Complete the following statement in your own words:

When you contrast two things, it means that you are ...
Common claim: It is critical that our global water supply be sustainable. For that to happen, we need to better manage the world's water.

Evidence ONLY from Fishman's "The Big Thirst"

Evidence in BOTH Fishman's "The Big Thirst" and Kingsolver's "Water Is Life"
## Four Types of Evidence/Identify the Evidence

<table>
<thead>
<tr>
<th>Type of Evidence</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>anecdote</strong></td>
<td>a brief story about something interesting or funny in life that may give an example of the author’s claim or serve as evidence for a claim.</td>
<td>“We keep an eye out for wonders, my daughter and I … and wherever we find them, they reflect the magic of water.” (Kingsolver)</td>
</tr>
<tr>
<td><strong>analogy/metaphor</strong></td>
<td>a comparison between two things that allows the reader to understand the author’s evidence or claim in a clear way.</td>
<td>“Cities there function like space stations, importing every ounce of fresh water from distant rivers or fossil aquifers.” (Kingsolver)</td>
</tr>
<tr>
<td><strong>fact/statistic</strong></td>
<td>a piece of information about something, presented as true and accurate, that supports the author’s claim. A statistic specifically counts something by number.</td>
<td>“Chinese soldiers were dispatched in early 2010 to help deliver water in Southwest China.” (Fishman, 15)</td>
</tr>
<tr>
<td><strong>expert testimony</strong></td>
<td>a statement that supports the author’s claim, made by a person with special skill or knowledge.</td>
<td>“Miguel Angel Fraile, secretary general of the Catalan Federation of Commerce, said, ‘You can understand a boat bringing water to an island, but not to a continent.’” (Fishman, 10)</td>
</tr>
</tbody>
</table>
Below are four examples of evidence. Label each with the correct type.

1. “Even while we take Mother Water for granted, humans understand in our bones that she is the boss.” (Kingsolver)

2. “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. ... I looked down that black hole and then turned and climbed the sand mound to hide my unprofessional tears.” (Kingsolver)

3. “So at least 40 percent of the world either doesn’t have good access to water, or has to walk to get it.” (Fishman, 13)

4. “I think our relationship to water is going to be one of the deciding things of the next century. I don’t think water’s in any trouble. But we might be.” (Fishman, 28)
### Reflection Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Fishman Text</th>
<th>Kingsolver Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>What types of evidence are used the most?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What types of evidence are used the least?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you see any other patterns in the types of evidence used?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Why do you think the author chose the evidence he/she did? What reasons does it support?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There are four main categories in which water is used in a society, listed below. Keep these in mind as you read and answer the questions.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>personal</td>
<td>water used by individuals</td>
<td>taking a shower; washing dishes</td>
</tr>
<tr>
<td>agricultural</td>
<td>water used to grow crops or raise animals</td>
<td>washing down milking machines in dairies; watering wheat fields</td>
</tr>
<tr>
<td>industrial</td>
<td>water used in the production of goods</td>
<td>creating and bottling soft drinks; manufacturing computer chips</td>
</tr>
<tr>
<td>municipal</td>
<td>water used by the government to maintain communities</td>
<td>providing clean water to homes; maintaining public green spaces such as parks</td>
</tr>
</tbody>
</table>

1. Fishman writes on page 20 that “[Water] problems are local, but the consequences, the damage, and the costs are anything but local.” Read the paragraph that follows this statement and use it to fill in the chart below.
**Claim:** “The idea that all water problems are local isn’t quite so simple.”

**Reason:** “The problems are local, but the consequences, the damage, and the costs are anything but local.”

<table>
<thead>
<tr>
<th>Evidence:</th>
<th>How the evidence connects to the claim (reasoning):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evidence:</th>
<th>How the evidence connects to the claim (reasoning):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evidence:</th>
<th>How the evidence connects to the claim (reasoning):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Take a look again at the two examples you used to answer Question 1. In what **water category** would you place your first example (personal, agricultural, industrial, or municipal)? Explain your answer.

3. The author concludes the chapter by stating, “It is one of the ironies of our relationship to water that the moment it becomes unavailable, the moment it really disappears—that’s when water becomes the most urgently visible.”

   *Irony* means “a reversal of expectations in a situation.” How does Fishman’s statement show us a reversal of expectations? In other words, why is it *ironic*?
| A field of soybeans is irrigated by a network of ditches connected to the nearest river. |
| A man fills the bathroom sink with water to help him shave. |
| The floor of a slaughterhouse is washed down every evening. |
| A batch of white T-shirts is dipped into several vats of commercial dye in a factory. |
| Parts of an airplane are cast out of metal, then placed in baths of water to cool. |
| A family car is washed in the driveway on a hot summer day. |
| A refrigerator uses a special mechanism to make ice. |
| Apple trees on a farm are sprayed with liquid pesticide. |
| A soft drink is mixed using carbonated water as a base, then bottled in a bottling plant. |
Tape the appropriate Water Management Example Cards here.

What other examples of industrial water management have you seen or heard in the text of *The Big Thirst*, pages 20, 21, and 24?
<table>
<thead>
<tr>
<th>Tape the appropriate Water Management Example Cards here.</th>
</tr>
</thead>
</table>

**What other examples of agricultural water management have you seen or heard in the text of *The Big Thirst*, pages 20, 21, and 24?**
Tape the appropriate Water Management Example Cards here.

What other examples of personal water management have you seen or heard in the text of *The Big Thirst*, pages 20, 21, and 24?
When you find a text you think you might use for research, you first need to assess it by asking these questions.

1. **Assess the Text’s Accessibility**
   - Am I able to read and comprehend the text easily?
   - Do I have adequate background knowledge to understand the terminology, information, and ideas in the text?

2. **Assess the Text’s Credibility and Accuracy**
   - Is the author an expert on the topic?
   - Is the purpose to inform or to persuade/sell?
   - When was the text first published?
   - How current is the information on the topic?
   - Does the text have specific facts and details to support the ideas?
   - Does the information in this text expand on or contradict what I already know about the topic?

