	Meeting Students' Needs
A. Entry Task (10 minutes) (See teaching note regarding alternate entry task) • As students enter, distribute the entry task.	
* "Think back to A Long Walk to Water, the story of Salva and Nya that you read in Module 1. What connections can you make between A Long Walk to Water and Paragraphs 6–9 of "Water Is Life"?	
• Give students 3 or 4 minutes to write their responses. Cold call several to share their answers. Listen for: "Nya had to walk many hours each day to get water, and so do the people in Baja Piura," "In 'Water Is Life,' the people of the village are digging a well. In Nya's village, they dig a well also," or "In both texts, the girls and women are the ones who walk to collect the water."	
Read the learning targets aloud:	
st "I can determine the meaning of figurative and technical language in 'Water Is Life.'"	
st "I can analyze how a major section of 'Water Is Life' contributes to the development of ideas."	
• Ask students to turn and talk with a partner about what a "major section" of a text might be. Cold call pairs and listen for: "A major section can be a paragraph or several paragraphs of a text." Clarify if needed. Explain that in this lesson, students will analyze a major section of "Water Is Life": Paragraphs 6–9.	



Analyzing Text Structure: "Water Is Life" Paragraphs

Work Time	Meeting Students' Needs
 A. Text-Dependent Questions on Paragraphs 6-9 of "Water Is Life" (15 minutes) Ask students to take out their "Water Is Life" article. Distribute Paragraphs 6-9 Text-Dependent Questions and display a copy on a document camera. Work through this handout in concert with the Paragraphs 6-9 Close Reading Guide (for teacher reference). 	
B. Analyzing Structure(15 minutes)	
• Remind students that <i>juxtapose</i> means to put things next to each other, especially for the purpose of comparing them and to support the author's central idea. If the students did Module 1, prompt them to remember how author Linda Sue Park juxtaposes the perspectives of Salva and Nya in <i>A Long Walk to Water</i> . Explain that in this lesson, they will analyze juxtaposition in "Water Is Life" and how this juxtaposition contributes to the overall meaning of the text.	
 Pair students up. Assign each pair to reread either Paragraphs 1–5 or Paragraphs 6–9 of "Water Is Life." 	
• Tell students that as they reread with their partners, they should underline words and phrases that describe what the environment is like. Give a brief example:	
* "In the first paragraph, Kingsolver describes what she and her daughter see in the morning as they walk to the school bus: 'a spider web drooping with dew.' That describes something about the setting in that section of the text."	
• Invite students to begin. As they work, distribute the Analyzing Juxtaposition recording form. Ask them to write the words that they underlined in the appropriate column.	
• Once pairs have finished the paragraphs they are assigned, form groups of four made up of one pair who focused on Paragraphs 1–5 and another who focused on Paragraphs 6–9.	
Give directions for these new groups of four:	
1. The pair that read Paragraphs 1–5 shares the words and phrases that they underlined.	
2. The other pair adds these words to their Analyzing Juxtaposition recording form.	
3. Pairs switch roles. The pair that read Paragraphs 6–9 shares their words while the other pair adds the words to their recording forms.	
4. Everyone in each group should have words and phrases written in both columns.	

Analyzing Text Structure: "Water Is Life" Paragraphs

Work Time (continued)	Meeting Students' Needs
Prompt groups to work together to answer the questions:	
* "What is the setting of the essay like in Paragraph 1?"	
* "What is the setting of the essay like in Paragraph 6?"	
* "Why might Kingsolver juxtapose these settings? How does this help her make the point that water sustainability is important for everyone to care about?"	
• When students are finished, refocus them whole group. Cold call groups to share their answers to the three questions. Listen for:	
1. "The setting of Paragraph 1 is very wet. Kingsolver uses words like 'aqueous' and 'rainy.'"	
2. "In Paragraph 6, the setting is the Baja Piura desert, which is very dry. Kingsolver uses 'driest Holocene sands,' 'thorny life,' 'eye-burning valleys' and 'arid-adapted tree.' Life is not easy there."	
3. "Kingsolver juxtaposes these to show how important water is. She makes the point that even though we might live where water is plentiful, there are many people who live in places where water is scarce, so water sustainability is important for everyone to care about."	

Analyzing Text Structure: "Water Is Life" Paragraphs

Meeting Students' Needs
Checking in with learning targets helps students self-assess their learning.
Meeting Students' Needs

LEARNING



Grade 7: Module 4B: Unit 1: Lesson 3 Supporting Materials





	Entry Task	
	Name:	
	Date:	
Think back to <i>A Long Walk to Water</i> , the story of What connections can you make between <i>A Long</i> Life"?		
		_
		-
		_
		_
		-
		-
		_
		_
		_
		_



Alternate Entry Task
Name:
Date:
n. Juxtaposition means "to put things next to each m." Choose one of the images and identify what two t might the photographer be trying to make by



Paragraphs 6-9 Text-Dependent Questions

Date:		
Questions	Notes	
In Paragraph 6, Kingsolver writes, "For hours we passed through white-crusted fields ruined by years of irrigation and then into eye-burning valleys beyond the limits of endurance for anything but sparse stands of the deep-rooted <i>Prosopis pallida</i> , arguably nature's most arid-adapted tree. And remarkably, some scattered families of <i>Homo sapiens</i> ."		
1. What does Kingsolver mean by "eve-burning valleys"?		

Name:

2. What does it mean that the tree

3. What are Homo sapiens? Why

might Kingsolver use this term?

Prosopis pallida is "arid-adapted"?





Paragraphs 6-9 Text-Dependent Questions

Questions	Notes
4. Reread the first sentence of Paragraph 7. Why do people live in Baja Piura?	
5. Kingsolver says that the "fragile drylands pay their own price too." What does she mean by that?	
6. Kingsolver came to the desert to learn about "an innovative reforestation project." What was the purpose of the project? Why do you think reforestation in a desert is innovative?	
7. Explain what Kingsolver means when she writes, "I climbed" Why do you think Kingsolver had tears in her eyes? What experiences has she shared in earlier parts of the text that might make her	

Name:

Date:

feel sad for the people living in

the desert?





Paragraphs 6-9 Text-Dependent Questions (For Teacher Reference)

Name:		
Date:		

Questions	Notes
In Paragraph 6, Kingsolver	(10 minutes)
writes, "For hours we passed	Say to students:
through white-crusted fields ruined by years of irrigation	* "Please read in your heads while I read along with you aloud."
and then into eye-burning valleys beyond the limits of endurance for anything but	Read Paragraphs 6–9 without pausing for questions. When you are finished, pause.
sparse stands of the deep-	Point out that Kingsolver sometimes uses <i>figurative language</i> in
rooted <i>Prosopis pallida</i> , arguably nature's most aridadapted tree. And remarkably, some scattered	this essay and remind students that figurative language is not meant to be taken literally. She also uses <i>technical language</i> that is specifically related to science.
families of <i>Homo sapiens</i> ." 1. What does Kingsolver mean by "eye-burning	Ask the questions one at a time. For each question, ask students to think individually and then raise their hands when they know the answer. When most of the class has a hand up, cold call several students to share out.
valleys"?	Listen for:
	1. "The land was white and the sun was bright, so it was hard to look at. This is figurative language—the valleys don't literally burn eyes."
2. What does it mean that	
the tree <i>Prosopis pallida</i> is	2. "The tree is able to live in a very dry place. This is technical
"arid-adapted"?	language—Prosopis pallida is the scientific name of a specific tree."



Paragraphs 6-9 Text-Dependent Questions

(For Teacher Reference)

Qu	iestions	Notes
3.	What are <i>Homo sapiens</i> ? Why might Kingsolver use this term?	3. "Homo sapiens are people. Kingsolver might have used this term because it is scientific, just like calling the trees Prosopis pallida instead of by their common name. It makes it clear that humans are part of nature too. This is technical language; it is the scientific name for humans."





Paragraphs 6-9 Text-Dependent Questions (For Teacher Reference)

Name:		
Date:		

Questions	Notes
4. Reread the first sentence of Paragraph 7. Why do people live in Baja Piura?	(10 minutes) 1. "People live in Baja Piura because they don't have to pay much to live there."
5. Kingsolver says that the "fragile drylands pay their own price too." What does she mean by that?	 "Kingsolver means that the people who live there cut down trees for firewood. That has a negative effect on the land—it makes it even more like a desert." "Innovative means a new way of thinking. The purpose of the project is to help more tress grow in the desert. It's innovative because it doesn't seem like it would be necessary, since not many trees grow in the desert anyway."
6. Kingsolver came to the desert to learn about "an innovative reforestation project." What was the purpose of the project? Why do you think reforestation in a desert is innovative?	 4. "Kingsolver means she was upset that people lived in a place where they had to work so hard to survive. She admires their perseverance. Her tears are unprofessional because she is a journalist, so she is there doing a job to report on the reforestation project." Before moving on to the next part of the lesson, invite students to turn and talk to a partner about the meaning of Paragraphs
7. Explain what Kingsolver means when she writes, "I climbed" Why do you think Kingsolver had tears in her eyes? What experiences has she shared in earlier parts of the text that might make her feel sad for the people living in the desert?	6–9 to solidify their understanding.





	Analyzing Juxtaposition
	Name:
	Date:
Words and Phrases that Describe the Setting Paragraph 1 of "Water is Life"	Words and Phrases that Describe the Setting Paragraph 6 of "Water Is Life"
1. What is the setting of the essay like in Paragrap	h 1?
2. What is the setting of the essay like in Paragrap	oh 6?
3. Why might Kingsolver juxtapose these settings'	? How does this help her make the point that water

sustainability is important for everyone to care about?





Reader's Notes:

"Water Is Life" Paragraphs 10-12

	Date:	
Directions: Use this note-catcher to get the gist of the reading. Remember that the main idea and supporting details are often not just a single sentence of the text; rather, they may involve multiple sentences.		
Main idea:		
Supporting detail:	Supporting detail:	

Name:





"Water Is Life" Paragraphs 10-12

Name:	
Date:	

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
self-imposed (Paragraph 12)		
commons (Paragraph 13)		
watershed (Paragraph 13)		
relic (Paragraph 14)	something old that has survived until today	
quarantined (Paragraph 14)		
firmament (Paragraph 14)	the sky or the heavens	





Reader's Notes: "Water Is Life" Paragraphs 10-12 (for Teacher Reference)

Name:	
Date:	

Directions: Use this note-catcher to get the gist of the reading. Remember that the main idea and supporting details are often not just a single sentence of the text; rather, they may involve multiple sentences.

Main idea: People need to change how they think about and use water.		
Supporting detail: Humans have treated water like it will always be available to us.	Supporting detail: Humans need to think of the Tragedy of the Commons, where an ecologist pointed out that if farmers using a common pasture each increased their cattle herd by one cow, then there wouldn't be enough pasture left to feed any of them.	
Supporting detail: Water is also a common resource, so we need to protect it.	Supporting detail: Ecuador has put the rights of nature into its constitution.	
Supporting detail: Water will always exist on Earth, unlike gas or oil.	Supporting detail: Humans have to live within the limits of water.	
Supporting detail: Humans need to look at water differently.	Supporting detail:	



Reader's	Notes:	"Water	Is Life"	Paragraphs	10-12
			(for T	eacher Refe	rence)

Name:
Date:

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
self-imposed (Paragraph 12)	Something you require of yourself (and not someone else making you do something)	
commons (Paragraph 13)	A resource that everyone shares	
watershed (Paragraph 13)	The area where the water in a river or lake comes from	
relic (Paragraph 14)	something old that has survived until today	
quarantined (Paragraph 14)	Kept separate	
firmament (Paragraph 14)	the sky or the heavens	



Grade 7: Module 4B: Unit 1: Lesson 4
Analyzing Main Ideas and Details: Why Care about Water?





Analyzing Main Ideas and Details
Why Care about Water?

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
 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

Agenda	Teaching Notes
 Opening A. Entry Task (5 minutes) Work Time A. Text-Dependent Questions on Paragraphs 10-12 of "Water Is Life". (20 minutes) B. Analyzing Main Ideas and Supporting Details in "Why Care about Water?"(15 minutes) Closing and Assessment A. Thinking Log(5 minutes) Homework A. Reread Paragraphs 13 and 14 and complete Paragraphs 13-14 Text-Dependent Questions. 	 In this lesson, students answer text-dependent questions on Paragraphs 10–12 of "Water Is Life." The homework assignment on Paragraphs 13 and 14 is a continuation of this close reading, so it is intentionally included on the same handout. Note, however, that the Teacher's Guide for the homework, is a separate supporting materials following to Close Reading Guide. By now, students are familiar with the structure of Main Ideas and Details note-catcher from the Reader's Notes. In this lesson, they use is on its own as they watch "Why Care about Water?" to practice the skill of listening for main ideas and supporting details (SL.7.2). In advance: Consider how you would like to pair students for this lesson; set up a projector and speakers to play the video; cue up "Why Care about Water?" (see link in supporting materials); review Paragraphs 10–12 of "Water Is Life." Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom. Post: Learning targets.



Lesson Vocabulary	Materials
water sustainability, water management; folklore (Paragraph 10), water table (Paragraph 11), relic (Paragraph 14) hydrosphere, myriad, agriculture (video)	 Domain-Specific Vocabulary anchor chart (begun in Lesson 1) "Water Is Life" by Barbara Kingsolver (from Lesson 1; one per student) Document camera Paragraphs 10–12 Text-Dependent Questions (one per student) Paragraphs 10–12 Close Reading Guide (for teacher reference) Homework: Paragraphs 13–14 Text-Dependent Questions, Teacher's Guide (for teacher reference) Video: "Why Care about Water" Main Idea and Details note-catcher (one per student) Main Idea and Details note-catcher (for teacher reference) Thinking Log (begun in Lesson 1; one per student)

Opening	Meeting Students' Needs
A. Entry Task (5 minutes)	
• As students enter, direct them to sit with a partner. Invite them to compare their definitions from their homework, Reader's Notes "Water Is Life" Paragraphs 10–14, as well as from the previous Reader's Notes homework on Paragraphs 6–9.	
• After 2 minutes, refocus whole class. Ask students to put stars by words that are domain-specific.	
 Cold call pairs to share their domain-specific words and definitions. Add these words to the Domain-Specific Vocabulary anchor chart as students share. Clarify terms as needed. 	
Read the learning targets aloud:	
* "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."	
• Ask:	
* "What note-catcher do you think you will use to analyze the main ideas and details in a video?"	
• Wait a moment, then cold call a student. Listen for: "the main ideas and details note-catcher that we use as a part of our Reader's Notes for homework."	

Work Time	Meeting Students' Needs
• Ask students to retrieve their copy of "Water Is Life." Display (using a document camera) and distribute Paragraphs 10–12 Text-Dependent Questions. Work through this handout in concert with the Paragraphs 10–12 Close Reading Guide (for teacher reference)	 While students are working in pairs, consider checking in with those who struggle reading complex texts. Paragraph 12 has some challenging concepts, such as "sin" and "moral." Consider providing concrete examples for students who struggle with abstract thinking.

Work Time (continued)	Meeting Students' Needs
 B. Analyzing Main Idea and Supporting Details in "Why Care about Water?" (15 minutes) Explain to students that you will play a short video from the National Geographic website called "Why Care about Water?" that is about the management and sustainability of water. 	
• Distribute Main Idea and Details note-catcher . Let students know that they will watch the video three times. The first time through, they should listen for the main idea.	
• Play the short video: "Why Care about Water" once:	
• Ask students to write down what they think the main idea is on their note-catchers. Cold call one or two to share the main idea. Listen for them to say the main idea is that we need to change the way we use water.	
• Explain that students will watch the video two more times, just as they would reread a text. As they watch again, ask them to write down the details that support the main idea.	
Play the video a second time.	
• Then give students about 2 minutes to add to their Main Idea and Details note-catcher.	
• Play the video a third time, again giving students a few minutes to add to their notes. Point out that close listening, like close reading, means that you often notice more details and deepen your understanding each time you watch a video like this.	
 After students have finished writing, ask them to form groups of three and compare their work. Encourage them to talk about any discrepancies in their answers and revise their work accordingly. 	
• Cold call students to share the supporting details. Refer to Main Idea and Details note-catcher (for teacher reference) for possible responses.	