3. **Assess the Text’s Relevance**
   - Does the text have information that helps me answer my research questions? Is it information that I don’t have already?
   - How does the information in the text relate to other texts I have found?
## Questions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1. | At the bottom of page 20, a sentence says, “Poor farming practices around the world squander huge quantities of water.” What do you think the word *squander* might mean?  
What word in that sentence gives you the best clue to the meaning of *squander*? |
| 2. | Talk about a fact about water that jumped out at you while reading this excerpt. Which of the three uses of water we have studied today relates the most closely to that fact? |
| 3. | In this passage, there are three footnotes. How does this relate to the idea that *The Big Thirst* is a credible source? |
### Questions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>The passage reads, “Meanwhile, we haven't yet really tried to get Americans to install water-efficient fixtures at home.” What do you think a <em>water-efficient</em> fixture is? What does <em>efficient</em> mean? How do you know? Give an example of a context clue from the text.</td>
</tr>
<tr>
<td>5.</td>
<td>In the previous lesson, we discussed how the evidence of facts and statistics helps to make a strong argument. What facts does the author choose to discuss in the excerpt, and what claims and reasons do they support?</td>
</tr>
<tr>
<td>Questions:</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>6. Does the author believe that technology assists with water problems</td>
<td></td>
</tr>
<tr>
<td>6. Does the author believe that technology assists with water problems</td>
<td></td>
</tr>
<tr>
<td>or makes them worse? Use at least one example from the text to support</td>
<td></td>
</tr>
<tr>
<td>or makes them worse? Use at least one example from the text to support</td>
<td></td>
</tr>
<tr>
<td>your answer.</td>
<td></td>
</tr>
<tr>
<td>your answer.</td>
<td></td>
</tr>
<tr>
<td>7. Where would “technology” cause a problem in the three categories of</td>
<td></td>
</tr>
<tr>
<td>7. Where would “technology” cause a problem in the three categories of</td>
<td></td>
</tr>
<tr>
<td>water use we have studied, and why? Use examples from the text to</td>
<td></td>
</tr>
<tr>
<td>water use we have studied, and why? Use examples from the text to</td>
<td></td>
</tr>
<tr>
<td>support your answer.</td>
<td></td>
</tr>
<tr>
<td>support your answer.</td>
<td></td>
</tr>
</tbody>
</table>
Main idea: “In the last decade, business has discovered water as both a startling vulnerability and an opportunity to reduce costs and turn water itself into a business” (123).

**startling:** surprising; frightening

**vulnerability:** a weakness open to attack or damage

Why would water be regarded by business as a “startling vulnerability”? Use at least one of the supporting details above to support your answer.
Some definitions have been provided for you. For words without definitions, create a definition from the context and fill out the Context Clues column. Then, check your definition against a dictionary to see if you were correct.

<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
<th>Context clues: How did you figure out this word?</th>
</tr>
</thead>
<tbody>
<tr>
<td>painstaking (123)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inevitable (123)</td>
<td>impossible to avoid</td>
<td>x</td>
</tr>
<tr>
<td>potable (123)</td>
<td>suitable for drinking</td>
<td>x</td>
</tr>
<tr>
<td>desalination (123/124)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>culinary (124)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prosaic (124)</td>
<td>being dull, ordinary, or uninteresting</td>
<td>x</td>
</tr>
<tr>
<td>trivial (125)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Entry Task

Name:

Date:

Answer these questions in a few brief sentences:

What is a consequence?

When have you experienced a consequence in your life? What was it?
How do industry and agriculture currently manage water? What strategies exist for industry and agriculture to manage water better?
Good researchers stop often to look around and see where they are, check their maps, and set their course toward their final destination. They sometimes take side trips, but they use their route-finding tools to reach their destinations.

**INITIATING INQUIRY**

**Step 1:** Set a purpose for research: What is the overarching research question? What information do you need to find? Why does this inquiry matter?

**Step 2:** Gather background information about your topic from a reliable source and generate supporting research questions.
- Relevant
- Specific
- Answerable

**GATHERING SOURCES**

**Step 3:** Gather a variety of reliable and relevant sources.

**ANALYZING SOURCES**

**Step 4:** Use your sources. For each source:
- Skim the source to see if it is useful for you.
- If it is useful, read it and mark parts of the text that are relevant to your research.
- On your note-taking sheet, record the source information and take notes in your own words on ideas and information that are relevant.

**EVALUATING RESEARCH**

**Step 5:** After you are done reading a source, step back and evaluate:
- Which of my supporting research questions have I answered, either partially or completely?
- What additional supporting research questions did I generate?
- How thorough is my answer to the overarching research question?
- Which source might I use next?

**DEVELOPING AN EVIDENCE-BASED PERSPECTIVE**

**Step 6:** When you have enough information, synthesize and share your findings.
This is your place to gather information, generate questions, and keep track of your findings as you complete this research project. This will help you practice for and write your position paper and demonstrate your progress toward these learning targets:

- 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 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)

**RESEARCH QUESTION(S):** How do industry and agriculture currently manage water? What strategies exist for industry and agriculture to manage water better?

The following pages will help you organize your notes on your sources and your ideas about them.
## Text Selection 1

This text will help you learn information about the management of water in industry. This will help you begin to generate relevant questions about your topic.

**Track the bibliographic information for this source. The first entry has been mostly filled out for you, but you must add the date and page numbers:**

<table>
<thead>
<tr>
<th>Title: <em>The Big Thirst</em></th>
<th>Author: Charles Fishman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print or Digital: Print</td>
<td>Source Type: Book</td>
</tr>
<tr>
<td></td>
<td>Credible: Yes</td>
</tr>
<tr>
<td></td>
<td>Page #(s):</td>
</tr>
</tbody>
</table>

**My notes from this source:**
- 
- 
- 
- 
- 

**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: __________________________

What is your initial idea of its meaning? 

______________________________

What strategy did you use to determine an initial meaning for this word?

______________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word?

______________________________
<table>
<thead>
<tr>
<th>Paragraph to sum up new information from this text about the use of water in industry:</th>
<th>Questions I now have (keep these relevant, specific, and answerable):</th>
</tr>
</thead>
</table>

• • • • • •
1. Read for gist. Is this a source that is relevant to your topic and questions?

2. Reread the text to find key vocabulary about how water is currently managed. While you read, text-code important passages.

3. After you’ve read, paraphrase the excerpt by using one of these sentence stems:

<table>
<thead>
<tr>
<th>According To</th>
<th>Source</th>
<th>Paraphrased Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>writes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>illustrates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>observes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>states</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>claims</td>
<td></td>
</tr>
</tbody>
</table>

Example:
According to The New York Times, the ways we currently use water are unsustainable.

According to Fred Peace’s interview, desalination is an expensive solution.
Text Selection 2

This text will help you learn information about the management of water in industry. This will help you begin to generate relevant questions about your topic.

Track the bibliographic information for this source. The first entry has been mostly filled out for you, but you must add the date and page numbers:

- Author: Charles Fishman
- Title: The Big Thirst
- Source Type: Book
- Print or Digital: Print
- Credible: Yes
- Page #(s):

Use the paraphrasing steps in Section II to help you paraphrase this source.