Closing and Assessment	Meeting Students' Needs
 A. Thinking Log (5 minutes) Ask students to get out their Thinking Logs. Read the prompt aloud: 	
* "Reread what you wrote in Lesson 3. Based on what you read and watched today, how have you expanded your understanding of water sustainability? What else are you wondering about water sustainability?"	
• Point out to students that the homework is a continuation of the work they did in class. Remind them to take their copy of "Water Is Life" home with them to complete it.	
Homework	Meeting Students' Needs
• Reread Paragraphs 13 and 14 and complete Paragraphs 13-14 Text-Dependent Questions	



Grade 7: Module 4B: Unit 1: Lesson 4 Supporting Materials





Domain-Specific Vocabulary Anchor Chart

(for Teacher Reference)

Word	Definition
sustainability	being aware of and responsible with our natural resources.
aqueous (Paragraph 1)	made of, by, or with water
runnel (Paragraph 2)	a tiny river or stream
aquifer (Paragraph 2)	a water-bearing layer of rock, sand, or gravel capable of absorbing water
saline (Paragraph 2)	consisting of or containing salt
arid (Paragraph 4)	
evaporation (Paragraph 4)	very dry; <i>especially</i> : not having enough rainfall to support agriculture
holocene (Paragraph 6) El Niño (Paragraph 6)	the process of passing off or causing to pass off into vapor from a liquid state
	The current geological era
desertification (Paragraph 7)	A warm ocean current that flows along the equator and affect weather.
watershed (Paragraph 13)	
	The process of becoming a desert
	The area where water flows into a particular river or body of water





Paragraphs 10-12 Text-Dependent Questions

Date:		
Questions	Notes	
1. What is the <i>folklore</i> that Kingsolver writes about in Paragraph 10?		
2. What does Kingsolver mean when she says, "Astronomers believed it for centuries, but a few of them eventually thought to test it and had their illusions dashed by simple observation"?		
3. According to Kingsolver, what other myth do people still believe?		
4. A water table is the level of water in the ground in a particular place. Kingsolver writes, "Now water tables plummet in countries harboring more than half the world's population." Put that sentence into your own words.		

Name:





Paragraphs 10-12 Text-Dependent Questions

 BT 4	
	Date:
	Name:

Qı	uestions	Notes
5.	Passenger pigeons were common birds that are extinct because of overhunting and destruction of habitat. What does Kingsolver mean when she writes, "Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons"?	
6.	Kingsolver writes about "The Tragedy of the Commons," which claims that some "problems can be solved only by 'a change in human values or ideas of morality." Explain what "human values or ideas of morality" means.	
7.	In Paragraph 12, what is Kingsolver comparing the destruction of a cattle pasture to? How does this paragraph expand on the ideas in Paragraphs 10 and 11?	





Paragraphs 10-12 Close Reading Guide (for Teacher Reference)

Date:		
Questions	Notes	
Homework: Paragraphs 13-14 Text-Dependent Questions		
Complete these text-dependent questions for homework.		
Reread Paragraph 13.		
1. What does Kingsolver mean when she writes, "Watercourses once seemed as boundless as those pigeons that darkened the sky overhead"?		
2. What was Ecuador the first country to do?		

Name:





Paragraphs 10-12 Close Reading Guide

(for Teacher Reference)

Date:		
Questions	Notes	
Reread Paragraph 14.		
3. How does that relate to the ideas in Paragraph 12?		
4. A <i>relic</i> is something that has survived from another time. What is the "ancient, dazzling relic" in this paragraph?		
5. According to Kingsolver, what do humans need to do?		

Name:





Paragraphs 10-12 Close Reading Guide (for Teacher Reference)

	Date:		
Qı	uestions	Notes	
1.	What is the <i>folklore</i> that Kingsolver writes about in Paragraph 10?	(5 minutes) Invite students to read along silently while they listen to Paragraph 10 read aloud.	
		Direct them to work with their partner to answer Questions 1 and 2 on the Paragraphs 10–12 Text-Dependent Questions handout.	
2.	What does Kingsolver mean when she says, "Astronomers believed it for centuries, but a few of them eventually thought to test it and had their illusions dashed by simple	Circulate as pairs work. If students are confused, help clarify by saying things like: * "Another example of folklore is the tale of Johnny Appleseed." * "What are astronomers?" * "What are illusions?" * "What does it mean to have 'illusions dashed'?"	
	observation"?	Once students have answered Questions 1 and 2, refocus them whole class. Cold call pairs to share their answers. Listen for: 1. "The folklore that Kingsolver mentions is the belief that if you	

they found out it was wrong."

is."

Name:

are in a well, you can see the stars, no matter what time of day it

2. "Kingsolver means that scientists believed that you could see stars from the bottom of a well, but when they tested their theory,





Paragraphs 10-12 Close Reading Guide (for Teacher Reference)

Name:	
Date:	

Questions	Notes
3. According to Kingsolver, what other myth do people still believe?	Repeat the same steps as above, beginning with reading Paragraph 11 aloud. As students work in pairs, circulate. If they are confused, help clarify by asking:
4. A water table is the level of water in the ground in a particular place. Kingsolver writes, "Now water tables	 * "What was the myth that Kingsolver focused on in Paragraph 10?" * "What does <i>infinite</i> mean? What is <i>generosity</i>?" * "Look at the context. What does <i>harboring</i> mean? What does <i>plummet</i> mean?"
plummet in countries harboring more than half the world's population." Put that sentence into your own words.	Once students have answered Questions 3 and 4, refocus them whole class. Cold call pairs to share their answers. Listen for: 3. "The other myth is that people believe we will always have access to water." 4. "The level of groundwater has gone down in countries where more than half the people in the world live."





Questions

Paragraphs 10-12 Close Reading Guide (for Teacher Reference)

Name:	
Date:	

5. Passenger pigeons were common birds that are extinct because of overhunting and destruction of habitat. What does Kingsolver mean when she writes, "Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons"?

6. Kingsolver writes about "The Tragedy of the Commons," which claims that some "problems can be solved only by 'a change in human values or ideas of morality." Explain what "human values or ideas of morality" means.

Notes

Repeat the same steps for Paragraph 12, Questions 5–7. If students are confused, clarify by saying things like:

- * "What is a 'sin'?"
- * "An example of a human value is the belief that honesty is important."
- * "An example of morality is the belief that humans should not kill each other."
- * "Refer to your homework. What does commons mean?"

Once students have answered Questions 5–7, refocus them whole class. Cold call pairs to share their answers. Listen for:

- 5. "Passenger pigeons were very common, so hunting them for food was acceptable. Now, it seems terrible that people hunted them so much because they are extinct."
- 6. "Human values or ideas of morality are some of the ways humans make decisions about how to behave and what is right and wrong."
- 7. "Kingsolver is comparing the destruction of a cattle pasture to the way humans are using water. It relates to the idea of water sustainability and that people think we can't run out of water, but we will not have access to water if we overuse it, like the cattle overgrazing in the pasture."





Paragraphs 10-12 Close Reading Guide (for Teacher Reference)

Name:
Date:

Questions	Notes
7. In Paragraph 12, what is Kingsolver comparing the destruction of a cattle pasture to? How does this paragraph expand on the ideas in Paragraphs 10 and 11?	Once the students have shared their answers, ask them to turn and talk to their partner: * "How do you think this section of text contributed to the meaning of the essay overall?" Cold call a pair to share their thinking. Listen for them to say: "Kingsolver uses the idea that water is a shared resource as another way to support the idea that we need to change the way we use water in our lives."





Questions

Paragraphs 10-12 Close Reading Guide (for Teacher Reference)

Date:	
3-14 Text	t-Dependent Questions
-	cted passenger pigeons to become extinct, ect us to run out of water.
was the firs	st country to include the rights of nature in
le of what	decided that nature has rights of its own, it Kingsolver wrote in paragraph 12, where bout nature differently and put limits on

survived from another time. What is the "ancient.

4. A *relic* is something that has

Complete these text-dependent

1. What does Kingsolver mean

as boundless as those

"Watercourses once seemed

pigeons that darkened the

2. What was Ecuador the first

3. How does that relate to the ideas in Paragraph 12?

questions for homework.

Reread Paragraph 13.

when she writes.

sky overhead"?

country to do?

Reread Paragraph 14.

dazzling relic" in this paragraph?

5. According to Kingsolver, what do humans need to do?

Homework: Paragraphs 1

Name:

Notes

1. Humans n and humans

- 2. Ecuador v its constituti
- 3. Since Ecu is an examp people need themselves.
- 4. The 'ancient, dazzling relic' is the water in Kingsolver's glass.
- 5. Humans need to change the way we view and use water.



"Why Care about Water?" Link

http://video.nationalgeographic.com/video/environment/freshwater/env-freshwater-whycare/



Main Idea and Details Note-catcher

	Name:	
	Date:	
Name of Text/Video: "Why Care about Water?"		
Author or Speaker's Name: National Geographic		
Main idea:		
Supporting detail:	Supporting detail:	
Supporting detail:	Supporting detail:	
Supporting detail:	Supporting detail:	





Main Idea and Details Note-catcher

(For Teacher Reference)

	Name:
	Date:
Name of Text/Video: "Why Care about Water?"	
Author or Speaker's Name: National Geographic	
Main idea: We need to change the way we use water.	
Supporting detail: Less than 1 percent of all water is available to use for drinking, agriculture, industry, and nature.	Supporting detail: More than 1 billion people don't have access to safe drinking water.
Supporting detail: All of our water resources are connected. Water that runs in the Ganges could end up in the Hudson River.	Supporting detail: It takes twice the global average of water use to sustain the American lifestyle.
Supporting detail: Seventy percent of our water use is for agriculture.	Supporting detail: The Colorado River no longer runs to the sea.



Grade 7: Module 4B: Unit 1: Lesson 5
Mid-Unit Assessment: Listening for Main Ideas and
Supporting Details





Mid-Unit Assessment:

Listening for Main Ideas and Supporting Details

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
 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

1 Opening	• This lesson marks the end of close reading of "Water Is Life" and includes the Mid-Unit 1 Assessment.
A. Entry Task: Introducing Vocabulary (3 minutes) 2. Work Time A. Main Idea and Details in "Why College Students Should Start Paying Attention to Water" (15 minutes) B. Mid-Unit 1 Assessment (22 minutes) 3. Closing and Assessment A. Turn in Mid-Unit Assessment and Preview Homework (3 minutes) 4. Homework	Students watch a video and analyze its main ideas and details and then show how those ideas clarified their thinking (SL.7.2). Work Time A give them an opportunity to hone their skills before they take the assessment. • This lesson and the assessment rely on two short videos—both under 2 minutes—that feature author Charles Fishman, whose book students will begin in the Lesson 6. In this way, the lesson and assessment serve as an introduction to the topics and the author of the book. • To perform well on the assessment, students must understand the words <i>global</i> and <i>crises</i> , as detailed on the entry task. • In advance: Project or write on the board the two sentences with the new vocabulary words (see Opening); set up projector and speakers to play video, preview both videos, and cue up both videos. • Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom. • Post: Learning targets.



Mid-Unit Assessment:

Listening for Main Ideas and Supporting Details

Lesson Vocabulary	Materials			
global, crises	Analyzing Main Idea and Details note-catcher (one per student)			
	Projector and speakers for playing video clips			
	• Video: "Why College Students Should Start Paying Attention to Water"			
	• Mid-Unit 1 Assessment: "The Water Crisis Isn't Global. It's Local": Listening for Main Ideas and Supporting Details (one per student)			
	• Mid-Unit 1 Assessment: "The Water Crisis Isn't Global. It's Local": Listening for Main Ideas and Supporting Details (answers, for teacher reference)			
	• Video: "The Water Crisis Isn't Global. It's Local"			
	• "Water Is Life" writing prompt (one per student)			
	Model Response: "Water Is Life" Writing Prompt			



Mid-Unit Assessment:

Listening for Main Ideas and Supporting Details

Opening	Meeting Students' Needs
 A. Entry Task: Introducing Vocabulary (3 minutes) Direct students' attention to two sentences written on the board (or projected): 	Posting learning targets allows students to reference them
* "There is no <i>global</i> water crisis. All water <i>crises</i> are local."	throughout the lesson to check their
Explain that a crisis is a catastrophic or terrible event or situation.	understanding. They also provide a reminder to students and teachers
Ask students to turn to a partner and discuss:	about the intended learning behind
* "What does the word <i>global</i> mean?"	a given lesson or activity.
* "What is the difference between <i>crisis</i> and <i>crises</i> ?"	
• Cold call students to share their responses. Listen for them to define <i>global</i> as "worldwide" and <i>crises</i> as "more than one crisis." Clarify as needed.	
• Tell students that these words will appear on their mid-unit assessment today. Write these definitions on the board so they can refer to them.	
B. Reviewing Learning Targets(2 minutes)	
Read the learning targets aloud:	
* "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."	
• Remind students that as they learn more details about water usage and sustainability, they are clarifying and refining their understanding of the topic.	
Explain today's agenda:	
* "Today, you will watch another short clip about water to practice identifying the main idea and supporting details before you take your mid-unit assessment. The assessment will ask you to combine your skills of analyzing the main idea and details in a video, which you've been practicing, and then explaining how the new information has clarified your understanding of the topic of water sustainability."	
Before moving on to Work Time, ask students if they have any questions.	

Mid-Unit Assessment:

Listening for Main Ideas and Supporting Details

Work Time Meeting Students' Needs

A. Main Idea and Details in "Why College Students Should Start Paying Attention to Water" (15 minutes)

- Distribute the Analyzing Main Idea and Details note-catcher to each student.
- Remind them that this is their final practice round with this organizer before it appears on their Mid-Unit 1 Assessment. This practice round is an opportunity for them to work together to make sure they have mastered this skill.
- Explain that you will play a short video (only 1 minute and 14 seconds) of an author, Charles Fishman, as he gives a quick talk about water. Tell students that Fishman is the author of the book they will start reading in the next class, *The Big Thirst*.
- Instruct students to take out something to write with and prepare to watch the video. Tell them that, as in the previous lesson, they will watch and listen to the video several times.
- Set purpose: On their first viewing, they should listen for the main idea.
- Play the video: "Why College Students Should Start Paying Attention to Water" (http://www.youtube.com/watch?v=XM7S0_Qi3B4) once.
- Ask students to write down what they think the main idea is on their note-catchers.
- Tell students you will play the video two more times. On these rounds, ask them write down the details Fishman provides to support his main idea.
- Play the video a second time, then pause to give students a few minutes to write.
- Play the video a third time. Again, pause so students can take notes.
- Direct them to bring their note-catchers, a book or folder to write on, and a pen or pencil as they stand up and find a partner who is not their usual seat partner.
- Once students have a partner, ask them to stay standing as they share their main ideas with each other. Give them 30 seconds to do so.
- Ask students to raise their hands if their answers were not the same as or similar to their partner's answer. If any students have their hands raised, call on them to share their main idea so that you can offer clarification.
- If no one raises a hand, cold call a student to share the main idea. Listen for: "College students will have to pay attention to water more than they ever have."

- You may need to partner up with a student or a group of students to guide them and check understanding.
- Consider providing transcripts of Charles Fishman's videos for ELLs or students who struggle with auditory processing.
- For English Language Learners, consider providing a vocabulary list of terms from the video that might be unfamiliar for them. Also, consider playing the video one or two more times in order for ELLs to have more chances at auditory comprehension.
- If students receive additional accommodations for assessment, communicate with the cooperating service providers regarding the practices of instruction in use during this study, as well as the goals of the assessment.



Mid-Unit Assessment:

Listening for Main Ideas and Supporting Details

Work Time (continued)	Meeting Students' Needs
Instruct students to write this idea down if they haven't already.	
Then have them turn around and quickly find a new partner who is standing near them.	
• Invite partners to share their supporting details with each other for 2 minutes.	
• Cold call students to share out details. Listen for: "Everything is related to water, from economic growth, to climate change, to whether lakes and rivers are swimmable," "The richer people get, the more water they use and need," and "The current generation is going to have to pay attention to something that previous generations didn't have to think about at all."	
Ask students to thank their partners, return to their seats, and put all their materials away except for a writing utensil.	
B. Mid-Unit 1 Assessment (22 minutes)	
 Distribute the Mid-Unit 1 Assessment: "The Water Crisis Isn't Global. It's Local": Listening for Main Ideas and Supporting Details. 	
• Explain that the assessment has four parts. Students should follow the directions for each part.	
• Focus them on Part 1:	
* "In Part 1, please respond to the prompt about your current thinking about water sustainability."	
• Give students 3 minutes to complete Part 1 of the assessment as you set up the video: "The Water Crisis Isn't Global. It's Local" (http://www.youtube.com/watch?v=lZxVyIiPDsA).	
• Give directions for Parts 2–4 of the assessment:	
1. You will view this short video three times. As you watch the video clip (it is 2 minutes long), fill out Part 2, the graphic organizer, just as we have been practicing.	
2. After you have seen the video three times, you may move on to Parts 3 and 4 of the assessment.	
3. When you are done, please turn in your assessment.	
• Play the video up to 1:54 and press stop.	
• Allow students a minute to write before playing it again. Repeat, playing it a total of three times.	
• Allow time for students to move on to Parts 3 and 4.	



Mid-Unit Assessment:

Listening for Main Ideas and Supporting Details

Closing and Assessment	Meeting Students' Needs
 A Turn in Mid-Unit Assessment and Preview Homework (3 minutes) Collect students' assessments. 	
• Preview the homework. Distribute the "Water Is Life" writing prompt and read it aloud to the class:	
* "In her article, Kingsolver states that 'water is life.' Based on your reading of Kingsolver's article, as well as the videos you've watched, write a paragraph in which you explain what this statement means. In your paragraph, be sure to provide a main idea and three to five supporting details."	
Address any clarifying questions.	
Homework	Meeting Students' Needs
Respond to the "Water Is Life" writing prompt.	



Grade 7: Module 4B: Unit 1: Lesson 5 Supporting Materials





Analyzing Main Idea and Details Note-catcher Name: Date:

Name of Text/Video: "Why College Students Should Start Paying Attention to Water"			
Author or Speaker's Name: Charles Fishman			
Main idea:			
Supporting detail:	Supporting detail:		
Supporting detail:	Supporting detail:		
Supporting detail:	Supporting detail:		





Mid-Unit 1 Assessment: "The Water Crisis Isn't Global. It's Local": Listening for Main Ideas and Supporting Details

Name:		
Date:		

Learning target: I can analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. (**SL.7.2**)

Part 1: My Current Thinking

Do you think that water sustainability is a global issue? Explain your answer.

Part 2: Informational Video Clip

1 urt 2. 111101111utt011ut 1 tuco 011p				
DIRECTIONS: Watch the video clip and fill out the graphic organizer below.				
Name of Video: "The Water Crisis Isn't Global. It's Local"				
Author or Speaker's Name: Charles Fishman				
Speaker's main idea:				
Supporting detail:	Supporting detail:			
Supporting detail:	Supporting detail:			
Supporting detail:	Supporting detail:			





Mid-Unit 1 Assessme	nt: "The Water Crisis Isn't Global. It's Local":
	Listening for Main Ideas and Supporting Details

Name:			
Date:			

Part 3: Multiple Choice

Circle the best answer for each question below:

- 1. Why does Fishman say that there are a thousand, or ten thousand, local water crises?
 - a. to deny the fact that there is a water problem
 - b. to explain his point that there isn't one global crisis, but many smaller local ones
 - c. to exaggerate his point that there is a global water crisis
- 2. Why does Fishman give the example of Ontario's water problem?
 - a. to show that Canada's water problems are connected to the United States' water problems
 - b. to give a personal story of a place where he has spent a lot of time
 - c. to illustrate his point that water problems in one community cannot be affected by the actions of other communities
- 3. Why does Fishman think it's a good thing that we do not need someone with "global powers" to solve our water problems?
 - a. It means that individuals can be empowered to solve problems in their communities.
 - b. It means that we do not actually have any water problems to solve.
 - c. It means that there are other ways to solve the global water crisis.

Part 4: Clarifying My Thinking

How did the video you watched today clarify your thinking about water sustainability across the globe?



Mid-Unit 1 Assessment: "The Water Crisis Isn't Global. It's Local":

Listening for Main Ideas and Supporting Details (Answers, For Teacher Reference)

Learning target: I can analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. (SL.7. 2)

Part 1: My Current Thinking

Do you think that water sustainability is a global issue? Explain your answer.

Yes, I think that making water more sustainable is definitely a global issue. Water is something that affects everyone, everywhere. Because the amount of freshwater on the globe never changes—it just goes through its water cycle—water that is now in the United States could end up in Zambia, and vice versa. Therefore, we should care about the water everywhere on earth.

Dart 9: Informational Video Clin

Part 2: Informational Video Clip	
DIRECTIONS: Watch the video clip and fill out	the graphic organizer below.
Name of Video: "The Water Crisis Isn't Global. I	it's Local"
Author or Speaker's Name: Charles Fishman	
Speaker's main idea: What we think about water is wrong. The	re is no global water crisis.
Supporting detail: There are 1,000—or 10,000—water crises.	Supporting detail: All water problems are local. They can be solved only where they are happening.
Supporting detail: Misbehavior by other people in different areas doesn't affect water where you live.	Supporting detail: Companies like Google, Hershey's, etc., are paying more attention to water.
Supporting detail: Water belongs to the community where the people reside.	Supporting detail: We can only solve our own local water problems.



Mid-Unit 1 Assessment: "The Water Crisis Isn't Global. It's Local":

Listening for Main Ideas and Supporting Details

(Answers, For Teacher Reference)

Part 3: Multiple Choice Circle the best answer for each question below:

- 4. Why does Fishman say that there are a thousand, or ten thousand, local water crises?
 - a. to deny the fact that there is a water problem
 - b. to explain his point that there isn't one global crisis, but many smaller local ones
 - c. to exaggerate his point that there is a global water crisis
- 5. Why does Fishman give the example of Ontario's water problem?
 - a. to show that Canada's water problems are connected to the United States' water problems
 - b. to give a personal story of a place where he has spent a lot of time
 - c. to illustrate his point that water problems in one community cannot be affected by the actions of other communities
- 6. Why does Fishman think it's a good thing that we do not need someone with "global powers" to solve our water problems?
 - a. It means that individuals can be empowered to solve problems in their communities.
 - b. It means that we do not actually have any water problems to solve.
 - c. It means that there are other ways to solve the global water crisis.

Part 4: Clarifying My Thinking

How did the video you watched today clarify your thinking about water sustainability across the globe?

I used to think that we needed to solve the whole world's water problems. Now I realize that we need to act locally, within our own cities, to change our water management. If every local community worked to solve their own individual water crisis, we could solve the problem better than if we try to solve what we think is a "global water crisis."



Homework: "Water Is Life" Writing Prompt

In her article, Kingsolver states that "water is life."

Based on your reading of Kingsolver's article, as well as the videos you've watched, write a paragraph in which you explain what this statement means.

In your paragraph, be sure to provide a main idea and three to five supporting details.



Model Response: "Water Is Life" Writing Prompt

In her article, Kingsolver states that "water is life."

Based on your reading of Kingsolver's article, as well as the videos you've watched, write a paragraph in which you explain what this statement means.

In your paragraph, be sure to provide a main idea and three to five supporting details.

When Barbara Kingsolver says that "water is life," what she means is that humans can't exist without water. In her article, Kingsolver points out that humans believe that they will always have unlimited access to water. For example, people who live in the Arizona desert use water to keep their lawns green. However, as the video "Why Care About Water?" pointed out, less than one percent of water is available to use for drinking, agriculture, industry, and nature. So human access to the water we need is limited. The actions that humans have taken have already led to problems. For instance, according to "Why Care About Water?", the Colorado River no longer runs to the sea. Without water, humans can't live. That's why Kingsolver says that 'water is life.'



Grade 7: Module 4B: Unit 1: Lesson 6 Analyzing the Central Claim in *The Big Thirst*



Analyzing the Central Claim in The Big Thirst

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
• I can analyze the interaction between people and water in <i>The Big Thirst</i> .	• The Big Thirst Pages 1–5 Text-Dependent Questions
• I can identify a central claim in pages 1–5 of <i>The Big Thirst</i> .	Thinking Log



Analyzing the Central Claim in *The Big Thirst*

Agenda	Teaching Notes
 Opening A. Entry Task: What Do the Words "Claim" and "Evidence" Mean? (2 minutes) Work Time A. Introducing The Big Thirst (3 minutes) B. Text-Dependent Questions on Page 1-5 of The Big Thirst (30 minutes) Closing and Assessment A. Thinking Log (6 minutes) Homework A. Read "Beyond Thirst: The Global Water Crisis" and write the gist on the bottom of the last page. 	 This lesson introduces the text <i>The Big Thirst</i>, which students saw in the videos during Lesson 5. Students read the first few pages of Fishman's book closely, using text-dependent questions to guide them. These questions mainly deal with concepts and vocabulary essential to understanding Fishman's claim. In Module 2, students learned about claims and evidence. Today's lesson will pull on their background knowledge and review what they learned as they prepare for more in-depth analysis of a claim in the next lesson. This lesson includes enough review of the terms <i>claim</i> and <i>evidence</i> to catch up students who did not participate in Module 2. <i>The Big Thirst</i> contains a large number of words that will be unfamiliar to your students. Assure them that you will help them focus on the vocabulary words that relate to the topic of study: water use and sustainability. They should listen/look for context clues and try to figure out what the words mean as they read, but you will point out the words that are essential for their understanding of the most important parts of the text, both in the discussions you have and the handouts you give them. The first three paragraphs of the text contain some interesting background information; however, they also contain some concepts you may wish to avoid in class (they mention the water needed to make "great beer" and a "shower for two"). If you wish to avoid those paragraphs, you can begin reading with Paragraph 4, "Water is both mythic and real." On the text-dependent question handout, Question 5 asks students to identify a central claim in the text. Since Fishman's argument develops over the course of the book, some of his claims are embedded within the supporting evidence instead of clearly stated at the beginning. In some cases, the claims are not even explicitly stated. To support students in identifying the claims, this lesson focuses their attention on the key paragraphs and lines necessary for them to find the claim. T
	Post: Learning targets



Lesson Vocabulary	Materials
claim, evidence; abundant, aquatic, inconspicuous (page 3), insulate (page 4)	 Entry task (one to display) Scrap paper (one piece per student) The Big Thirst (book; one per student) The Big Thirst Pages 1–5 Text-Dependent Questions (one per student)
	 The Big Thirst Pages 1–5 Close Reading Guide (for teacher reference) "Beyond Thirst: The Global Water Crisis" (one per student)

Opening	Meeting Students' Needs
 A. Entry Task: What Do the Words "Claim" and "Evidence" Mean? (2 minutes) Display the entry task. Ask students to write down their best understanding of what the words <i>claim</i> and <i>evidence</i> mean on a scrap piece of paper. As students are writing, collect their homework in order to provide feedback and informally assess. 	Discussing and clarifying the language of learning targets helps build academic vocabulary.
B. Reviewing Learning Targets (4 minutes)	
Read the learning targets out loud or invite a volunteer to do so:	
* "I can analyze the interaction between people and water in <i>The Big Thirst</i> ."	
* "I can evaluate a central claim in pages 1–5 of <i>The Big Thirst</i> ."	
• Ask students to look back at their entry tasks. Use the Fist to Five protocol to ask how well they can explain what a claim is.	
• Call on a student holding up a five to explain to the class what a claim is. Listen for: "A claim is a statement that a writer or speaker makes that presents an opinion, not necessarily a fact."	
• Ask students to show you how well they can explain what evidence means using the Fist to Five protocol.	
• Call on a student holding up a five to share with the class. Listen for: "Evidence is the proof or the facts that support the writer's opinion or claim."	



EXPEDITIONARY

Work Time Meeting Students' Needs

A. Introducing *The Big Thirst* (3 minutes)

- Remind students that they watched a short video clip of Charles Fishman, the author of the book *The Big Thirst*, during their mid-unit assessment.
- Distribute students' texts, *The Big Thirst*. Ask them to examine the front cover and table of contents. Ask:
 - * "What do you notice about the book, and what do you wonder?"
- Cold call a few students to share.
- Explain that this book is about the general topic of water sustainability around the globe. It goes into more depth with some of the same points that Kingsolver makes in her article.
- Tell students that you will read excerpts from this text, but not the whole thing. Explain that the book has many advanced vocabulary words, and that you will point out the ones that are the most important for them to understand and add them to the Domain-Specific Vocabulary anchor chart you started earlier in the unit.

- You may want to assign partners for this activity to encourage students to work with new partners with whom they'll stay focused and engaged.
- · Some students may benefit from being privately prompted before they are called upon in a cold call. Although cold calling is a participation technique that necessitates random calling, it is important to set a supportive tone so that use of the cold call is a positive experience for all.



Analyzing the Central Claim in *The Big Thirst*

Work Time (continued)	Meeting Students' Needs
 B. Text-Dependent Questions on Pages 1-5 of <i>The Big Thirst</i> (30 minutes) Build up the interest for this text without giving much away: Fishman is a highly regarded author who has been investigating issues of water and water sustainability. Distribute <i>The Big Thirst</i> Pages 1–5 Text-Dependent Questions to each student. Lead the class through these questions in concert with <i>The Big Thirst</i> Pages 1–5 Close Reading Guide (for teacher reference). 	Text-dependent questions keep students engaged in the reading process by giving a purpose to reading a text closely. Consider allowing students who have difficulty with handwriting or have slower processing speed to discuss their answers with a partner.
	• The Big Thirst is complex, often using both first- and third-person voice, parenthetical and hyphenated clauses, and detailed statistics. It will be essential for students to read along with the teacher, and for the teacher to read clearly and with appropriate emotion and expression. Consider practicing reading this text aloud before "performing" it for students. Also, consider making the audio version of the text available to students with emergent literacy, and/or using the audio version in class.



Closing and Assessment	Meeting Students' Needs
 A. Thinking Log (6 minutes) Direct students to open their Thinking Logs and read the prompt for Lesson 6: 	
* "Reread what you wrote in Lesson 4. Based on what you read today, how have you expanded your understanding of water sustainability?"	
• Allow 5 minutes for students to write in their Thinking Logs.	
• Review homework and distribute "Beyond Thirst: The Global Water Crisis" before students exit.	
Homework	Meeting Students' Needs
• Read "Beyond Thirst: The Global Water Crisis" and write the gist of each paragraph in the margin next to it.	



Grade 7: Module 4B: Unit 1: Lesson 6 Supporting Materials





	Entry Task
	Name:
	Date:
What does the word <i>claim</i> mean? What doe these two words that show your understandi	es evidence mean? Write down your best definitions for ng of them.
Claim:	
Evidence:	



The Big Thirst Pages 1-5 Text-Dependent Questions

Questions	Notes
1. What are some of the examples the author gives about how water is important to our lives? Review the section we just read and find at least three. Write them down here.	
2. On page 3, Fishman states, "We've spent the last hundred years in a kind of aquatic paradise: Our water has been abundant, safe, and cheap."	
Given that abundant means "in large quantities and easily accessible," what does Fishman mean when he says that abundant, safe, and cheap water has made the last hundred years an "aquatic paradise"?	
3. Using context clues, determine what <i>inconspicuous</i> means on the bottom of page 3. Write down your definition and how you figured it out.	

Name:

Date:



The Big Thirst Pages 1-5 Text-Dependent Questions

Name:
Date:

Questions	Notes
4. Reread the three paragraphs in the middle of page 3, starting with "Given that water" and continuing until " for almost no cost." What do you think is the author's central claim here?	
5. On page 4, Fishman says, "For Americans, flushing the toilet is the main way we use water. We use more water flushing toilets than bathing or cooking or washing our hands, dishes, or our clothes." Where do you see evidence he gives for this claim? Find at least two examples.	