Paraphrased information from this text about the current state of water management in industry:

• • • • • •
**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: _____________________________________

What is your initial idea of its meaning?
_______________________________________

What strategy did you use to determine an initial meaning for this word?
____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word?
____________________________________________________________
____________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):

•

•

•

•

•
## Text Selection 3

This text will help you learn information about the management of water in industry. This will help you begin to generate relevant questions about your topic.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Source Type</th>
<th>Credible</th>
<th>Print or Digital</th>
<th>Page #(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Big Thirst</td>
<td>Charles Fishman</td>
<td>Book</td>
<td>Yes</td>
<td>Print</td>
<td></td>
</tr>
</tbody>
</table>

### Paraphrased Information in Section II to Help You Paraphrase This Source:

- Use the paraphrasing steps in Section II to help you paraphrase this source.

- Paraphrased information from this source about the current state of water management in industry:
**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: ____________________________________

What is your initial idea of its meaning?
_______________________________________

What strategy did you use to determine an initial meaning for this word?
____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word?
____________________________________________________________
____________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):

- 
- 
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- 
-
### Text Selection 4

This text will help you learn information about the management of water in agriculture. This will help you begin to generate relevant questions about your topic.

**Track the bibliographic information for this source. The first entry has been mostly filled out for you, but you must add the date and page numbers:**

<table>
<thead>
<tr>
<th>Title: The Big Thirst</th>
<th>Author: Charles Fishman</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print or Digital: Print</td>
<td>Source Type: Book</td>
<td>Credible: Yes</td>
</tr>
</tbody>
</table>

**Use the paraphrasing steps in Section II to help you paraphrase this source.**

Paraphrased information from this text about the current state of water management in agriculture:

- •
- •
- •
- •
- •
**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: _________________________________

What is your initial idea of its meaning? ____________________________________________________________

What strategy did you use to determine an initial meaning for this word? ____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word? ____________________________________________________________

____________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):

- •
- •
- •
- •
- •
**Text Selection 5**

This text will help you learn information about the management of water in agriculture. This will help you begin to generate relevant questions about your topic.

---

**Track the bibliographic information for this source. The first entry has been mostly filled out for you, but you must add the date and page numbers:**

<table>
<thead>
<tr>
<th>Author</th>
<th>Date:</th>
<th>Source Type</th>
<th>Page #(s):</th>
<th>Credible:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Fishman</td>
<td></td>
<td>Book</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Print or Digital:** Print

Title: The Big Thirst

---

**Use the paraphrasing steps in Section II to help you paraphrase this source.**

Paraphrased information from this text about the current state of water management in agriculture:

• • • • •
**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: ________________________________________

What is your initial idea of its meaning? ____________________________________________________________

What strategy did you use to determine an initial meaning for this word? ____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word? ____________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):

- 
- 
- 
- 
-
You will now use the internet to search for sources that answer the questions you have identified above in your notes.

**Track bibliographic information here:**

<table>
<thead>
<tr>
<th>Title of Web Page:</th>
<th>Title of Website:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author of Article:</td>
<td>Credible Source?:</td>
</tr>
<tr>
<td>Date of Website Creation:</td>
<td>Date I Accessed:</td>
</tr>
</tbody>
</table>

**Use the paraphrasing steps in Section II to help you paraphrase this source.**

Paraphrased information from this text about the current state of water management in industry or agriculture:

- 
- 
- 
- 
-
Vocabulary:
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: _____________________________________

What is your initial idea of its meaning?
__________________________________________________________________________________________

What strategy did you use to determine an initial meaning for this word?
__________________________________________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word?
__________________________________________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):

•

•

•

•

•
### Website 2

You will now use the internet to search for sources.

**Track bibliographic information here:**

<table>
<thead>
<tr>
<th>Title of Web Page</th>
<th>Title of Website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Author of Article</th>
<th>Credible Source?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of Website Creation</th>
<th>Date I Accessed</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Use the paraphrasing steps in Section II to help you paraphrase this source.**

**Paraphrased information from this text about the current state of water management in industry or agriculture:**

- ...
- ...
- ...
- ...
- ...
**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: ________________________________

What is your initial idea of its meaning? ____________________________________________________________

What strategy did you use to determine an initial meaning for this word? ____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word? ____________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):

- 
- 
- 
- 
-
<table>
<thead>
<tr>
<th>Website 3</th>
<th>Title of Website:</th>
<th>Credible Source?:</th>
<th>URL:</th>
<th>Date I Accessed:</th>
<th>Date of Website Creation:</th>
<th>Paraphrased information from this text about the current state of water management in industry or agriculture:</th>
</tr>
</thead>
</table>

You will now use the internet to search for sources.

Track bibliographic information here:

Use the paraphrasing steps in Section II to help you paraphrase this source.

•

•

•

•

•

•
Vocabulary:
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: ______________________________________

What is your initial idea of its meaning? ____________________________________________________________

What strategy did you use to determine an initial meaning for this word? ____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word? ____________________________________________________________

Questions that will now guide my further research (remember to keep these relevant, specific, and answerable):
•
•
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•
•
•
Text Selection 6

Track the bibliographic information for this source.

<table>
<thead>
<tr>
<th>Title:</th>
<th>Author:</th>
<th>Date:</th>
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<th>Print or Digital:</th>
<th>Source Type:</th>
<th>Credible:</th>
<th>Page #(s):</th>
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</table>

Use the paraphrasing steps in Section II to help you paraphrase this source.

Paraphrased information from this text about the current state of water management in agriculture:

•

•

•

•

•
**Vocabulary:**
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: __________________________________________

What is your initial idea of its meaning? ________________________________________________________________

What strategy did you use to determine an initial meaning for this word? ________________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word? ________________________________________________________________

______________________________________________________________
<table>
<thead>
<tr>
<th>Text Selection 7</th>
<th>Date:</th>
<th>Page #(#s):</th>
<th>Credible:</th>
<th>Source Type:</th>
<th>Print or Digital:</th>
<th>Use the paraphrasing steps in Section II to help you paraphrase this source.</th>
<th>Paraphrased information from this text about the current state of water management in agriculture:</th>
</tr>
</thead>
</table>

Paraphrased information:
- • • • • •
Vocabulary:
Identify a word from the text that is new to you, and whose meaning seems important to understanding this text: _____________________________________

What is your initial idea of its meaning? ____________________________________________________________

What strategy did you use to determine an initial meaning for this word? ____________________________________________________________

Look this word up in a reference (dictionary, thesaurus, glossary). What is the definition of this word? ____________________________________________________________
Which of the following criteria do all good research questions have?

a. Relevant
b. Long
c. Specific
d. Answerable
e. Complicated
f. Broad
1. The main idea of this excerpt of reading is that the IBM Co.

2. This shows that water in industry

and that
On page 113 of *The Big Thirst*, author Charles Fishman explains the process of cleaning wool used in Salisbury, Australia. He explains that the wool is “washed in cold water, lightly agitated, wrung out, and moved.”

1. What do you think the word *agitated* means in this context? Write your ideas below:

2. Now look up the word *agitate* in a dictionary. There will be several different definitions. Read all of them, then select what you think is the best definition for this context.