The Big Thirst Pages 1-5 Close Reading Guide (For Teacher Reference)

1. What are some of the examples the author gives about how water is important to our lives? Review the section we just read and find at least three. Write them down here. (7 minutes) Say: * "Please read in your heads while I read along with you aloud." Read page 1 to page 2, stopping after the first full paragraph with the words "indispensable practicality." After you have read these pages, pause. Tell students that the author is giving some background information about his topic by describing ways that water is used and perceived by	Questions	Notes
people. Explain that he is building up to his central claim. Remind students that a central claim in a text is the overall statement or opinion the author is trying to prove. Continue reading until the middle of page 3, stopping at "requires neuron filled with water." Direct students to Question 1. Ask them to write down their answer and then raise their hands when they have finished. Question 1 has numerous potential answers. Call on at least four students to try to generate a variety of answers. Listen for: "Water drives our weather and shapes our geography." "Electricity uses water." "Computer chips use water." "We amuse ourselves with water." "We use water in our expressions and phrases." "We are made of water." If students say something unrelated to these ideas, clarify by asking a question such as:	1. What are some of the examples the author gives about how water is important to our lives? Review the section we just read and find at least three. Write them	(7 minutes) Say: * "Please read in your heads while I read along with you aloud." Read page 1 to page 2, stopping after the first full paragraph with the words "indispensable practicality." After you have read these pages, pause. Tell students that the author is giving some background information about his topic by describing ways that water is used and perceived by people. Explain that he is building up to his central claim. Remind students that a central claim in a text is the overall statement or opinion the author is trying to prove. Continue reading until the middle of page 3, stopping at "requires neurons filled with water." Direct students to Question 1. Ask them to write down their answer and then raise their hands when they have finished. Question 1 has numerous potential answers. Call on at least four students to try to generate a variety of answers. Listen for: "Water drives our weather and shapes our geography." "Electricity uses water." "Computer chips use water." "We amuse ourselves with water." "We use water in our expressions and phrases." "We are made of water." If students say something unrelated to these ideas, clarify by asking a



The Big Thirst Pages 1-5 Close Reading Guide

(For Teacher Reference)

Questions	Notes
2. On page 3, Fishman states, "We've spent the last hundred years in a kind of aquatic paradise: Our water has been abundant, safe, and cheap."	(10 minutes) Say: * "Please read silently in your heads as I read aloud." Read from where you stopped on the middle of page 3 to the end of the first full paragraph on page 4, " to deliver that water."
Given that abundant means "in large quantities and easily accessible," what does Fishman mean when he says that abundant, safe, and cheap water has made the last hundred years an "aquatic paradise"?	For this set of questions, invite students to work with their seat partners to discuss and write down their answers. When they are finished, ask them to raise their hands. Cold call different pairs to share out, making sure to refine their definitions if needed. Listen for:
3. Using context clues, determine what inconspicuous means on the bottom of page 3. Write down your definition and how you figured it out.	2. "a 'water' paradise where we haven't had to think about water use"3. "hidden, invisible, unnoticeable"



The Big Thirst Pages 1-5 Close Reading Guide (For Teacher Reference)

Questions	Notes
4. Reread the three paragraphs in the middle of page 3, starting with "Given that water" and continuing until " for almost no cost." What do you think is the author's central claim here?	Direct students to Question 4. This question asks about one of the central claims of the text, which you will return to in the next lesson. Ask students to read, think, and discuss with their seat partners, but not to write down the claim just yet. When they are finished discussing, ask them to raise their hands. When most of the class has a hand up, cold call one or two pairs to share out. Listen for: "The central claim is that water seems invisible to us although we rely on it." Instruct students to write down the claim. Explain that you will return to this claim in the next lesson. Probing and scaffolding for Question 5 (for students who are stuck): * "Read the sentence, 'But water has achieved an invisibility in our lives that is only more remarkable given how central it is.'"



The Big Thirst Pages 1-5 Close Reading Guide

(For Teacher Reference)

Questions	Notes
5. On page 4, Fishman says, "For Americans, flushing the toilet is the main way we use water. We use more water flushing toilets than bathing or cooking or washing our hands, dishes, or our clothes." Where do you see evidence he gives for this claim? Find at least two examples.	Say: * "Please read silently in your heads as I read aloud." Read from where you stopped in the middle of page 4 and continue to the middle of page 5, "Or, at least, we like to." Ask students to write down their answers and raise their hands when they have two pieces of evidence written down. When most of the class has a hand up, cold call several students to share out. Listen for: "The typical American flushes the toilet five times a day and uses 18.5 gallons of water," "Americans put 5.7 billion gallons of clean drinking water down the toilet," and "We flush more water down the toilets than 95 million Brits and Canadians use."



Beyond Thirst: The Global Water Crisis

Most of us think nothing about grabbing a cold glass of water. In 2008, though, flooding caused a drinking water shortage in Cedar Rapids, Iowa. Meanwhile, North Carolina, Georgia, and California suffered serious droughts. Yet these problems seem small compared to the world's water crisis.

Every day, 1.2 billion people don't get enough safe drinking water for their basic needs. That's nearly one-sixth of the world's people. More than a third--roughly 2.6 billion people- lack safe sanitation. Left unchecked, the crisis will only worsen.

A Scarce Resource

While water covers 70 percent of Earth's surface, 97 percent is undrinkable seawater. With two-thirds of all fresh water locked in polar ice caps, only 1 percent of the world's water is potentially available for people.

"Water is a precious, vital resource," stresses Meena Palaniappan at the Pacific Institute in California.

When poor sanitation and other practices pollute water, less is available for basic needs.

"Climate change is going to have a dramatic impact on water resources," adds Palaniappan. For many areas, rainfall will occur in a shorter period of time. Meanwhile, drought periods will lengthen.

Population growth will further stress water resources.

The World Health Organization (WHO) says each person needs at least 20 liters (a little more than 5 gallons) per day. But not everyone has equal access, especially in developing countries. When well-to-do people have water pumped into their homes, they get water at low per-unit costs. However, poor people in the same cities may pay up to 10 times as much per liter for water from tank trucks. Rural people may have to fetch water themselves. "It's a huge inequity," says Palaniappan.

Disease, Poverty, and Other Problems

Lack of safe water and sanitation is deadly. Contaminated water kills 1.8 million children every year with diarrhea. Parasites, bacteria, and viruses cause many other illnesses. At any moment, nearly half the people in developing countries suffer from some water-related sickness.

"These people have no choice," notes Sally Edwards at the Pan American Health Organization/World Health Organization. "They know it leads to disease, but there is no other water."



Beyond Thirst: The Global Water Crisis

Girls and women suffer most. "Many girls who would otherwise be in school are spending hours each day walking to distant sources to collect water," notes Nicole Wickenhauser at WaterPartners International in Missouri.

Girls who do attend school often drop out as teens if schools lack separate toilets. Outside school, girls and women may risk attack just by going to the bathroom.

Adults can't earn as much when they spend hours fetching water of questionable quality. Water-related sickness makes them miss more work. As a result, families can't escape a cycle of disease and poverty.

Water shortages affect food supplies, too. According to WHO, growing one day's food for a family of four can take as much water as an Olympic-size swimming pool. Insecurity about water can also cause political and economic conflicts--both within countries and internationally.

In short, addressing the water crisis won't just improve health. It will let people build better, more secure lives.

Addressing the Crisis

In 2000, the United Nations announced a Millennium Development Goal (MDG) of halving the proportion of people without safe drinking water by 2015. While we are still far from that goal, progress is occurring.

'The technology exists to provide water and sanitation to all," stresses Edwards. The most successful water and sanitation projects involve communities in decision-making. They also teach people about hygiene and system upkeep, so safe water supplies are sustainable.

Technologies vary based on geography, but they don't need to be elaborate. One area might use a rainwater harvesting system. Another community might benefit from a deep borehole well.

"All of our projects use as simple a technology as possible, and we use local materials," says Wickenhauser. "It's easier to operate and maintain."

Solving the global water crisis will cost billions of dollars. Yet WHO says meeting its MDG for safe water would cost less than five days' worth of global military spending. On a smaller scale, WaterPartners International says \$25 can bring safe water to someone for life. Just \$150 can meet a whole family's water needs.



Beyond Thirst: The Global Water Crisis

What Can You Do?

Start by saving water at home and elsewhere. Ask others to protect this precious resource, too. Recent water shortages in the United States show that we shouldn't waste water. Conservation can also help the environment.

Beyond this, spread the word about the world's water crisis. Some schools have hand-raisers to educate people and raise money for water projects. Speak out to elected officials, too. Tell them you want the world to have safe drinking water and sanitation for everyone.

"We know how to bring people safe water," stresses Wickenhauser. "It's a problem we can solve together."

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Grade 7: Module 4B: Unit 1: Lesson 7 Evaluating an Argument in *The Big Thirst*





Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
 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

Agenda	Teaching Notes
 Opening A. Reviewing Learning Targets (1 minutes) B. Evaluating a Flawed Argument: Argument A (5 minutes) Work Time A. Evaluating an Argument: Argument B; Relevant and Sufficient Evidence and Sound Reasoning (20 minutes) B. Tracing an Argument Note-catcher for "Beyond Thirst: The Global Water Crisis" (15 minutes) Closing and Assessment 	 This lesson draws upon students' understanding of claims and evidence from the previous lesson as well as what makes evidence relevant, which they learned in Module 2. It offers a review for all students, which will help any who may not have been present in Module 2. It also develops further understanding by adding the concepts of sufficient evidence and sound reasoning, as students begin to trace an argument and identify and evaluate claims and evidence in different informational texts and The Big Thirst. In Work Time B, students use the criteria they build for evaluating evidence to trace a central claim and the use of evidence in the article they read for homework, "Beyond Thirst: The Global Water Crisis." This skill will be reinforced throughout the next several lessons. They will use this form of note-catcher repeatedly to trace and evaluate arguments in both texts and videos throughout the unit. They will start by using easy-to-access texts with clear claims and evidence. As they develop their skills, the texts will increase in complexity, culminating in the End of Unit 1 Assessment.
 A. Finding a Claim on Page 9 of <i>The Big Thirst</i> (4 minutes) 4. Homework A. Reread the excerpt on page 9 of <i>The Big Thirst</i> and complete the Reader's Notes. 	 The Reader's Notes for page 9 of The Big Thirst use a different format than the Reader's Notes from previous modules. These Reader's Notes have been constructed to support students' comprehension of this complex informational text by focusing on vocabulary and text-dependent questions that guide them to understand the most important concepts from the reading. You may want to point out to students that they are still notes and questions to help them understand the text more deeply, though they look a bit different. In advance: Create a blank Evaluating an Argument anchor chart (see supporting materials); review the Fist to Five in Checking for Understanding Techniques (see Appendix). Post: Learning targets



Lesson Vocabulary	Materials
evaluate, sound reasoning, unsound reasoning, relevant, sufficient, logical; golden age, scarcity	 Argument A (one to display) Projector or document camera Argument B (one to display) Evaluating an Argument anchor chart (new; co-created with students in Work Time A) Evaluating an Argument anchor chart (model, for teacher reference) Tracing an Argument note-catcher (one per student) Tracing an Argument note-catcher (answers, for teacher reference) The Big Thirst (book; one per student) Reader's Notes The Big Thirst Page 9 (one per student) Reader's Notes The Big Thirst Page 9, Teacher's Guide (for teacher reference)

Opening	Meeting Students' Needs
A. Reviewing Learning Targets (1 minutes)Read aloud the learning targets or invite a volunteer to do so:	
* "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> ."	
• Tell students that today's lesson will build off of the work with claims and evidence in Lesson 6 as they learn to trace and <i>evaluate</i> arguments. Explain that when we evaluate an argument, we assess whether it is strong and successful at proving its claim.	



Opening (continued)	Meeting Students' Needs
B. Evaluating a Flawed Argument: Argument A (5 minutes)	
Project Argument A with a projector or document camera.	
Invite students to evaluate this argument as you read it aloud:	
* "I should not have to turn the water off while I brush my teeth. First, I hate having to brush my teeth. Plus, it's annoying to have to turn the water off when I'm brushing my teeth. Everyone else in my family turns the water off when they brush their teeth, so it shouldn't matter if I do or not, since I'm only one person. How much water can I really waste?"	
• Ask:	
* "What is the claim?"	
• Cold call a different student. Listen for: "The claim is that the writer shouldn't have to turn off the water when he brushes his teeth."	
• Ask:	
* "What reasons does the writer give?"	
• Cold call different students. Listen for: "He hates brushing his teeth," "It's annoying to turn off the water," and "Everybody else in his family turns the water off, so he shouldn't have to."	
• Ask:	
* "What is the problem with these reasons?"	
• Listen for: "The reasons are based on his feelings and don't have to do with facts or evidence."	
If students struggle to see this, you can probe their thinking by asking:	
* "Does he give solid evidence for his reasons? What are his reasons based on?"	
• Then ask:	
* "What is wrong with this argument? Does it make sense overall?"	
• Cold call different students. Listen for something like: "It's based on his feelings but not evidence," "It has unrelated supporting details," or "It isn't logical."	
• Explain that the proper use of reasons in an argument is called the argument's <i>reasoning</i> . If an argument makes sense, it is considered <i>sound</i> . If an argument does not have solid reasons and evidence to support the claim, or if it uses reasons and evidence that do not make sense, it has <i>unsound</i> reasoning. Remind the class that the prefix <i>un</i> - means "not."	

Opening (continued)	Meeting Students' Needs
• Invite students to turn to their partners and discuss the reasoning given in the argument:	
* "Do you think the reasoning in this argument is sound or unsound?"	
• Give students 30 seconds to discuss, and then get their attention and cold call a pair to share out. Listen for: "The argument is unsound."	
• Ask students to discuss with their partners for 30 seconds:	
* "Does this argument provide any evidence?"	
• Cold call a different pair. Listen for: "It offers statements that could be considered evidence, but they're all based on feelings, and none of them are facts" or "There is very little supporting evidence, if any."	

Evaluating an Argument in The Big Thirst

Meeting Students' Needs Work Time A. Evaluating an Argument: Argument B; Relevant and Sufficient Evidence and Sound Reasoning (20 Consider assigning partners for the minutes) discussions in Work Time A and B so Tell students: students have the opportunity to work with new classmates and are sure to * "Now we will look at an argument that is stronger. As we analyze it, I want you to think about why this argument is stay focused. stronger than the first one." · Anchor charts offer students a visual • Project Argument B with a projector or document camera. cue about what to do when you ask • Invite students to follow along as you read it aloud: them to work independently. They * "You really need to start turning the faucet off when you brush your teeth. First, leaving the water running is pointless, also serve as note-catchers when the because as you're brushing your teeth, you're not using the water. Also, by turning the water off, you could save up to 8 class is co-constructing ideas. gallons of water a day, because the average faucet uses 2 gallons of water a minute. If you turned the water off while you · For students who struggle with brushed your teeth, you would help conserve water in our town, which needs it, because it rains so little here." following multiple-step directions, • Ask students to identify the claim. Cold call a new student. Listen for: "The claim is that her little brother needs to turn the consider displaying these directions water off when he brushes his teeth." using a document camera or interactive white board. Another Ask: option is to type up these instructions * "What reasons does the writer give?" for students to have in hand. · Listen for: "Running the water is pointless," "You can save lots of water," and "It will help our town, which needs the • Graphic organizers and note-catchers water.' engage students more actively and • Ask: provide scaffolding that is especially critical for learners with lower levels * "Does the writer give any specific evidence to support those reasons?" of language proficiency and/or • Listen for: "Yes. You could save up to 8 gallons a day" and "It rains so little in our town." learning. • Then ask students to turn to a partner and discuss: • When reviewing the note-catcher, * "What does relevant evidence mean?" consider using a document camera to display it for students who struggle · Cold call on a student to share her ideas. Listen for: "Relevant evidence is something that relates to the claim and helps to

prove it."

with auditory processing.



Work Time (continued)	Meeting Students' Needs
• Use the Fist to Five checking for understanding technique to have students rate the relevance of the evidence given in this argument. Look for students to hold up 4s or 5s. If any have 3s or lower, ask them to explain their reasoning so you can clarify their understanding.	For students needing additional supports, you may want to provide a partially filled-in note-catcher (see
• Define the term sufficient for students. Explain that sufficient evidence is both high in quality and quantity. For there to be sufficient evidence for a claim, there needs to be enough supporting pieces of evidence to convince the reader.	supporting materials for a completed one).
• Prompt the students:	
* "Discuss with your partners whether or not the evidence provided here is sufficient to prove the claim."	
• After a minute, cold call some students who have not yet spoken. Listen for: "The writer provides different reasons and pieces of evidence, which all support the claim, so that is sufficient."	
• Next, tell students to look at the reasoning, or logic, provided in the argument. Ask them to look for sound reasoning, or solid logic in which the reasons and evidence connect and work together to prove the claim.	
• Ask:	
* "Can you find any examples of sound reasoning in this argument?"	
• Cold call students and listen for them to point out the lines: "As you're brushing your teeth, you're not using the water," "You could save up to 8 gallons of water a day, because the average faucet uses 2 gallons of water a minute," and "You would help conserve water in our town, which needs it, because it rains so little here."	
• If students struggle to understand the concept of "sound reasoning," you can explain it further as a way of organizing one's reasons and use of evidence in a logical and connected way so that, after taking into account everything the writer/speaker has presented, you accept the claim.	
• Post the blank Evaluating an Argument anchor chart. Introduce it to students and explain that they will help you build the descriptors for each term. Chart student responses as you progress through the next few questions:	
* "Now that you have seen some examples of irrelevant and relevant evidence, how can we capture what 'relevant evidence' means for our chart?"	
* "How can we describe what 'sufficient evidence' means on our chart?"	
* "How can we explain what 'sound reasoning' means on our chart?"	



Work Time (continued)	Meeting Students' Needs
• Guide and prompt students as you fill out the anchor chart with appropriate descriptors, referring to the Evaluating an Argument anchor chart (model, for teacher reference) as needed.	
• Explain that if an argument has relevant and sufficient evidence and sound reasoning, it often successfully proves a claim.	
• Invite students to look over this chart and tell them that they will refer back to it throughout this lesson and in future lessons.	
 B. Tracing an Argument Note-catcher for "Beyond Thirst: The Global Water Crisis" (15 minutes) Tell students that now they will apply what they've just learned about analyzing claims to their reading for homework last night, "Beyond Thirst: The Global Water Crisis." 	
• Ask students to take out their copies of "Beyond Thirst: The Global Water Crisis" as you distribute the Tracing an Argument note-catcher .	
• Give directions:	
 Put your name at the top of this new note-catcher. 	
 Fill out the title of the text in the appropriate section. 	
– Write "Kathiann Kowalski" under Author's Name.	
 Think about what the claim of the article is. 	
• Ask:	
* "What was the author's central claim?"	
• Cold call a student, or several, to get a sense of what they thought the claim was. Listen for something like: "Safe water availability is a crisis, and will become worse in coming decades."	
• Ask students to write the claim in the appropriate spot on the Tracing an Argument note-catcher.	
Then prompt students to discuss with an elbow partner:	
* "What evidence did the author use to support the claim?"	
• Give pairs a couple of minutes to discuss the evidence. Invite them to text-code the evidence they see on their papers with the letter "E."	
Then, cold call new students to share out what they discussed.	



Work Time (continued) **Meeting Students' Needs** • Listen for something like: "Over 70 percent of the surface of the earth is covered by water, but only 3 percent is freshwater." Refer to the Tracing an Argument Note-catcher (answers, for teacher reference) for other pieces of evidence. · Ask students to write their evidence on the note-catcher and decide whether it is relevant (in this case, all the evidence presented is relevant). Circulate as students are filling out their evidence, providing support as needed. • Then ask students to discuss with a new elbow partner: * "Was the evidence presented by the author sufficient? Why or why not?" • Direct students to the Evaluating an Argument anchor chart as a guide. · Cold call new students and listen for: "The writer has many reasons, and each reason has several pieces of evidence to back it up, including examples and statistics" and "There was enough evidence to prove the claim." Refer again to the Tracing an Argument Note-catcher (for teacher reference). Ask: * "Can you find any examples of sound reasoning in this argument?" • Cold call students from different pairs and listen for: "The reasoning was logical when the author gave evidence that freshwater is already scarce and one solution could be to increase access to water-cleaning technologies" or "The author logically explained how lack of water can cause a cycle of sickness and lack of education that makes it hard for families to break the cycle of poverty" or "The different reasons, like climate change, and the evidence used were all logically connected and proved the claim." Allow students to finish filling out the note-catcher.

When they are finished, ask them to turn the note-catchers in to you. Before the next class, review them to check that all

students have filled theirs out completely. Provide feedback if any students seem confused.



Closing and Assessment	Meeting Students' Needs
 A. Finding a Claim on Page 9 of <i>The Big Thirst</i> (4 minutes) Tell students that they now will transition back to reading <i>The Big Thirst</i>, looking in particular at the claims and evidence Fishman uses. 	
• Direct students to open up their books to page 9 and follow along as you read another section, which contains a new claim that they should listen for. Read from "But the golden age of water" to the page break on page 9 where it says, " the revenge of water."	
• After reading, ask students to turn to their seat partner and share what they think "the golden age of water" and "water scarcity" could mean.	
• Cold call students to share out. Listen for them to say that golden age means "a time period where there is a large quantity of something" or that it means "richness," "abundance," or "wealth." Listen for them to define scarcity as "a lack of something" or "when supplies have run out."	
• Listen for students to note that a golden age and scarcity are like opposites. If they do not come to this conclusion on their own, point this out to them.	
• Then ask them to identify Fishman's central claim in this piece of the text and share with their seat partners.	
• Ask students to raise their hands if they think they have figured out the claim. When most of the class has a hand raised, cold call someone to answer.	
• Listen for: "We are at the end of the golden age of water" or "We are entering an era when water will be more scarce." If students struggle to identify this claim, tell them what it is.	
• Explain that their homework will go into more depth to help them understand the claim further.	
• Distribute Reader's Notes The Big Thirst Page 9.	
Homework	Meeting Students' Needs
• Reread the excerpt on page 9 of <i>The Big Thirst</i> and complete the Reader's Notes.	
Note: You will need a projector and speakers for Lesson 9.	



Grade 7: Module 4B: Unit 1: Lesson 7 Supporting Materials





Argument A

Consider this argument, given by a middle school student to his parents:

I should not have to turn the water off while I brush my teeth. First, I hate having to brush my teeth. Plus, it's annoying to have to turn the water off when I'm brushing my teeth. Everyone else in my family turns the water off when they brush their teeth, so it shouldn't matter if I do or not, since I'm only one person. How much water can I really waste?



Argument B

Now consider this argument, given by a middle school student to her little brother:

You really need to start turning the faucet off when you brush your teeth. First, leaving the water running is pointless, because as you're brushing your teeth, you're not using the water. Also, by turning the water off, you could save up to 8 gallons of water a day, because the average faucet uses 2 gallons of water a minute. If you turned the water off while you brushed your teeth, you would help conserve water in our town, which needs it, because it rains so little here.



Evaluating an Argument Anchor Chart:

(Model for Teacher Reference)

Relevant Evidence	Sufficient Evidence	Sound Reasoning
 Related to the claim Proves the point Supports the argument Can be facts, statistics, or examples Not just personal opinions 	 Enough evidence to prove the claim More than one piece of evidence Might give several supporting pieces of evidence or just really strong evidence Can be high-quality evidence or quantity of evidence 	 Logical argument Based in facts, not just feelings Hard to disagree with once you read/hear it Makes sense No gaps or holes in the argument Ideas connect to one another logically Can't find exceptions





Tracing an Argument Note-Catcher

	Name: Date:		
Name of Text/Excerpt/Clip: Beyond Thirst			
Author/ Speaker's Name:			
Claim:			
Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3	
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?	
Yes / No	Yes / No	Yes / No	
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	



Tracing an Argument Note-Catcher

Supporting Evidence 4	Supporting Evidence 5	Supporting Evidence 6	
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?	
Yes / No	Yes / No	Yes / No	
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	
Did the author provide sufficient evidence? Explain why or why not.			
Was the reasoning sound? Explain why or why not.			
	cessfully prove the claim? Wl ant and sufficient evidence a		



Tracing an Argument Note-Catcher

(Answers, for Teacher Reference)

Name of Text/Excerpt/Clip: "Beyond Thirst: The Global Water Crisis"

Author/ Speaker's Name: Kathiann Kowalski

Claim: (something like) Safe water availability is a crisis, and will become worse in coming decades.

Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3
While water covers 70 percent of Earth's surface, 97 percent is undrinkable seawater.	When poor sanitation and other practices pollute water, less is available for basic needs.	Climate change is going to have a dramatic impact on water resources.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim: This evidence shows that there	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
is only a very small amount of freshwater to be had on the planet.	This evidence shows that how we use water also reduces how much clean water we have.	This evidence shows that climate change is an additional factor that will reduce access to clean, safe water.

Tracing an Argument Note-Catcher

(Answers, for Teacher Reference)



Not everyone has equal access to clean water, especially in developing countries.	Contaminated water kills 1.8 million children every year with diarrhea.	Families can't escape a cycle of disease and poverty if they don't have access to clean water.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
This evidence shows that the access to safe water is not guaranteed for all people.	This shows that unsafe water is responsible for many deaths every year.	This shows that clean water is necessary for people to be able to escape poverty.

Tracing an Argument Note-Catcher (Answers, for Teacher Reference)

Did the author provide sufficient evidence? Explain why or why not.

The author provided multiple facts and expert testimony to support her claim.

Was the reasoning sound? Explain why or why not.

Yes. Her reasons and evidence connected logically with the claim.

Overall, does the author successfully prove the claim? Why or why not? Refer to what you wrote above about relevant and sufficient evidence and sound reasoning.

Because the author provided sufficient, sound reasons and evidence, she did successfully prove her claim.



Reader's Notes



	The Big Thirst Page 9
Name:	
Date:	

Directions: Reread the excerpt from page 9 that begins "But the golden age of water ..." and ends at the page break with "... the revenge of water." Fill in the chart and answer the questions below.

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
conditioned (page 9)		
era (page 9)		
revolution (page 9)		
Blasé (page 9)		



Reader's Notes
The Big Thirst Page 9

Text-dependent questions

1.	On page 9, Fishman writes, "The last century has conditioned us to think that water is naturally abundant, safe and cheap—that it should be, that it will be." What does he mean by this?
2.	When Fishman writes, "We are entering a new era of water scarcity—not just in traditionally dry or hard-pressed places like the U.S. Southwest and the Middle East, but in places we think of as water-wealthy, like Atlanta and Melbourne," what does he mean by "water scarcity" and "water-wealthy"?
Ιt	hink "water scarcity" means:





Reader's Notes
The Big Thirst Page 9

I tl	nink "water-wealthy" means:
3.	On page 9, at the end of the paragraph that begins with "We are entering a new era," Fishman
1)	describes what the future will look like in terms of water. What are two things he says about water in this new era?
2)	
4.	What does it mean for us to "go directly from the golden age of water to the revenge of water?"



	The Big Thirst Page 9
Name:	

Reader's Notes

Date:

Directions: Reread the excerpt from page 9 that begins "But the golden age of water ..." and ends at the page break with "... the revenge of water." Fill in the chart and answer the questions below.

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
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era (page 9)		
revolution (page 9)		
Blasé (page 9)		

Text-dependent questions

1.	On page 9, Fishman writes, "The last century has conditioned us to think that water is naturally
	abundant, safe and cheap—that it should be, that it will be." What does he mean by this?



Reader's Notes
The Big Thirst Page 9

2.	When Fishman writes, "We are entering a new era of water scarcity—not just in traditionally dry or hard-pressed places like the U.S. Southwest and the Middle East, but in places we think of as water-wealthy, like Atlanta and Melbourne," what does he mean by "water scarcity" and "water-wealthy"?
<u>I</u> t	hink "water scarcity" means:
Ιt	hink "water-wealthy" means:
3.	On page 9, at the end of the paragraph that begins with "We are entering a new era," Fishman describes what the future will look like in terms of water. What are two things he says about water in this new era?
1)	
2)	
4.	What does it mean for us to "go directly from the golden age of water to the revenge of water?"



Reader's Notes
The Big Thirst Page 9, Teacher's Guide
(For Teacher Reference)

Vocabulary

Word	Definition	Context clues: How did you figure out this word?
conditioned (page 9)	Trained	
era (page 9)	A period of time in history	
revolution (page 9)	A major change	
Blasé (page 9)	unconcerned	

Text-dependent questions

1. On page 9, Fishman writes, "The last century has conditioned us to think that water is naturally abundant, safe and cheap—that it should be, that it will be." What does he mean by this?

The way that we have used water for the last one hundred years has trained us to think that water will always be cheap, clean and available for us to use.

2. When Fishman writes, "We are entering a new era of water scarcity—not just in traditionally dry or hard-pressed places like the U.S. Southwest and the Middle East, but in places we think of as water-wealthy, like Atlanta and Melbourne," what does he mean by "water scarcity" and "water-wealthy"?

I think "water scarcity" means: "Water scarcity" means not having enough water.

I think "water-wealthy" means:

Water-wealthy" means having plenty of water or more than enough water.



Reader's Notes

The Big Thirst Page 9, Teacher's Guide (For Teacher Reference)

- 3. On page 9, at the end of the paragraph that begins with "We are entering a new era ...," Fishman describes what the future will look like in terms of water. What are two things he says about water in this new era?
 - 1) We may have enough water, but it will be water that is not clean. It will be water that is reused.
 - 2) We will have access to drinking water, but it will be more expensive than it is now.
- 4. What does it mean for us to "go directly from the golden age of water to the revenge of water?"

It means that humans will go from having as much access to water as they want to quickly not having that kind of access to water.



Grade 7: Module 4B: Unit 1: Lesson 8
Tracing and Evaluating Arguments: "The Future of Water" and *The Big Thirst*





Tracing and Evaluating:

"The Future of Water" and The Big Thirst

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
• I can evaluate the argument in "The Future of Water" and in pages 12–15 of <i>The Big Thirst</i> .	• Reader's Notes <i>The Big Thirst</i> Page 9 (from homework)
	Tracing an Argument note-catcher
	• Text-dependent questions
	Thinking Log

Tracing and Evaluating:

Agenda	Teaching Notes
 Opening A. Entry Task Vocabulary Review (2 minutes) Work Time A. Tracing an Argument in "The Future of Water" (13 minutes) B. Read-Aloud, Pages 12-15 with Text-Dependent Questions and Tracing an Argument (23 minutes) Closing and Assessment A. Distributing and Explaining Homework (2 minutes) Homework 	 This lesson continues the implementation of the Tracing an Argument note-catcher, which students will use two times in class to evaluate a new video and one of Fishman's arguments. At this point, students work more independently to fill out the note-catcher and should begin to feel more confident in the process as they prepare to demonstrate their mastery of it in the End of Unit 1 Assessment (in Lesson 10). Students will turn in their note-catchers for the video "The Future of Water" so you can review them and provide feedback. This is an opportunity to discover whether any students are struggling and check in with them the following day to address their questions before the end of unit assessment. Work Time B gives students another opportunity to practice using the note-catcher on Fishman's <i>The Big Thirst</i>. In this section of the reading, Fishman uses reasons and evidence to support his claim that we are no longer in the golden age of water. This section provides one of his clearest arguments and thus
A. Fill out your Thinking Log for Lesson 8. How did today's video and reading help clarify your thinking about the issue of water sustainability?B. Using the maps provided, scan through your readings in <i>The Big Thirst</i> so far and mark each place that is mentioned.	 a perfect opportunity to trace it. It is important for students to store their note-catchers on pages 12–15 of <i>The Big Thirst</i> in a safe place, as they will refer back to these in Unit 2, Lesson 1. You may want to collect them in the next lesson and hold on to them until Unit 2. In advance: Set up the projector and speakers. Cue the video. Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom. Post: Learning target.