3. Write the definition you chose here:

4. Explain how you determined that this is the correct definition:
1. Reread the second paragraph on page 112, starting with “So when Australian sheep get sheared—and Australia is still the largest producer of wool in the world …” Then, discuss with your partner what you think these words mean:
   A. sheared
   B. grubby
   C. scouring

2. In the third paragraph on page 112, Fishman writes, “Salisbury uses a megaliter of water a day to wash wool,” and in the last paragraph of page 113, he states, “Salisbury gets just eighteen inches of rain a year.” What do you infer is the problem here?

3. Reread the last full sentence in the first paragraph on the top of page 114. Why is it absurd to be washing greasy wool in tap water?

4. The word *prescient* comes from the prefix *pre*, meaning “before,” and the root word for *science*, which means “to know.” Given that, in the third paragraph on page 114, what does the line “The tickle of water insecurity turned out to be almost scarily prescient” mean? How was this “tickle” a way of “pre-knowing”?
5. Pause and discuss the gist of these paragraphs with your seat partner:
   A. Page 114, “As it happened ...”
   B. Page 114, “And so the town ...”
   C. Page 115, “The basic idea ...”

6. Considering the last four paragraphs, what was the problem and what was the solution that Salisbury found?

7. What are the purple pipes? Why do you think they are purple?

8. What are some of the benefits of Michell Wool using SA water (Salisbury, Australia’s purple pipe water)?

9. At the top of page 116, Fishman refers to a “virtuous water cycle.” Virtuous means “impacting virtue, or giving benefit.” This use of the word virtuous is often heard in the world of problems and solutions. How does the word virtuous fit into the water cycle as discussed here?
Exit Ticket: Practicing Paraphrasing

Name:

Date:

Read the excerpt from *The Big Thirst* below. Then, on the lines below, paraphrase the excerpt in your own words.

“Just-sheared wool arrives strapped into heavy, bulging bales, chest-high, bristling with grass, sticks, dirt, burrs. Raw wool is called greasy wool, because in addition to dirt, the wool is coated with the sheep’s natural protection, lanolin.”
Contrasting Evidence: Bottled Water

Excerpt 1:

http://www.mnn.com/food/healthy-eating/stories/5-reasons-not-to-drink-bottled-water
(Mother Nature Network)

In theory, bottled water in the United States falls under the regulatory authority of the Food and Drug Administration. In practice, about 70 percent of bottled water never crosses state lines for sale, making it exempt from FDA oversight.

On the other hand, water systems in the developed world are well-regulated. In the U.S., for instance, municipal water falls under the purview of the Environmental Protection Agency, and is regularly inspected for bacteria and toxic chemicals. Want to know how your community scores? Check out the Environmental Working Group’s National Tap Water Database.

While public safety groups correctly point out that many municipal* water systems are aging and there remain hundreds of chemical contaminants for which no standards have been established, there’s very little empirical** evidence that suggests bottled water is any cleaner or better for you than its tap equivalent.

* municipal—city-wide
** empirical—observable, provable
Excerpt 2

http://www.columbiatribune.com/arts_life/family_life/blogs/word_from_a_mother/bottled-water-the-biggest-waste-of-all-time/article_7c7c49ac-f92d-5fa2-8712-4b042d0ce0ac.html
(Columbia Tribune)

We think it's safer or more pure than tap water. Ironically, bottled water, in some cases, is the same water that comes from a tap, according to the film (Tapped), it just costs about 1,000 times more. In other cases, companies buy a parcel of land, pump the ground water and sell it in bottles. What if there's a drought or an enforced water restriction? Oh well. You and I can't water our lawns, but the water keeps a-pourin' into the plastic bottles at the factory.

So who regulates the safety of bottled water? The short answer is no one, according to the film. The FDA has jurisdiction only over bottled water that is sold in a different state in which it was pumped, but most water is sold in-state. Besides, the FDA is under-staffed. Quality tests are done by the companies that bottle and sell the water. Where I come from, we call this a conflict of interest.

On the other hand, municipal water distribution is highly regulated. The City of Columbia tests its water supply more than 4,000 times per year, or an average of 11 times per day. The water reports are public information, so any red flag is pounced upon by alert and thorough news reporters.

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Common Claim:

Evidence ONLY from Excerpt 1  Evidence in BOTH  Evidence ONLY from Excerpt 2
Reflection Question

1. Which author made the most convincing argument, and why? Use the criteria from the Evaluating an Argument anchor chart and the Note Sheet: Four Types of Evidence to support your answer. If you think both arguments were equally strong, your answer should include reasons why each of them was convincing.
1. A *basin* is a bowl-shaped area of land. Reread the first sentence of the second paragraph on page 186.
   a. Using context clues, determine what a *rangeland* is.

   b. What clues did you use to figure it out?

2. What does the line “It is no place to underestimate nature” mean?

3. Why do you think Fishman calls Laurie Arthur’s fields “The Big Dry”?

4. Fishman says, “Arthur, like all the farmers for hundreds of miles around, is an irrigator.”
   a. Based on the context around this sentence, what does *irrigator* mean?

   b. Why do you think it’s a problem when farmers have to rely on irrigation channels to water their crops?
5. A *baron* is like a captain or ruler of a certain business or industry. What does Fishman mean when he says, “In the Big Dry, Laurie Arthur is both a water baron and water prisoner”?

6. Why does Fishman use juxtaposition in this sentence?

7. According to Fishman, Arthur can grow enough food to feed 100,000 people for one year if he uses his six gigaliters of water, which is half the amount of water that the city of Toowoomba uses in a year. What do you think is the problem with this?
1. When Fishman says, “A kangaroo peeing in the right place could have changed the productivity of his fields—if there had been any reason to plant them in the first place,” what point is he making?

2. On page 186, the text says, “He is too much in touch with the daily rhythm of weather, sunshine, and dry dirt not to have an almost elegiac view of the future. ‘I do think the halcyon days are gone,’ he says. ‘I think the days of big water are gone.’”
   A. Elegiac means “full of sorrow.” What do you think halcyon means?
   B. Where in the text did you find context clues to help you figure this out?

3. What does Fishman mention as some of the consequences when farmers do not have enough water to do their work?

4. Page 187 consists of several questions that Fishman wants his readers to think about. What is the general problem he is highlighting by asking these questions?
The following is an excerpt from an article about one negative consequence of bottled water:

All Bottled Up
By Jodie Mangor and Elizabeth Taft

Around the globe, people quench their thirst daily with bottled water. In the last 20 years, sales of bottled water in the United States have more than quadrupled.

Americans are currently the world's biggest consumer of bottled water, followed by China and Mexico, countries where tap water is scarce and often unsafe. It's estimated that the amount of water Americans bought in 2011 is equal to four bottles of water for every single person in the country—every week! Compared to sugary, caffeinated soft drinks, bottled water seems a healthy choice. But is it a wise one?

Water for One

A single-serve water bottle offers great convenience. It can be bought almost anywhere, carried around for a while, and then thrown away. At times, bottled water is the best available option. Hurricanes, other natural disasters, and other emergency situations can negatively affect the safety of public water. Reliable water systems may not be in place in developing nations and war-torn countries. In these cases, bottled water can provide an important source of clean, safe drinking water.

The impact of bottled water on the environment, however, is staggering. Approximately 2.7 million tons of plastic are turned into disposable bottles each year. Just making the plastic requires large quantities of crude oil: researchers at the Pacific Institute found that about 2,000 times more energy is required to produce bottled water compared to the same amount of tap water. Transportation of bottled water in the United States each year produces the same amount of carbon dioxide as 2 million cars. And though the bottles can be recycled, only a fraction of them actually are.

From Odyssey issue: Water is Life, © 2013 ePals Publishing Company, published by ePals Media, 30 Grove Street, Suite C, Peterborough, NH 03458. All Rights Reserved. Used by Permission of the publisher. www.cobblestonepub.com
**Exit Ticket:**
**Search Terms**

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<th>Name:</th>
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<td>Date:</td>
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<tr>
<th>What search terms would you type in if you were researching this question: “How much water is used to grow grains in the United States?”</th>
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</table>
Consider the overarching research questions: “How do industry and agriculture currently manage water? What strategies exist for industry and agriculture to manage water better?”

What information do you have that helps you answer the overarching research questions?

What kind of information do you still need?
Authors’ Use of Evidence
About Water Management in Agriculture

Name:

Date:

In the excerpts below, all authors have the same claim, that agriculture should reduce the amount of water it uses. As you read, mark (underline or highlight) the evidence the authors use to support their claim and decide what kind of evidence it is.

Article 1: Tapped Out: How Will Cities Secure Their Water Future?

Posted by Brian Richter of the Nature Conservancy and University of Virginia in Water Currents on May 8, 2013

Today, global demands for food, energy, and shelter are putting unprecedented pressure on the resources of the planet. Water is at the heart of this crisis.

In fact, more than half of the world’s cities are already experiencing water shortages on a recurring basis—based on findings from a study that I published, along with 13 of my colleagues, this week in the Water Policy journal. It was not difficult to see why so many cities got into trouble with water.

The water sources they depend upon—rivers, lakes, and aquifers—have for decades been heavily used for irrigated agriculture. Since 1950, the consumption of water globally for irrigation has tripled in volume, a trend that played a large role in enabling food production to more than double over the same period.

The result: Water-stressed cities are trying to expand in places where most of the water is already being consumed by irrigated agriculture. In fact, more than 90% of the water being consumed from those shared water sources is going to growing crops.

Promising opportunities exist to free up the water presently used in agriculture through techniques such as reducing unproductive water consumption (e.g., stopping canal leakage, reducing soil and reservoir evaporation), changing crop types, introducing rotational fallowing, temporary fallowing during droughts, or the elimination of low-value farming.

Used with permission by Brian Richter
Article 2: Another View: When Every Drop Counts: The Need for Conservation and Improved Water Management in Agriculture

Oct 18, 2012
Written by Danielle Nierenberg and Sophie Wenzlau

The 2012 drought has been the worst Iowa has experienced since 1936....

Fresh water is the planet’s most essential and scarce resource. Although 75 percent of the Earth’s surface is covered in water, we must rely on as little as 0.5 percent of the total water supply to meet all agricultural, industrial, domestic and ecological needs.

Water scarcity makes it painfully clear that farmers, businesses and consumers need to take concrete steps to conserve water and improve its productive use in our agricultural sector.

Let’s reconsider the way we irrigate crops. Most Iowa farmers depend on Mother Nature to supply the water needed to grow their crops. And in times of drought, as Iowa farmers are well aware, crops dependent on rain will often fail.

Thankfully, there are a variety of promising techniques and technologies—such as drip irrigation—that could both conserve and increase the productive use of water in our agricultural sector while rendering Iowa’s farms more resilient to the future uncertainty of our climate.

Drip irrigation is the precise application of water to plant roots via tiny holes in pipes that allow a controlled amount of water to drip onto the ground. This precise application avoids water loss due to evaporation, enables plants to absorb water at their roots (where they need it most), and allows farmers to water only those rows or crops they want to, in lieu of an entire field.
Over the course of a season, drip irrigation enhances plant growth, boosts crop yield and improves plant nutritional quality. Although not a “one-size-fits-all” solution to water challenges (it is expensive, high maintenance and does not work well in sandy soil), drip irrigation is a low-waste irrigation method capable of significantly boosting crop yields when applied appropriately, is well-suited to row crops like corn and soybeans, and, with drip tape’s lifetime of 5 to 7 years, especially when laid below the surface, can be a wise long-term investment that is significantly more reliable than rain-fed agriculture in times of drought.
Authors’ Use of Evidence
About Water Management in Agriculture

Name: 

Date: 

Venn Diagram

Common Claim:

Evidence ONLY from Excerpt 1  Evidence in BOTH  Evidence ONLY from Excerpt 2
Reflection Question

Which author made the most convincing argument, and why? Use the criteria from the Evaluating an Argument anchor chart and the Note Sheet: Four Types of Evidence to support your answer. If you think both arguments were equally strong, your answer should include reasons why each of them was convincing.
<table>
<thead>
<tr>
<th>Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reread the paragraph that begins with “Environmentalists were equally opposed ...” on page 204. What is <em>brine</em>?</td>
<td>{}</td>
</tr>
<tr>
<td>2. What does <em>diluted</em> mean?</td>
<td>{}</td>
</tr>
<tr>
<td>3. What is the problem with desalination that Fishman describes in this paragraph?</td>
<td>{}</td>
</tr>
<tr>
<td>4. Reread the paragraph that begins with “The site of Perth’s proposed desalination plant ...” on page 205. What is a <em>bay</em>?</td>
<td>{}</td>
</tr>
<tr>
<td>Question:</td>
<td>Teacher Guide:</td>
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<td>-----------</td>
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<tr>
<td>5. Fishman uses the term “desal plant” as a shorter form of “desalination plant.” According to Fishman, where would the brine from the desal plant go? Why is that a problem?</td>
<td></td>
</tr>
<tr>
<td>6. Reread the paragraph that begins with “Desal faced opposition for another reason ...” on page 205. What do residents of Perth believe is the cause of their water shortage?</td>
<td></td>
</tr>
<tr>
<td>7. According to Fishman, why might building a desal plant make this problem worse?</td>
<td></td>
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</tbody>
</table>
Mid-Unit 2 Assessment: Simulated Research Task:
Water Management Strategies

Name:

Date:

**Long-Term Learning Targets:**
- 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)
Directions: Read “Get the Salt Out” by Karen E. Lange and fill in the graphic organizer that follows.