Tracing and Evaluating:

Lesson Vocabulary	Materials
conditioned, era, revolution, blasé (from homework)	 Entry task (one to display) Document camera Details in "The Future of Water" note-catcher (one per student) Tracing an Argument note-catcher (from Lesson 7; two new blank copies per student) Video: "The Future of Water" http://video.nationalgeographic.com/video/environment/freshwater/env-freshwater-whycare/ The Big Thirst (book; one per student) The Big Thirst Pages 12–15 Text-Dependent Questions (one to project) The Big Thirst Pages 12–15 Close Reading Guide (for teacher reference) Homework Directions: Unit 1, Lesson 8 (one per student) Blank Map: The Big Thirst USA (one per student)
	 Blank Map: The Big Thirst Europe/Asia/Australia (one per student) Master Map: The Big Thirst USA (for teacher reference) Master Map: The Big Thirst Europe/Asia/Australia (for teacher reference)

Tracing and Evaluating:

Opening	Meeting Students' Needs
 A. Entry Task: Vocabulary Review (2 minutes) As students enter, display the entry task with a document camera. Direct them to sit with a partner and compare vocabulary definitions from last night's homework (see supporting materials). 	 You may want to assign partners so students have the opportunity to work with someone new with whom they can focus. Use this partner work time as an opportunity to check in with students who may be struggling with the reading and provide them with additional support.
B. Reviewing Homework and Learning Target (5 minutes)	war additional supports
 Invite students to bring their homework, Reader's Notes The Big Thirst Page 9, with them as they work with a new partner. 	
• Ask them to check their vocabulary and answers to Questions 1–4 with their partners. If they disagree on answers, partners should try to convince each other that their answer is correct and use the text as proof.	
If students cannot agree, ask them to raise their hands.	
• Circulate to students who raise their hands and help to clarify. If there are any general misunderstandings throughout the class, get everyone's attention and clarify for the whole group.	
• When the class is finished reviewing homework, invite students to return to their original seats.	
Ask for volunteers to read today's learning target out loud:	
* "I can evaluate the argument in 'The Future of Water' and in pages 12–15 of <i>The Big Thirst</i> ."	
• Explain that students will continue to work with the Tracing an Argument note-catcher as they evaluate a new video and then Fishman's claim in pages 12–15.	



Tracing and Evaluating:

Work Time	Meeting Students' Needs
 A. Tracing an Argument in "The Future of Water" (13 minutes) Distribute the Details in "The Future of Water" note-catcher and two blank copies of the Tracing an Argument note-catcher to each student. Tell them that they will fill these out one at a time—the first is for a video they will watch, and the second is for <i>The Big Thirst</i>. 	Whenever possible, invite students who would benefit from physical activity to help you distribute materials.
• Explain that students will first watch a video and capture the important details on one note-catcher and then use that to fill in a Tracing an Argument note-catcher to evaluate the argument. Tell students you will play the video three times to allow them a chance to process all of its information.	Consider giving students who struggle to see the projector or to stay focused a printed version of the
• Invite them to watch the video: "The Future of Water" once through just for gist.	text-dependent questions for pages
• Then, ask students write down the details they hear on the Details in "The Future of Water" note-catcher as you play the video again. Pause in the middle and then at the end to give students time to finish writing.	12–15 of <i>The Big Thirst</i> .
• Ask students to think about what claim the video is making and to write it down on a blank Tracing an Argument note-catcher, along with the title of the video.	
• Explain that students can add to their details or the claim as they watch the video a third time. Play it once more.	
• Then ask students to use their Details in "The Future of Water" note-catchers to fill out the evidence section of the Tracing an Argument note-catcher.	
• Instruct them to fill out the remaining sections of the Tracing an Argument note-catcher and then turn it in to you.	
• Collect the Tracing an Argument note-catchers and give feedback before the next lesson.	
B. Read-Aloud, Pages 12-15 with Text-Dependent Questions and Tracing an Argument (23 minutes)	
• Be sure students have their text, The Big Thirst. Remind them that their homework, which they reviewed at the beginning of class, dealt with the main claim that Fishman is making on pages 12–15 of the text.	
 Project The Big Thirst Pages 12–15 Text-Dependent Questions with a document camera as you guide students through the reading using The Big Thirst Pages 12–15 Close Reading Guide (for teacher reference). 	



Tracing and Evaluating:

Closing and Assessment	Meeting Students' Needs
 A. Distributing and Explaining Homework (2 minutes) Explain that students have two homework assignments. Direct them to take home their Thinking Logs and to fill in the section for Lesson 8. 	
• Distribute the Homework Directions: Unit 1, Lesson 8, Blank Map: <i>The Big Thirst</i> USA and Blank Map: <i>The Big Thirst</i> Europe/Asia/Australia . Explain that students should review the pages they've read in <i>The Big Thirst</i> so far (1–5, 9, 12–15) and locate the places mentioned around the globe on the maps, marking them with an "X" or coloring them in (invite them to be creative).	
Homework	Meeting Students' Needs
 Fill out your Thinking Log for Lesson 8: How did today's video and reading help clarify your thinking about the issue of water sustainability? Using pages 1–5, 9, and 12–15 of <i>The Big Thirst</i>, mark the geographic locations mentioned in the text on the maps provided. You may use any atlas, map, or online geographic source to help you fill in the map accurately. Two blank maps have been provided to assist you: one of the United States and Canada, the other of Europe, Asia, and Australia. Be creative! 	Consider modifying this assignment by allowing students to use technological platforms, such as Google Earth or Google Maps, to complete it.



Grade 7: Module 4B: Unit 1: Lesson 8 Supporting Materials





	Entry Task
Name:	
Date:	

Take out your homework from last night, Reader's Notes *The Big Thirst* Page 9. With a partner, review your definitions to see if they are similar. If there is a big difference between yours and your partner's definition, look the word up and write down what you think is the correct definition.





Name:		
Date:		

Details in "The Future of Water" Note-Catcher:

Detail 1	Detail 2	Detail 3
Detail 4	Detail 5	Detail 6
I think the claim of the video is:		



Tracing an Argument Note-Catcher for "The Future of Water"

Name:	
Date:	

Name of Text/Excerpt/Clip: "The Future of Water"

Author/ Speaker's Name: N/A

Claim:

We are using water in unsustainable ways.

Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3
Bottled water is a grotesque illustration of this.	One billion people have to search for their water.	Millions of women spend several hours a day fetching the water they need.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
It is an example of how we are using water in unsustainable ways.	This provides a statistic about how we are not managing water properly.	This is an example of how some people have to work hard for water; it proves the claim that we are not using it properly.



Tracing an Argument Note-Catcher for "The Future of Water"

Supporting Evidence 4	Supporting Evidence 5	Supporting Evidence 6
Contaminated water kills many children each day.	There is enough water for everyone. Who should pay for it, how much, to whom?	A majority of the world's population lives in cities—soon there will be 30 cities with a population of more than 10 million. This will lead to social conflicts, like in Johannesburg.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
Cidiii.	Ciaiii.	Ciaiiii.



Tracing an Argument Note-Catcher for "The Future of Water"

Did the author provide sufficient evidence? Explain why or why not.

Yes, the speaker gave at least six pieces of evidence, using a balance of statistics and facts to prove his claim.

Was the reasoning sound? Explain why or why not.

The reasoning was sound and logical. All of the evidence supported the idea that we need to be concerned about the future of our water.

Overall, does the author successfully prove the claim? Why or why not? Refer to what you wrote above about relevant and sufficient evidence and sound reasoning.

Yes, the author does prove the claim that we are using water in unsustainable ways by showing the problems with access to water around the globe and how those problems are only going to get worse. Using statistics and facts, the speaker supports and provides relevant evidence and sound reasoning to prove his claim.





Questions	Notes
1. After explaining how the world does not have enough freshwater to sustain its current population, Fishman writes, "Even if those were our only problems with water, and if those problems were static, we'd have a water crisis." <i>Static</i> , in this instance, means "unchanging." How does this statement support the claim he made on page 9?	
2. Where on page 13 is there evidence that we do not have enough water across the globe? Discuss with your seat partner and raise your hands when you have found two pieces of evidence.	
3. Fishman writes on page 14, "So between now and forty years from now, more new people will join the total population than were alive worldwide in 1900. They will be thirsty." What does he mean by "They will be thirsty?"	

Name:

Date:



Questions	Notes
4. Fishman writes, "In fact, during the golden age of water, during the last hundred years, the population of the world has gone up by a factor of four; our total water consumption has gone up by a factor of seven." When something goes up by a factor of a number, it is multiplied by that number. In this line, what problem is he pointing out? How does it support his central claim? Turn and talk to your partners.	
 5. What do these three examples have in common? a. "Lake Mead is the source of water for 20 million people, and it is half-empty." b. "The rainfall-change map shows that two-thirds of 	
India's land will actually receive less rain." "Australia is struggling to quickly adapt its economy and lifestyle to a completely new, and much reduced water budget."	



Questions	Notes
6. Review the evidence you've written down and scan Fishman's argument on these pages again. a. Can you find three reasons Fishman uses to support his claim that we are running out of water? What are they? b. Does he use sound reasoning? Explain.	



The Big Thirst Pages 12-15 Text-Dependent Questions (For Teacher Reference)

Name:
Date:

Questions	Notes	
1. After explaining how the world does not have enough freshwater to sustain its current population, Fishman writes, "Even if those were our only problems with water, and if those problems were static, we'd have a water crisis." <i>Static</i> , in this instance, means "unchanging." How does this statement support the claim he made on page 9?	Say: * "Please read in your heads while I read along with you aloud." Read from the bottom of page 12, starting with "The big numbers are so big," and stop at the top of page 14 at "They will be thirsty." After you have read these pages, pause. Read aloud Question 1. Ask students to consider this question individually and then turn and share with a partner. Cold call a student to share out. Listen for: "It's about how we're running out of water" or "It's about how we're no longer in the golden age of water." Direct students to write the claim in their own words on their	
	Tracing an Argument note-catcher (see sample note-catcher in supporting materials).	



Qı	uestions	Notes	
2	Where on page 13 is there evidence that we do not have enough water across the globe? Discuss with your seat partner and raise your hands when you have found two pieces of evidence.	Project and ask Question 2. Wait for students to write in their note-catchers and for the majority of hands to go up. Cold call students with their hands up to share their pieces of evidence. Listen for: "1.1 billion of us don't have access to clean, safe drinking water," "1.8 billion people don't have access to water in their home or yard," "At least 40 percent of the world doesn't have good access to water," and "1.8 million children die from lack of water or from diseases they got from drinking tainted water." If any students' answers seem unrelated, ask them to point out where in the text they saw that evidence in order to clarify their understanding.	
3.	Fishman writes on page 14, "So between now and forty years from now, more new people will join the total population than were alive worldwide in 1900. They will be thirsty." What does he mean by "They will be thirsty?"	(3 minutes) Project and read aloud Question 3. Ask students to raise their hands when they have an answer. Call on a volunteer. Listen for: "They will be thirsty because water will not be easily accessible. We won't have enough water for all the people."	



Questions	Notes
4. Fishman writes, "In fact, during the golden age of water, during the last hundred years, the	(3 minutes) Say: * "Please read in your heads again while I read along with you aloud."
population of the world has gone up by a factor of four; our total water consumption has gone up by a factor of	Read from where you left off on the top of page 14 to the top of page 15 where it says, "Water problems now literally circle the globe."
seven." When something goes up by a factor of a number, it is multiplied by that number. In this line,	Project and read aloud Question 4. Give students a minute to turn and talk to their partners. Cold call a pair to share out what they discussed.
what problem is he pointing out? How does it support his central claim? Turn and talk to your partners.	Listen for: "The problem is that we are using even more water as our population grows" or "This problem supports the claim because it is evidence that we are using more and more water as our population is growing."
	Tell students to add this piece of evidence to their note-catchers.



Questions	Notes
 5. What do these three examples have in common? a. "Lake Mead is the source of water for 20 million people, and it is halfempty." b. "The rainfall-change map shows that two-thirds of India's land will actually receive less rain." "Australia is struggling to quickly adapt its economy and lifestyle to a completely new, and much reduced water budget." 	(3 minutes) Project and read aloud Question 5. Give students a minute or two to think in their heads, and then ask them to share their thoughts with their partners. Cold call a pair. Listen for: "They are examples around the globe of how different places are running out of water." Direct students to add this as evidence on their note-catchers. Explain that even though the note-catcher has space for six pieces of evidence, not every text they read or video they watch will have exactly that amount. For this excerpt, they do not have to have six pieces of evidence—four or five are perfectly acceptable.



Questions	Notes
6. Review the evidence you written down and scan Fishman's argument on these pages again. a. Can you find three reas Fishman uses to support his claim that we are running out of water? Vare they? b. Does he use sound reasoning? Explain.	ve (4 minutes) Project and read Question 6 aloud to the students and invite them to discuss with their partners. After 1 minute, cold call some students. Listen for: a. "His reasons are lack of access to clean water, population growth, and climate change."
	Have students store their note-catchers in a safe place or collect them and hold on to them until Unit 2, Lesson 1.



Tracing an Argument Note-Catcher for *The Big Thirst* (Pages 12-15) (For Teacher Reference)

Name:			
Date:			
Date.			

Name of Text/Excerpt/Clip: The Big Thirst pages 12–15

Author/ Speaker's Name: Charles Fishman

Claim:

We are at the end of the "golden age of water"; we are running out of water across the globe.

Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3
1.1 billion people don't have access to clean, safe drinking water.	1.8 billion people don't have access to water in their home or yard.	At least 40 percent of the world doesn't have good access to water.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
It gives a specific statistic that proves the claim that we don't have enough water across the globe.	another statistic that proves the claim that we don't have enough water across the globe	another statistic that proves the claim that we don't have enough water across the globe



Tracing an Argument Note-Catcher for *The Big Thirst* (Pages 12-15) (For Teacher Reference)'

Supporting Evidence 4	Supporting Evidence 5	Supporting Evidence 6
1.8 million children die from lack of water or from diseases they got from drinking tainted water.	The population of the world has gone up by a factor of four; our total water consumption has gone up by a factor of seven. Lake Mead, India, and Australia are all example of places that are runn out of the water they are used to having.	
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
another statistic that proves the claim that we don't have enough water across the globe	It shows that we are using up more and more water at a faster rate, and as our population grows, this rate will	These are all specific examples of places that are used to having more water than they do now. It's a logical conclusion that we are running



Tracing an Argument Note-Catcher for *The Big Thirst* (Pages 12-15) (For Teacher Reference)

Did the author provide sufficient evidence? Explain why or why not.

Yes. Fishman gives at least five pieces of evidence that all prove the claim. He gives a balance of statistics and specific examples that all support the idea that we are running out of water.

Was the reasoning sound? Explain why or why not.

Yes, his reasoning was sound. He gave specific reasons—lack of access, population growth, and climate change—which he then supported with evidence. He used sound reasoning because these three reasons all affect each other and the available freshwater around the globe. After reading his reasons (and evidence), you have to accept his claim that we are running out of water.

Overall, does the author successfully prove the claim? Why or why not? Refer to what you wrote above about relevant and sufficient evidence and sound reasoning.

Yes, Fishman proves his claim. He uses specific statistics and several examples to provide sufficient evidence to support his claim. All of his evidence and reasoning make sense.



Homework Directions

Using pages 1–5, 9, and 12–15 of *The Big Thirst*, mark the geographic locations mentioned in the text on the maps provided.

You may use any atlas, map, or online geographic source to help you fill in the map accurately.

Two blank maps have been provided to assist you: one of the United States and Canada, the other of Europe, Asia, and Australia.

Be creative!



Blank Map: The Big Thirst USA





Blank Map: The Big Thirst Europe/Asia/Africa





Master Map: The Big Thirst USA





Master Map: The Big Thirst Europe/Asia/Africa





Grade 7: Module 4B: Unit 1: Lesson 9 Clarifying Thinking on Water Management: Revisiting the Gallery Walk





Clarifying Thinking on Water Management: Revisiting the Gallery Walk

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
 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

Agenda	Teaching Notes
 Opening A. Entry Task: Defining Vocabulary Words from Unit 1 (2 minutes) 	• This lesson continues to draw upon students' use of video and text to clarify the issue of water sustainability. In addition, students review their homework and check their thinking based on text-based evidence.
B. Sharing Unit 1 Vocabulary (6 minutes)C. Reviewing Learning Targets (2 minutes)2. Work Time	• Students revisit the Gallery Walk from Lesson 1 to think about what they now know and what they still would like to understand better. This reflective process helps them build on new understandings. A self-monitoring or metacognitive approach can help students develop the ability to take control of their own learning, define learning goals, and monitor their progress.
 A. Reviewing thinking Log and World Map Homework (15 minutes) B. Reviewing Gallery Walk (15 minutes) 3. Closing and Assessment 	• As in the Gallery Walk in Lesson 1, item 1 is a short video, which students can watch on a computer in the classroom. Cue up the Web page before class starts so that students can click "play" as they get to the station. Choose whether students will use headphones or listen at the station in small groups, quietly so that it will not disrupt others.
 A. Thinking Log (5 minutes) 4. Homework A. Read the article "Wringing Dry" and complete the Tracing an Argument note-catcher 	 In advance: Prepare Quiz-Quiz-Trade cards (see supporting materials); decide how best to group students into triads for Work Time B; review the Quiz-Quiz-Trade and Gallery Walk protocols (see Appendix), and cue up the video. Post: Domain-Specific Vocabulary anchor chart, Gallery Walk items from Lesson 1, learning targets.



Lesson Vocabulary	Materials
synthetic, imminent (Paragraph 1), intensive (Paragraph 5), nitrate, phosphate (Paragraph 6), brackish (Paragraph 8), calibrated (Paragraph 9)	 Unit Vocabulary Quiz-Quiz-Trade Cards Domain-Specific Vocabulary anchor chart (begun in Lesson 2) Notices and Wonders note-catcher (from Lesson 1; students' completed copies) Suggested Gallery Walk items (from Lesson 1) "Wringing Dry" (one per student) Tracing an Argument note-catcher (from Lesson 7; one new blank copy per student) Tracing an Argument note-catcher on "Wringing Dry," Teacher's Guide (for teacher reference)

Opening	Meeting Students' Needs
 A. Entry Task: Defining Vocabulary Words from Unit 1 (2 minutes) Distribute one vocabulary card for each student from the Unit Vocabulary Quiz-Quiz-Trade Cards. Ask students to write the definition of the word on the back of the card. Remind them that they can use their prior Reader's Notes to define the word. 	 If students need help defining the word, prompt them to look at their Reader's Notes from Unit 1, the Domain-Specific Vocabulary anchor chart or other classroom resources. Consider allowing students to choose from multiple representations (words, pictures, etc.) on the back of the card to help define the word.



Opening (continued)	Meeting Students' Needs
B. Sharing Unit 1 Vocabulary (6 minutes)	
• Let students know that they will be doing the Quiz-Quiz-Trade protocol. Briefly review the directions:	
• When prompted, find a partner and show him or her the vocabulary word on your card.	
Your partner will use his or her resources to try to define your word.	
Then the process repeats, with you defining your partner's word.	
• After both of you have tried to determine the meaning of the words, share the correct definitions, then trade cards and find new partners.	
• Clarify directions as needed, and then invite the class to begin. Circulate to guide students and to listen in on their understanding of the words.	
Once students have partnered up four times, ask them to return to their seats.	
 Ask students to examine their vocabulary from their homework and place a star next to those words that are domain-specific. Cold call students and add these words to the Domain-Specific Vocabulary anchor chart. 	
C. Reviewing Learning Targets (2 minutes)	Checking in with learning targets
Read the day's learning targets aloud or ask a volunteer to do so:	helps students self-assess their
* "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."	learning. This research-based strategy supports struggling learners most.
* "I can cite several pieces of text-based evidence to find places on a map."	Allowing students to discuss with a
* "I can analyze photos, videos, and quotes to find a main idea."	partner before writing or sharing
• Remind students of the Fist to Five checking for understanding technique (introduced in Module 1).	with the whole class is a low-stress strategy to help them process in a risk-free situation.
Cold call a few students to provide evidence for the rating they gave themselves.	
• Tell students that today they will review the homework in preparation for their end of unit assessment (in Lesson 10), during which they will need to identify and evaluate arguments.	



Work Time	Meeting Students' Needs
 A. Reviewing Thinking Log and World Map Homework (15 minutes) Ask students to locate and silently review their homework: their Thinking Log and world maps. 	
Ask them to turn and talk to a partner and share their thinking:	
* "How were your ideas clarified by the video and reading from the previous lesson?"	
Cold call several students to share their ideas with the whole group.	
• Place students in triads. Tell them they will work with their triad to share the places they found on the maps. Give directions:	
1. In your triad, number yourselves off, student 1, 2, and 3.	
2. Student 1, share a place and the place in the book that it was mentioned.	
3. Students 2 and 3, check whether you also have that place. If not, add it.	
4. Student 2, share a place. Students 1 and 3, check whether you also have that place. If not, add it.	
5. Student 3, share a place. Students 1 and 2, check whether you also have that place. If not, add it.	
6. Continue taking turns until your triad has listed all the places you found in the text.	
B. Revisiting Gallery Walk (15 minutes)	
• Distribute students' Notices and Wonders note-catcher from Lesson 1.	
• Tell students that they will re-examine the Gallery Walk items from Lesson 1 , including quotes, images, and the video. Some of the information will now seem familiar, but some might still be new and interesting; students should add anything they observe, or that is still new or interesting, in the Notices column. They also may still find some of the information surprising or may have additional questions that are not answered in the image or quote. They can add any questions in the Wonders column.	
• Review the Gallery Walk protocol as needed and get students in small groups with their note-catchers to begin.	
• Ask them to silently wander to each image, quote, or the video and write down what they notice and what they wonder for about 8 minutes. They may linger at any item and not worry about getting to all the items. Invite students to play the video, already on the class computer screen. Tell them the video runs about 2 minutes, but they do not have to stay for the whole time. Remind students of the norms for moving calmly around the room and moving to those images, quotes, or video where there are fewer classmates.	



Work Time (continued)	Meeting Students' Needs
• Invite students to begin the Gallery Walk. Consider participating in this step and writing your own Notices and Wonders. Or circulate to listen in and clarify procedures as needed.	
• After 8 minutes, invite students to sit and finish writing their thoughts, especially adding to their thinking at the bottom of the handout. Starting with Notices, allow students to "popcorn" discuss any of the ideas they have written down. Next, invite them to "popcorn" discuss the questions that they still have after the Gallery Walk. Tell them that their questions may become research questions for Unit 2. Collect the Notices and Wonders note-catchers.	
• Congratulate students on how much they have learned about water since Lesson 1. Point out specific learning that students didn't know in the first Gallery Walk but did know in the second, as well as deeper and/or different questions formed based on increasing understanding of water sustainability and water management.	

Closing and Assessment	Meeting Students' Needs
 A. Thinking Log (5 minutes) Ask students to pair up and discuss this question before writing: 	
* "How has revisiting the resources in the Gallery Walk clarified your thinking about the issues of water sustainability and water management?"	
Then have students respond in their Thinking Log.	
Cold call students to share their current thinking.	
• Preview the homework and distribute the homework text and note-catcher.	
Homework	Meeting Students' Needs
Read the article "Wringing Dry" and complete the Tracing an Argument note-catcher.	



Grade 7: Module 4B: Unit 1: Lesson 9 Supporting Materials





abundance	agriculture
aquatic	aqueous
aquifer	



beleaguered	blasé
blighted	brackish
briny	calibrated
claim	conditioned



crisis/crises	desertification
endemic	evaporation
imminent	irrigate
levees	saline



water management	sustainability
industry	potable



Wringing Dry

Ready to give up long showers, water parks, and unlimited water gushing out of your faucets? Well, you don't have to just yet, unless world leaders can't resolve the world's worsening water shortage. The oceans are full, of course. But the liquid most important to human life--fresh, clean water for drinking and watering crops--is in short supply in many parts of the world. Rivers are running low, lakes are shrinking, streams have stopped flowing, and groundwater is being pumped dry.

Drought conditions are spreading in Africa, causing crop failures, malnutrition, and starvation.

Millions of people in Africa and Asia have turned to drinking and washing with contaminated water, leading to the spread of diseases. Infectious water-borne diseases, such as typhus and cholera, are now responsible for 80 percent of illnesses and deaths in poor countries. Many of those affected are children. If the trends continue, one-third of the world population will face a severe water shortage by 2025.

World Water Forum

That's part of a sobering assessment by the World Water Forum, which meets every three years. This year, 25,000 delegates from 100 countries convened in Istanbul, Turkey, to figure out a solution to solve the world's water crisis.

"There are several rivers that don't reach the sea anymore," Mark Smith, head of the water program for the International Union for the Conservation of Nature, told the BBC. "The Yellow River [Huang River in China] is one, the Murray-Darling [river system in Australia] is nearly another--they have to dredge the mouth of the river every year to make sure it doesn't dry up. The Aral Sea [in west-central Asia] and Lake Chad [in Africa] have shrunk because the rivers that feed them have been largely dried out."

Smith says small streams and rivers, especially in Africa, are drying up for at least part of the year, leading to even less usable water for small communities.

When streams and lakes dry up, people look underground. In parts of Africa and Asia, deep tube wells have replaced streams and rivers for farm irrigation and for drinking water. But because of the need to produce more and more crops, even the deepest wells are going dry. In rural western India, says Fred Pearce, author of When the Rivers Run Dry, "half the traditional wells and millions of tube wells have dried up."



Wringing Dry

"For nearly 3 billion people, access to a [water and] sanitation system comparable to that of ancient Rome would be a significant improvement," scientist Peter Gleick told Public Works magazine.

In 2008, lack of water led China to try to lease or purchase land in southern Africa to grow crops to help feed China's population. South Korea, which is experiencing its own drought, is looking to lease land in Madagascar, an island nation off eastern Africa, to grow food. Other countries in Asia, including Saudi Arabia, are considering similar moves.

"In general, we see drying...from southern Europe across to Kazakhstan and from north Africa to Iran," Martin Parry, of the Intergovernmental Panel on Climate Change, told the BBC. "And the drying extends westward into Central America [as well as into southern Africa and Australia]." Since 2002, Australia has been in the grip of its worst drought in history.

The United States also has been hit hard. In 2007, Lake Superior, one of the world's largest freshwater lakes, dropped to its lowest level in 80 years. California has a 20-year supply of freshwater left. New Mexico has 10 years' worth. Since 2000, the Colorado River, which provides water for seven U.S. states, has carried less water than at any time in its known history. Experts say those problems represent more than a temporary drought. In fact, the Environmental Protection Agency warns that if current water use continues unchecked, 36 states will suffer water shortages within the next five years.

Causes and Solutions

What is causing the crisis? Experts say it is a complex combination of climate change and rapid population growth. Areas that once received a lot of rain now get less rain; areas that got little rain now get more rain. When areas experience less or no rain, and rivers, streams, and lakes dry up, crops fail and hunger increases. According to the Intergovernmental Panel on Climate Change, the area of Earth's land that is classified as "very dry" has doubled since 1970, and the trend is expected to grow.

The world population today is about 6.7 billion people, and it is expected to grow to more than 9 billion by 2050, according to United Nations projections. Much of the growth is expected to take place in countries that are already water poor, putting further stress on a dwindling water supply.



Wringing Dry

One partial answer to the world water shortage, at least for countries near the sea, is to build more desalination plants that convert seawater to freshwater. A new desalination plant has been built in drought-struck Australia, and several are planned for California. Another suggested solution is for water- rich countries, such as Canada, to sell water to water-poor countries. A third suggestion is for countries to adopt ways of increasing the freshwater supply, such as teaching farmers in Africa methods of capturing clean rainwater.

Delegates to last month's Istanbul conference discussed those and other ways to help solve the water crisis. Nearly everyone agreed that the amount of water on our planet can't be changed, but the way we use it can be if more people realized the problem.

"We're waking up," Gleick told Time magazine about the growing awareness of the world water shortage. "But not fast enough."

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Tracing an Argument Note-Catcher for "Wringing Dry" Teacher's Guide (For Teacher Reference)

Name:		
Date:		

Name of Text/Excerpt/Clip: Wringing Dry

Author/ Speaker's Name: Weekly Reader

Claim:

We are running out of freshwater, and we must do something about it.

Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3
One-third of the world population will face a severe water shortage by 2025.	Small streams and rivers, especially in Africa, are drying up for at least part of the year, leading to even less usable water for small communities.	In rural western India, says Fred Pearce, author of When the Rivers Run Dry, "half the traditional wells and millions of tube wells have dried up.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
This evidence demonstrates the worldwide nature of the lack of water.	This evidence shows how water access from streams and rivers is decreasing.	This evidence shows how even underground water is decreasing in some parts of the world.



Tracing an Argument Note-Catcher for "Wringing Dry" Teacher's Guide (For Teacher Reference)

Supporting Evidence 4	Supporting Evidence 5	Supporting Evidence 6
Since 2002, Australia has been in the grip of its worst drought in history.	If current water use continues unchecked, 36 states will suffer water shortages within the next five years.	According to the Intergovernmental Panel on Climate Change, the area of Earth's land that is classified as "very dry" has doubled since 1970, and the trend is expected to grow.
Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim: This evidence gives a specific example of a country which is experiencing lack of water.	Explain why this evidence is or is not relevant to the claim: This evidence gives a specific example of a country (the US) which may experience lack of water due to our usage.	Explain why this evidence is or is not relevant to the claim: This evidence shows how climate change has contributed to the water decrease.

Did the author provide sufficient evidence? Explain why or why not.

Yes. The author used facts and expert testimony to support the claim.

Was the reasoning sound? Explain why or why not.

Yes. The author gave two main reasons for lack of water and supported them with connected evidence, and also gave evidence that logically demonstrated a water crisis.



Tracing an Argument Note-Catcher for "Wringing Dry"

Teacher's Guide (For Teacher Reference)

Overall, does the author successfully prove the claim? Why or why not? Refer to what you wrote above about relevant and sufficient evidence and sound reasoning.

The author proved the claim by providing sufficient and sound evidence within the article.



Grade 7: Module 4B: Unit 1: Lesson 10
End of Unit Assessment: Tracing and Evaluating
Arguments





End of Unit Assessment:

Tracing and Evaluating Arguments

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

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)

Supporting Learning Targets	Ongoing Assessment
• I can identify the argument and specific claims in the text "Water in Agriculture: Improving Resource Management."	• End of Unit 1 Assessment
• I can evaluate the argument and specific claims in the text "Water in Agriculture: Improving Resource Management."	
• 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 Assessment: Tracing and Evaluating Arguments

Agenda	Teaching Notes
 Opening A. Entry Task: Evaluating an Argument I Have, Who Has? (5 minutes) B. Reviewing the Learning Targets (3 minutes) C. Introducing End of Unit 1 Assessment (2 minutes) Work Time A. End of Unit 1 Assessment (30 minutes) Closing and Assessment A. Thinking Log (5 minutes) Homework A. Reread "Water Is Life" and complete the Tracing an Argument note-catcher. 	 In this lesson, students independently complete a Tracing an Argument note-catcher for both a text and a video in an end of unit assessment. This task calls upon students to employ the task of tracing an argument that they have been practicing in the last four lessons. In advance: Cue up the video, "Corporations Need to Pay More Attention to Water: Charles Fishman" (http://www.youtube.com/watch?v=8uWzIDMuM_U) Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom. Post: Learning targets.



End of Unit Assessment:

Tracing and Evaluating Arguments

Lesson Vocabulary	Materials
consummate, commodities, diverted, seepage, harbored, cultivation, ecosystems, biodiversity, reclamation, eutrophication, depletion	 Evaluating an Argument I Have, Who Has? set of 6 (one set per triad) End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (one per student) Video: "Corporations Need to Pay More Attention to Water: Charles Fishman" "Agriculture and Environment: Cotton" (one per student) End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (answers, for teacher reference) "Water Is Life" (from Lesson 1; one per student) Thinking Logs for Lesson 10 Tracing an Argument note-catcher (from Lesson 7; one new blank copy per student) Tracing an Argument Note-catcher on "Water is Life," Teacher's Guide (for Teacher Reference)

End of Unit Assessment:

Tracing and Evaluating Arguments

Opening	Meeting Students' Needs
 A. Entry Task: Evaluating an Argument I Have, Who Has (5 minutes) Group students in triads and hand out two cards from the set of Evaluating an Argument I Have, Who Has to each student. Make sure each group has a full set of six cards. Ask students to stand facing their group with their cards in hand. Tell them that the student whose card starts with "I have the first card" will read aloud that card first, and then whoever has the "answer" to the first card will read theirs next, continuing until the last card. Then ask students to return to their seats. 	Taking time to ask for students' ideas about other tasks they can complete while their classmates are working can greatly enhance student buy-in for setting clear expectations for focused work time.
 B. Reviewing the Learning Targets (3 minutes) Share the learning targets: "I can identify the argument and specific claims in the text 'Water in Agriculture: Improving Resource Management." "I can evaluate the argument and specific claims in the text 'Water in Agriculture: Improving Resource Management." "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." Ask students to turn to a partner and take turns sharing one strategy that they use to evaluate an argument. Cold call students to share their strategy. 	 Checking in with learning targets helps students self-assess their learning. This research-based strategy supports struggling learners most. Allowing students to discuss with a partner before writing or sharing with the whole class is a low-stress strategy to help them process in a risk-free situation.
 C. Introducing the End of Unit 1 Assessment (2 minutes) Tell students that today they get to demonstrate their progress on these learning targets in the end of unit assessment. Write on the board, "If you finish early, you can" and prompt students to suggest appropriate silent activities that they can complete. This list should include rereading the "Water Is Life" article and reading The Big Thirst. This list could also include: "Complete homework for other classes" or "Continue reading your independent reading book." 	