Get the Salt Out

There’s no shortage of water on the blue planet—just a shortage of fresh water. New technologies may offer better ways to get the salt out.

Three hundred million people now get their water from the sea or from brackish groundwater that is too salty to drink. That’s double the number a decade ago. Desalination took off in the 1970s in the Middle East and has since spread to 150 countries. Within the next six years new desalination plants may add as much as 13 billion gallons a day to the global water supply, the equivalent of another Colorado River. The reason for the boom is simple: As populations grow and agriculture and industry expand, fresh water—especially clean fresh water—is getting scarcer. “The thing about water is, you gotta have it,” says Tom Pankratz, editor of the Water Desalination Report, a trade publication. “Desalination is not a cheap way to get water, but sometimes it’s the only way there is.”

And it’s much cheaper than it was two decades ago. The first desalination method—and still the most common, especially in oil-rich countries along the Persian Gulf—was brute-force distillation: Heat seawater until it turns to steam, leaving its salt behind, then condense it. The current state of the art, used, for example, at plants that opened recently in Tampa Bay, Florida, and Perth, Australia, is reverse osmosis, in which water is forced through a membrane that catches the salt. Pumping seawater to pressures of more than a thousand pounds per square inch takes less energy than boiling it—but it is still expensive.

Researchers are now working on at least three new technologies that could cut the energy required even further. The closest to commercialization, called forward osmosis, draws water through the porous membrane into a solution that contains even more salt than seawater, but a kind of salt that is easily evaporated. The other two approaches redesign the membrane itself—one by using carbon nanotubes as the pores, the other by using the same proteins that usher water molecules through the membranes of living cells.
None of the three will be a solution for all the world’s water woes. Desalination inevitably leaves behind a concentrated brine, which can harm the environment and even the water supply itself. Brine discharges are especially tricky to dispose of at inland desalination plants, and they’re also raising the salinity in parts of the shallow Persian Gulf. The saltier the water gets, the more expensive it becomes to desalinate.

What’s more, none of the new technologies seem simple and cheap enough to offer much hope to the world’s poor, says geologist Farouk El-Baz of Boston University. He recently attended a desalination-industry conference looking for ways to bring fresh water to the war-torn Sudanese region of Darfur. “I asked the engineers, ‘What if you are in a tiny village of 3,000, and the water is a hundred feet underground and laden with salt, and there is no electricity?’” El-Baz says. “Their mouths just dropped.” —Karen E. Lange

**Mid-Unit 2 Assessment: Simulated Research Task:**
**Water Management Strategies**

**Name:**

**Date:**

**Directions:** Fill out the graphic organizer based on “Get the Salt Out.”

<table>
<thead>
<tr>
<th>Name of Text:</th>
<th>Get the Salt Out</th>
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</thead>
<tbody>
<tr>
<td><strong>Author/Speaker’s Name:</strong></td>
<td>Karen E. Lange</td>
</tr>
<tr>
<td><strong>Claim:</strong></td>
<td>Desalination is not a solution for our water problems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Evidence 1</th>
<th>Supporting Evidence 2</th>
<th>Supporting Evidence 3</th>
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<tbody>
<tr>
<td><strong>What type of evidence is this? (Circle one)</strong></td>
<td><strong>What type of evidence is this? (Circle one)</strong></td>
<td><strong>What type of evidence is this? (Circle one)</strong></td>
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<tr>
<td>anecdote</td>
<td>anecdote</td>
<td>anecdote</td>
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<tr>
<td>analogy/metaphor</td>
<td>analogy/metaphor</td>
<td>analogy/metaphor</td>
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<tr>
<td>fact/statistic</td>
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</tr>
<tr>
<td>testimony</td>
<td>testimony</td>
<td>testimony</td>
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</tbody>
</table>
### Supporting Evidence 4

**What type of evidence is this? (Circle one)**

- anecdote
- analogy/metaphor
- fact/statistic
- testimony

### Supporting Evidence 5

**What type of evidence is this? (Circle one)**

- anecdote
- analogy/metaphor
- fact/statistic
- testimony

### Supporting Evidence 6

**What type of evidence is this? (Circle one)**

- anecdote
- analogy/metaphor
- fact/statistic
- testimony

---

1. In “Get the Salt Out,” Lange uses which evidence to support her claim? (Circle all that apply.) (RI.7.9)

   A. Desalination will increase the freshwater available by 40 percent.
   B. None of the new technologies will help the world’s poor.
   C. Desalination is expensive.
   D. Sometimes, desalination is the only way to get freshwater.
2. Briefly paraphrase this excerpt from “Get the Salt Out.” (W.7.8)

“Three hundred million people now get their water from the sea or from brackish groundwater that is too salty to drink. That’s double the number a decade ago.”

3. Reread the following sentence from “Get the Salt Out,” then answer the questions that follow. (L.7.4) “The closest to commercialization, called forward osmosis, draws water through the porous membrane into a solution that contains even more salt than seawater, but a kind of salt that is easily evaporated.”

<table>
<thead>
<tr>
<th>i. What is your initial idea of the meaning of the word porous?</th>
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<tbody>
<tr>
<td>ii. What strategy did you use to determine an initial meaning for this word?</td>
</tr>
<tr>
<td>iii. Look this word up in a reference. What is the definition of this word?</td>
</tr>
</tbody>
</table>
4. List two pieces of information from each source that would help you answer the question: “Should people rely on desalination to manage water better?” (W.7.8)

<table>
<thead>
<tr>
<th>Source</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>The Big Thirst</td>
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<td></td>
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<tr>
<td>“Get the Salt Out”</td>
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</table>
5. Use the Venn diagram below to compare and contrast how Fishman (from the homework) and Lange use evidence to support their claims about desalination. (RI.7.9)
6. To find more information about desalination, which of these sources would most likely be accessible, credible, and relevant? (W.7.8)
   A. A blog about water written by a college student
   B. A brochure published by a desalination company
   C. An article from an educational magazine focused on environmental issues
   D. A book published by a history professor

Please explain your choice, keeping in mind the likely accessibility, credibility, and relevancy of the source.

7. To find more information to answer the question “Should people rely on desalination to manage water better?” which of these would be good search terms? (Circle all that apply.) (W.7.8)
   A. Desalination history
   B. Water management brine
   C. Problems of desalination
      i. Saltwater
      ii. Desalination advantages
8. Based on the excerpts from *The Big Thirst* and “Get the Salt Out,” write two additional supporting research questions. (W.7.7)

1. ________________________________________________________________

2. ________________________________________________________________

9. Based on these two texts, how would you answer the question: “Should people rely on desalination to manage water more sustainably?” Use evidence from the texts to support your answer. (W.7.7). (Score students’ responses using the NYS 2-Point Holistic Rubric).
Imagine you are deciding whether to get an iPad for your personal use.