End of Unit Assessment: Tracing and Evaluating Arguments

Work Time	Meeting Students' Needs
A. End of Unit 1 Assessment (30 minutes)	
 Distribute the End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video. 	
• To complete Part 1, play the video: "Corporations Need to Pay More Attention to Water" once, allow time for students to respond, and then play it two more times.	
• After students have completed Part 1, hand out the text "Water in Agriculture: Improving Resource Management." Point out that some of the vocabulary words are defined for them and are in italics in the article. Ask students to read the article and then complete Part II.	
• Instruct students to remain silent until all classmates are finished with their work, and prompt students to begin.	
• If they complete their assessment, encourage students to stay seated and complete one of the tasks listed on the board.	
Collect students' assessments.	

Closing and Assessment	Meeting Students' Needs
 A. Thinking Log (5 minutes) Direct students to add to their Thinking Logs for Lesson 10: "How did today's reading and video help clarify your thinking about the issue of water sustainability?" Distribute the Tracing an Argument note-catcher and explain that for homework, students will reread "Water is Life" and fill in the note-catcher based on Kingsolver's argument. 	
Homework	Meeting Students' Needs
• Reread "Water Is Life" by Barbara Kingsolver and complete the Tracing an Argument note-catcher.	



Grade 7: Module 4B: Unit 1: Lesson 10 Supporting Materials





Entry Task: Evaluating an Argument I Have, Who Has?

I have the first card Who has a statement in an argument that something is true?	I have a claim. Who has evidence that relates to the claim, proves the point, and supports an argument?
I have relevant evidence. Who has how to evaluate an argument?	I have assess whether it is strong and successful at proving its claim. Who has enough evidence to prove the claim?
I have sufficient evidence. Who has reasoning that makes sense and is logical?	I have sound reasoning . Who has the first card?





End of Unit 1 Assessment: We Need to Pay More Attention to Water Tracing and Evaluating Arguments in Text and Vice				
	Na	ame:		
	Da	ate:		
Part I:	Part I: Delineating and Evaluating a Speaker's Argument			
□ E □ W □ C □ T □ W □ U □ S □ W	Ch the video two times and checkmark any interest if corporations try to save water, it won't water is a huge risk to the operation of a corporations rely on water more than they real corporations need to help their employees use the smartest companies are trying to use less when corporations use less water, they use less until agriculture uses less water, little can be desaving water gives corporations a competitive water problems are solvable.	make much of a difference. oration. lize. less water. water. s energy. lone. advantage.		
	ch the video again and write the central claim port with evidence.	that you think the author is trying to make and		
Claim:				



End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

3. Write three pieces of evidence the author uses. Then respond to whether that particular piece of evidence is relevant to the claim and why or why not.

Supporting Evidence 2	Supporting Evidence 3
Evidence 2 relevant? Why or Why not?	Evidence 3 relevant? Why or Why not?
	Evidence 2 relevant? Why or



End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

	Does the author provide sufficient evidence? Explain why or why not.
5.	Was the reasoning sound? Explain why or why not.
Pá	nrt II: Delineating and Evaluating a Writer's Argument
	art II: Delineating and Evaluating a Writer's Argument ext: "Agriculture and Environment: Cotton" by Jason Clay



End of Unit 1 Assessment: We Need to Pay More Attention to Water:

Tracing and Evaluating Arguments in Text and Video

7. Write three pieces of evidence the author uses to support his claim and tell whether the evidence is relevant and sufficient and whether the argument is sound.

Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3
Evidence 1 relevant? Why or Why not?	Evidence 2 relevant? Why or Why not?	Evidence 3 relevant? Why or Why not?



End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video

8.	Does the author provide sufficient evidence? Explain why or why not.
9.	Was the reasoning sound? Explain why or why not.



Agricultural and Environment: Cotton Environmental Impacts of Production: Water Use By Jason Clay

Cotton uses a tremendous amount of water both to produce and process.

Cotton production requires 550 to 950 litres per square meter of area planted. Put another way, 7,000 to 29,000 litres of water are required for each kilogram of cotton produced (Soth 1999).

A consumate1 consumer of water

Some estimates indicate that it is the largest user of water among all agricultural *commodities*². Estimates indicate that cotton represents more than half of the irrigated agricultural land in the world. Cotton production and processing are also a major source of pollution of freshwater (Soth 1999).

Inefficient water management

In many cotton-producing areas, surface waters are *diverted*³ to irrigate cotton. Most cotton irrigation systems rely on traditional flooding techniques. Freshwater is taken from its source (e.g., river, lake, reservoir, or underground) and transported via a series of even smaller, open canals to the area to be irrigated.

Freshwater losses occur through evaporation, *seepage*⁴, and inefficient water management. Globally, irrigation efficiency of all types is lower than 40 percent (Gleick 1993). This means that 60 percent of the water used in irrigation never makes it to the targeted plant.

Substantial damages in the Aral Sea basin

The continuous *cultivation*⁵ of cotton in the Aral Sea basin of Uzbekistan has caused a tremendous decrease in the surface area of the sea—it has shrunk by almost half. The reason is that two of the rivers that formerly fed the Aral Sea (the Amu Darya River and Syr Darya River) were *diverted*⁸ for cotton production.

Once the world's fourth largest lake, the Aral Sea formerly *harboured*⁶many fish; today there are few. In addition, some 20 of its 24 native fish species are now extinct there, including the sturgeon that produced world-famous caviar. In China's Yellow River Valley, where cotton is grown under both irrigated and rain-fed conditions, a shortage of irrigation water due to falling water tables has also been reported (Gillham 1995).



Agricultural and Evironment: Cotton Environmental Impacts of Production: Water Use By Jason Clay

Wide ranging impacts

The main activities associated with cotton production that affect freshwater *ecosystems*⁷ and *biodiversity*⁸ include runoff from fields, drainage, pesticide application, water withdrawal for irrigation, extensive irrigation, dam construction, and *land reclamation*⁹. These activities result in a range of impacts from *eutrophication*¹⁰ and pollution to loss of soil and other biodiversity.

Groundwater depletion¹¹

Groundwater *depletion*¹¹ is another environmental problem associated with cotton *cultivation*⁵. In many areas groundwater is pumped to irrigate cotton. In essence this water is mined from underground reserves. In ossified aquifers, which are aquifers with solid caps that do not allow the water to be replenished from surface runoff, water is a non-renewable resource. Even in other types of aquifers, groundwater systems can take hundreds or even thousands of years to be refilled once they have been drained.

According to a recent World Wildlife Fund report on cotton (Soth 1999), the impact of cotton on total freshwater supplies is probably much greater than the irrigation data shows. Even with irrigated cotton, some 60 percent of water demand is provided by rainfall (Klohn 1998). The total global freshwater demand for cotton production is between 50 and 210 cubic kilometers per year. This is between 1 percent and 6 percent of total global freshwater withdrawal (Soth 1999).

Excerpts from "World Agriculture & Environment" by Jason Clay

http://wwf.panda.org/what_we_do/how_we_work/businesses/transforming_markets/solutions/bettermarkets/farming/cotton/environmental_impacts/water_use/

Creative Commons

Vocabulary list:

- 1. consummate: perfect; complete
- 2. commodities: products that are bought and sold
- 3. diverted: turned away from something; made something go in a different direction
- 4. seepage: leakage; leaking from something
- 5. cultivation: making the land so it can grow plants
- 6. harboured: provided shelter or safety
- 7. ecosystems: communities of living things, together with their environment
- 8. biodiversity: the different types of life forms
- 9. reclamation: making poor-quality land useful again
- 10. eutrophication: when a body of water has too many nutrients and too many plants grow; this causes all the animals in the water to die
- 11. depletion: to make less





Claim:

End of Unit 1 Assessment: We Need to Pay More Attention to Water: Tracing and Evaluating Arguments in Text and Video (Answers, for Teacher Reference)

	Name:
	Date:
Pa	rt I: Delineating and Evaluating a Speaker's Argument
1.	Watch the video two times and checkmark any interesting details it mentions.
	☐ Even if corporations try to save water, it won't make much of a difference.
	✓ Water is a huge risk to the operation of a corporation.
	✓ Corporations rely on water more than they realize.
	☐ Corporations need to help their employees use less water.
	✓ The smartest companies are trying to use less water.
	✓ When corporations use less water, they use less energy.
	☐ Until agriculture uses less water, little can be done.
	✓ Saving water gives corporations a competitive advantage.
	✓ Water problems are solvable.
	✓ Companies must plan for smart water use now.
2.	Watch the video again and write the central claim that you think the author is trying to make and support with evidence.

Corporations need to pay more attention to water.



End of Unit 1 Assessment: We Need to Pay More Attention to Water:

Tracing and Evaluating Arguments in Text and Video

(Answers, for Teacher Reference)

3. Write three pieces of evidence the author uses. Then respond to whether that particular piece of evidence is relevant to the claim and why or why not. (For teacher reference, there are more than three below, but any three are correct.)

Supporting	Supporting	Supporting	Supporting
Evidence 1	Evidence 2	Evidence 3	Evidence 4
It takes a lot of water to do even little things (Google search).	Smart businesses are already thinking about water risk and trying to use less water.	Saving money on water means you also are saving energy and electricity.	Being creative about water use gives a competitive advantage.
Evidence 1 relevant?	Evidence 2 relevant?	Evidence 3 relevant?	Evidence 4 relevant?
Why or why not?	Why or why not?	Why or why not?	Why or why not?
Yes, because most people, or corporations, don't realize how much water they use, so it is wasted.	Yes, because most companies want to be smart companies.	Yes, because corporations want to save money on water and anything else they can if it doesn't hurt their product.	Yes, because most companies want to have a competitive advantage.

4. Does the author provide sufficient evidence? Explain why or why not.

Yes. There could be more, but in this short clip and for his purpose (to get corporations' attention), there are several pieces of evidence that are high quality.

5. Was the reasoning sound? Explain why or why not.

Yes, he convinced me. His reasons and evidence were logical and, when you look at the argument overall, it was supported and made sense.



End of Unit 1 Assessment: We Need to Pay More Attention to Water:

Tracing and Evaluating Arguments in Text and Video

(Answers, for Teacher Reference)

Part II: Delineating and Evaluating a Writer's Argument

Text: "Agriculture and Environment: Cotton" by Jason Clay

6.	Read and think closely about the text. Then, mark the central claim that you think the author is trying to make and support with evidence.
	☐ People should not wear clothes made of cotton.
	✓ Growing cotton is not a sustainable use of water.
	☐ Growing cotton ruins the soil so nothing else can grow.
	☐ In countries that grow cotton, there is not enough water for drinking.

7. Write three pieces of evidence the author uses to support his claim and tell whether the evidence is relevant and sufficient and whether the argument is sound. (For teacher reference, there are more than three below, but any three are correct.)

Supporting Evidence	Supporting Evidence	Supporting Evidence
Cotton uses a lot of water to produce—550–950 liters per square meter.	Cotton is the largest user of water among all agricultural commodities.	Cotton represents more than half the irrigated agricultural land of the world.
Cotton production and processing are also a major source of freshwater pollution.	Many times, surface waters are diverted to irrigate cotton—the land is flooded.	Water often leaks from the pipes as it is diverted.
Growing cotton has decreased the size of the Aral Sea because two rivers that fed the sea have been diverted to cotton fields.	Often, groundwater is being depleted because water is pumped from underground to irrigate the cotton.	



End of Unit 1 Assessment: We Need to Pay More Attention to Water:

Tracing and Evaluating Arguments in Text and Video

(Answers, for Teacher Reference)

- 8. Does the author provide sufficient evidence? Explain why or why not. The author uses lots of evidence, especially facts and statistics to support each of his reasons, so his evidence is sufficient.
- 9. Was the reasoning sound? Explain why or why not.

Yes, he does. The author claims that cotton used a lot of water. Then he lists reasons he believes that (like inefficient water management) and backs up his reasons with evidence. It's easy to see the connections between the evidence, the reasons and the claim, so his reasoning is sound.





Tracing an Argument Note-catcher on "Water is Life"

Teacher's Guide (for Teacher Reference)

Name:		
Date:		

Name of Text/Excerpt/Clip: "Water is Life"

Author/ Speaker's Name: Barbara Kingsolver

Claim:

We need to use water more sustainably

Supporting Evidence 1	Supporting Evidence 2	Supporting Evidence 3
"But such is the human inclination to take water as a birthright that public fountains still may bubble in Arizona's town squares and farmers there raise thirsty crops."	"We've lately raised the Earth's average temperature by .74°C (1.3°F), a number that sounds inconsequential. But these words do not: flood, drought, hurricane, rising sea levels, bursting levees."	"The results are in plain sight along pummeled coasts from Louisiana to the Philippines as superwarmed air above the ocean brews superstorms, the likes of which we have never known. In arid places the same physics amplify evaporation and drought, visible in the dust-dry farms of the Murray-Darling River Basin in Australia."



Tracing an Argument Note-catcher on "Water is Life"

Teacher's Guide (for Teacher Reference)

Is this evidence relevant?	Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
This evidence shows how people are currently using water in an unsustainable way—fountains and green lawns don't make sense in the desert.	This evidence shows another side to humans acting in an unsustainable way. Climate change, brought on by humans, has also caused changes to water, including horrible natural disasters like floods, droughts and hurricanes.	This evidence shows that the whole world, from Louisiana to the Philippines to Australia is suffering from the changes t to water.
Supporting Evidence 4	Supporting Evidence 5	Supporting Evidence 6
"Their husbands were digging a well nearby. They worked with hand trowels, a plywood form for lining the shaft with concrete, inch by inch, and a sturdy hand-built crank for lowering a man to the bottom and sending up buckets of sand. A dozen hopeful men in stained straw hats stood back to let me inspect their work, which so far had yielded only a mountain of exhumed sand, dry as dust."	"Forty percent of the households in sub-Saharan Africa are more than a half hour from the nearest water, and that distance is growing."	"Agreeing to self-imposed limits instead, unthinkable at first, will become the right thing to do. While our laws imply that morality is fixed, Hardin made the point that "the morality of an act is a function of the state of the system at the time it is performed." Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons."



accessing water.

Tracing an Argument Note-catcher on "Water is Life"

Teacher's Guide (for Teacher Reference)

Is this evidence relevant?	Is this evidence relevant?
Yes / No	Yes / No
Explain why this evidence is or is not relevant to the claim:	Explain why this evidence is or is not relevant to the claim:
Again, this is another piece of evidence that shows that many people struggle to get water every day and that will only get worse if we don't use water	This evidence shows that just like humans over-hunted passenger pigeons into extinction, if we abuse our water supply, we'll run out of that too.
	Yes / No Explain why this evidence is or is not relevant to the claim: Again, this is another piece of evidence that shows that many people struggle to get water every day and that will only

Did the author provide sufficient evidence? Explain why or why not.

Yes, the author used lots of different kinds of evidence and she used evidence in every paragraph. The evidence that she used supported her claim well.

Was the reasoning sound? Explain why or why not.

Yes, the reasoning was sound. Kingsolver made clear connections between the evidence and what the evidence shows. For instance, when she says "Agreeing to self-imposed limits instead, unthinkable at first, will become the right thing to do. While our laws imply that morality is fixed, Hardin made the point that "the morality of an act is a function of the state of the system at the time it is performed." Surely it was no sin, once upon a time, to shoot and make pies of passenger pigeons," it is logical to make that comparison. Since we over-used a natural resource before, we can do it again. So we should make sure to avoid making the same mistake.

Overall, does the author successfully prove the claim? Why or why not? Refer to what you wrote above about relevant and sufficient evidence and sound reasoning.

Yes, she successfully proves her claim by using relevant, sufficient evidence and using logical reasoning. It is easy to see why humans should use water more sustainably now.