List all the consequences (effects) of this decision.

Based on these consequences, what would you decide?

Why would you make that decision?
Unit 3 Essay Prompt

Name:

Date:

Which category of water management would be a good place to begin to make the way we manage water more sustainable?
• Use the second piece of 8.5-by-14 paper to create a Cascading Consequences chart for the Agricultural Management of Water in your researcher’s notebook.
• Use Sections IV–VI Research Notes from Text and Sections VII–IX internet Research.
• Use the Cascading Consequences chart for industrial management of water as your model and guide.
• You can use all parts of your researcher’s notebook to find consequences.
• Remember to use only those sections in which you explored a supporting research question that related to the agricultural use of water.
• When finished, continue your independent reading.
Sample Cascading Consequences Chart for Getting an iPad

Get an iPad

- I might lose friends.
- The house will be quieter and more peaceful.
  - I could lose it.
  - I will need to replace it with my own money.
  - I will in lots of trouble.

- I may have to upset my friends by putting limits on when and where they use my iPad.
  - My friends will ask to use it all the time.
  - My friends might break it.
    - This will cost money.
    - I won’t have as much money.
      - I won’t be able to buy as many clothes or spend as much on vacation.
    - I may have to get a part time job.
  - My parents won’t pay for it.
    - I’ll be able to have computer and Internet access more often.
      - I might lose focus on my chores and schoolwork.
    - I will do better in school.
    - I will be more popular.

Cascading Consequences Chart for Industrial Management of Water

Industrial Management of Water

List of Consequences:
1)
2)
3)
Cascading Consequences Chart for Agricultural Management of Water

Agricultural Management of Water

List of Consequences:
1) 
2) 
3)
What is the option being considered? To make soda available for free during school lunches.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>What way will this stakeholder be affected?</th>
<th>Is this an intended or unintended consequence?</th>
<th>Is this a positive or negative consequence?</th>
<th>If the consequence is negative, do you feel it is offset by greater good elsewhere?</th>
<th>How important to you are the interests of this stakeholder?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Students will enjoy the free soda but may react badly to the increased sugar and caffeine.</td>
<td>enjoyment = intended</td>
<td>enjoyment = positive</td>
<td>no</td>
<td>1</td>
</tr>
<tr>
<td>Teachers</td>
<td>Students may be wired and/or crashing due to soda consumption, unable to concentrate.</td>
<td>unintended</td>
<td>negative</td>
<td>no</td>
<td>1</td>
</tr>
<tr>
<td>Parents</td>
<td>will need to handle students influenced by sugar and caffeine; possible increase in cavities/dental work</td>
<td>unintended</td>
<td>negative</td>
<td>no</td>
<td>1</td>
</tr>
<tr>
<td>School Nurse</td>
<td>will need to handle more medical emergencies brought on by increased sugar and caffeine consumption</td>
<td>unintended</td>
<td>negative</td>
<td>no</td>
<td>2</td>
</tr>
</tbody>
</table>
### Stakeholder Chart

**For Industrial Management of Water**

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>What way will this stakeholder be affected?</th>
<th>Is this an intended or unintended consequence?</th>
<th>Is this a positive or negative consequence?</th>
<th>If the consequence is negative, do you feel it is offset by greater good elsewhere?</th>
<th>How important to you are the interests of this stakeholder?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-very</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2-somewhat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3-not so much</td>
</tr>
</tbody>
</table>

**What is the option being considered (from Fishman or your own research)?**

---

**Name:**

**Date:**
Remember to use your Stakeholder chart for industrial management of water as a model. Go back to your researcher’s notebook for further clarification and ideas. Remember to put yourself in the shoes of the stakeholders.
Who are the most important stakeholders in the *agricultural* management of water, and why?

Who are the most important stakeholders in the *industrial* management of water, and why?

Discuss the *positive* consequences listed on your Stakeholder charts for both agricultural and industrial management of water. Which ones do you feel are the most powerful, and why?

Discuss the most *negative* consequence listed on your Stakeholder charts for both agricultural and industrial management of water. How could this strengthen an argument? How could this weaken an argument?
**Review Your Discussion Protocols**

- Present your claim and evidence in a focused, logical, coherent manner.
- Incorporate relevant facts, descriptions, details, and examples to support your claim.
- Use appropriate eye contact.
- Use adequate volume.
- Use clear pronunciation.
- Use formal English.
- Take notes on what your classmates are saying when it is not your turn to speak.
**Claim:** We should begin to manage water better by addressing water use in industry instead of agriculture.

| Evidence |
|------------------|--------------------------------|
| Who are the most important stakeholders in industrial water use? | What positive consequences are there for addressing water use in industry? |
| What can be done to change the negative consequences of addressing water use in industry? | Using the information in the three other boxes, summarize here why industry’s use of water should be addressed before agriculture. |
| If you are a listener instead of a participant in the Fishbowl discussion today, take notes on what you hear in this space. |
**Claim:** We should begin to manage water better by addressing water use in agriculture instead of industry.

<table>
<thead>
<tr>
<th>Evidence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are the most important stakeholders in agricultural water use?</td>
<td>What positive consequences are there for addressing water use in agriculture?</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>What can be done to change the negative consequences of addressing water use in agriculture?</td>
<td>Using the information in the three other boxes, summarize here why agriculture’s use of water should be addressed before industry.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>If you are a listener instead of a participant in the Fishbowl discussion today, take notes on what you hear in this space.</td>
<td></td>
</tr>
</tbody>
</table>
Using your Industrial/Agricultural Fishbowl Graphic Organizer: Part I as a guide, respond one of the following prompts, depending on which topic you have been selected to defend:

• If you are supporting the claim that we should address industry first, respond to this prompt:

Pretend it is just before class and a classmate in the hallway says, “It’s clear that solving water management issues in industry is the way to go. It would have a much greater impact.” Now, in a paragraph below, use logic and reasoning to prove your classmate wrong. Imagine you are responding to the comment and advocate for the position that industry could have a greater impact on water management than agriculture.

• If you are supporting the claim that we should address agriculture first, respond to this prompt:

Pretend it is just before class and a classmate in the hallway says, “It’s clear that solving water management issues in agriculture is the way to go. It would have a much greater impact.” Now, in a paragraph below, use logic and reasoning to prove your classmate wrong. Imagine you are responding to the comment and advocate for the position that agriculture could have a greater impact on water management than industry.
Ticket to Enter

Write your paragraph below:
End of Unit 2 Assessment
Part 1

Name:

Date:

Learning targets addressed in this assessment:

• I can present claims and findings with descriptions, facts, details, and examples. (SL.7.4)

• I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.7.4)

• 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 use my experience and knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively. (SL.7.9a)

Directions: In a Fishbowl discussion with your class, you will take a stand on one of the following prompts, assigned to you by your teacher. You may use your Ticket to Enter to help you provide evidence when you speak. When it is not your turn to participate in the Fishbowl, you will take notes on what your classmates say (in a separate section of your Ticket to Enter) so you can add them later to your Stakeholder chart.

The Prompts:

1A. Defend this claim: We should begin to manage water better by addressing water use in industry first instead of agriculture.

Use concrete evidence from your reading and research to support this claim.

1B. Defend this claim: We should begin to manage water better by addressing water use in agriculture first instead of industry.

Use concrete evidence from your reading and research to support this claim.
The checklist below is how the teacher will assess you. When participating in the Fishbowl, keep the criteria below in mind.

<table>
<thead>
<tr>
<th>During the Fishbowl, I am expected to …</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present my claim and evidence in a focused, logical, and coherent manner</td>
<td></td>
</tr>
<tr>
<td>Incorporate relevant facts, descriptions, details, and examples to support claim</td>
<td></td>
</tr>
<tr>
<td>Use appropriate eye contact</td>
<td></td>
</tr>
<tr>
<td>Use adequate volume</td>
<td></td>
</tr>
<tr>
<td>Use clear pronunciation</td>
<td></td>
</tr>
<tr>
<td>Use formal English:</td>
<td></td>
</tr>
<tr>
<td>• Academic and domain-specific vocabulary</td>
<td></td>
</tr>
<tr>
<td>• Language that expresses ideas precisely, eliminating wordiness and redundancy</td>
<td></td>
</tr>
<tr>
<td>Take notes on what my classmates are saying when it is not my turn to speak</td>
<td></td>
</tr>
</tbody>
</table>
In the space below, write down what you noticed that students did well and what you thought they could have improved in yesterday’s Fishbowl. Think of their use of evidence and effective speaking techniques in particular.

<table>
<thead>
<tr>
<th>Did well:</th>
<th>Could have improved:</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
First, consider your overarching research question:

How do industry and agriculture currently manage water? Which category of water management would be a good place to begin to make the way we manage water more sustainable?

Now, to help you decide on an answer, discuss these questions with a partner:

• Which category will have the most immediate impact?

• Which one will have the most long-term impact?

• Which changes are easiest to implement right now?

• Which will help us change how we think about water and our water habits?

• Which will help make water seem less “invisible”?
**Overarching question:** How do industry and agriculture currently manage water? Which category of water management would be a good place to begin to make the way we manage water more sustainable?

**My Claim:**

<table>
<thead>
<tr>
<th>Reason 1:</th>
<th>Reason 2:</th>
<th>Reason 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evidence:</th>
<th>Evidence:</th>
<th>Evidence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
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<td>•</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
End of Unit 2 Assessment: Part 2
Present Your Claim

Name: ____________________
Date: ____________________

Directions: Read over the feedback you received on the End of Unit 2 Assessment: Part 1 and the criteria that your teacher will use to assess your presentation (the End of Unit 2 Assessment: Part 2). Based on those documents, answer the questions below.

1. What is one skill that is a strength for you?

2. How will that skill help you in your presentation (End of Unit 2 Assessment: Part 2)?

3. What is one skill that is challenging for you?

4. What can you do to make sure you improve on that skill for your presentation (End of Unit 2 Assessment: Part 2)?
End of Unit 2 Assessment: Part 2
Present Your Claim

Name: ____________________________
Date: ____________

Long-Term Learning Targets:

• I can present claims and findings with descriptions, facts, details, and examples. (SL.4)
• I can use effective speaking techniques (appropriate eye contact, adequate volume, and clear pronunciation). (SL.4)
• I can include multimedia components and visual displays in a presentation to clarify claims and to add emphasis. (SL.7.5)
• I can adapt my speech for a variety of contexts and tasks, using formal English when indicated or appropriate. (SL.6)

Directions: For this part of the assessment, you will formally present your research-based claim to an audience using your choice of visual aid to explain your idea. Your visual aid can be a part of your Cascading Consequences chart or your Stakeholder chart. You must use it to help explain your response to the position paper focusing question: “Which category of water management would be a good place to begin to make the way we manage water more sustainable?” Be sure to provide relevant and sufficient evidence and use sound reasoning to support your claim.

The checklist below is how the teacher will assess you. When preparing for and practicing your presentation, keep these criteria in mind.
### End of Unit 2 Assessment: Part 2

Present Your Claim

<table>
<thead>
<tr>
<th>In my presentation, I am expected to ...</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present my claim in a focused, coherent manner</td>
<td></td>
</tr>
<tr>
<td>Incorporate relevant facts, descriptions, details, and examples to support the claim and reasons for the claim</td>
<td></td>
</tr>
<tr>
<td>Use appropriate eye contact</td>
<td></td>
</tr>
<tr>
<td>Use adequate volume</td>
<td></td>
</tr>
<tr>
<td>Use clear pronunciation</td>
<td></td>
</tr>
<tr>
<td>Clarify my claim and add emphasis by using a visual display</td>
<td></td>
</tr>
<tr>
<td>Use formal English:</td>
<td></td>
</tr>
<tr>
<td>• Academic and domain-specific vocabulary</td>
<td></td>
</tr>
<tr>
<td>• Language that expresses ideas precisely, eliminating wordiness and redundancy</td>
<td></td>
</tr>
</tbody>
</table>
I may have to get a part-time job. This will cost money. I won’t have as much money. My friends might break it. My friends will ask to use it all the time. I may have to upset my friends by putting limits on when and where they use my iPad. I might lose friends.

My ultimate goal is:
Congratulations! You have completed your presentation. Take a few minutes to reflect on how you did. Below each of the learning targets below, circle how well you feel you did.

- **I can present my claim about water management using facts, details, and examples.**
  
  I did very well.  
  I did well.  
  I did OK.  
  I struggled with this.

- **I can use effective speaking techniques in my presentation.**
  
  I did very well.  
  I did well.  
  I did OK.  
  I struggled with this.

- **I can include a multimedia visual display in my presentation to clarify my claim and add emphasis.**
  
  I did very well.  
  I did well.  
  I did OK.  
  I struggled with this.

- **I can use formal English in my presentation.**
  
  I did very well.  
  I did well.  
  I did OK.  
  I struggled with this.

- **I can use my experience and knowledge of language and logic to advocate persuasively.**
  
  I did very well.  
  I did well.  
  I did OK.  
  I struggled with this.
Exit Ticket

Name one thing you did today as a presenter or an audience member that you’re proud of:

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________
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