

**9.4.1 Lesson 2**

**Introduction**

In this lesson, students read and analyze “The World’s First True University” (pp. 13–16) in *Sugar Changed the World*. This section of text examines the integral role played by Jundi Shapur in the spread of sugar across the globe.

Student analysis focuses on determining a central idea of this passage, and identifying and exploring how specific details develop this idea. Throughout this lesson, students learn how to utilize a variety of resources provided within the text. Through a series of questions and activities, students become familiar with the “Timeline” and “Notes and Sources” sections of the text.

Additionally, this lesson includes direct instruction on RI.9-10.7, in preparation for student work with the Image Analysis Tool. This tool prompts students to consider images as yet another rich resource in the text, as they analyze how the details emphasized in images and their captions shape or refine a central idea. Students are assessed on their completed Image Analysis Tool at the end of this lesson, and continue to work with this tool throughout the module as they build their visual literacy skills.

This lesson also introduces students to the activity “Mapping Sugar.” Students track the movement of sugar across the globe, as well as identify and mark the populations greatly affected by this trade. This ongoing mapping activity grounds students in the disparate geographies of the text, and illustrates the vast global network forged by the sugar trade.

For homework, students continue to read their AIR text through the lens of the focus standard of their choice.

**Standards**

Assessed Standard(s)	
RI.9-10.2	Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
Addressed Standard(s)	
RI.9-10.7	Analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account.

## Assessment

Assessment(s)
<p>Student learning in this lesson is captured via the completed Image Analysis Tool.</p> <p>① The Image Analysis Tool guides students to analyze how key details in the image of their choice develop a central idea of the text under discussion. This process prompts students to consider images as crucial details in the text that the authors use to develop their central ideas.</p>
High Performance Response(s)
<p>See Model Image Analysis Tool for High Performance Responses.</p>

## Vocabulary

Vocabulary to provide directly (will not include extended instruction)
<ul style="list-style-type: none"> <li>• judicial (adj.) – pertaining to judgment in courts of justice or to the administration of justice</li> <li>• ambassador (n.) – a diplomatic official of the highest rank, sent by one sovereign or state to another as its representative</li> <li>• mythic (adj.) – existing only in traditional or legendary stories</li> <li>• epic (adj.) – noting or pertaining to a long poetic composition, usually centered upon a hero, in which a series of great achievements or events is narrated in an elevated style</li> <li>• subcontinent (n.) – a large landmass forming a subdivision of a continent</li> <li>• reed (n.) – the straight stalk of any various tall grasses growing in marshy places</li> <li>• cultivated (v.) – to have prepared and worked on (land) in order to raise crops</li> <li>• mainland (n.) – the principal land of a country as distinguished from adjacent lands</li> <li>• crystallized (v.) – to have formed into crystals</li> <li>• ritual (n.) – an established or prescribed procedure for a religious or other rite</li> </ul>
Vocabulary to teach (may include direct word work and/or questions)
<ul style="list-style-type: none"> <li>• refine (v.) – to bring to a finer state or form by purifying</li> <li>• mediums (n.) – the category of a work of art, as determined by its materials and methods of production</li> </ul>

## Lesson Agenda/Overview

Student-Facing Agenda	% of Lesson
<p><b>Standards &amp; Text:</b></p> <ul style="list-style-type: none"> <li>Standards: RI.9-10.2, RI.9-10.7</li> <li>Text: <i>Sugar Changed the World</i>, “The World’s First True University” (pp. 13–16)</li> </ul> <p><b>Learning Sequence:</b></p> <ol style="list-style-type: none"> <li>Introduction of Lesson Agenda</li> <li>Homework Accountability and Mapping Sugar Activity</li> <li>Reading and Discussion</li> <li>RI.9-10.7 Review</li> <li>Image Analysis Activity and Assessment</li> <li>Closing</li> </ol>	<ol style="list-style-type: none"> <li>5%</li> <li>15%</li> <li>35%</li> <li>15%</li> <li>25%</li> <li>5%</li> </ol>

## Materials

- Student copies of the Mapping Sugar Tool (refer to 9.4.1 Lesson 1)
- Copies of Image Analysis Tool for each student

## Learning Sequence

How to Use the Learning Sequence	
Symbol	Type of Text & Interpretation of the Symbol
10%	Percentage indicates the percentage of lesson time each activity should take.
no symbol	Plain text indicates teacher action.
	<b>Bold text indicates questions for the teacher to ask students.</b>
	<i>Italicized text indicates a vocabulary word.</i>
▶	Indicates student action(s).
☞	Indicates possible student response(s) to teacher questions.
ⓘ	Indicates instructional notes for the teacher.

## Activity 1: Introduction of Lesson Agenda

5%

Begin by reviewing the agenda and assessed standard for this lesson: RI.9-10.2. In this lesson, students determine a central idea of “The World’s First True University” from *Sugar Changed the World* (pp. 13–16), and analyze how this idea is developed through key details. Students also practice using the rich resources provided in the text itself.

- ▶ Students look at the agenda.

## Activity 2: Homework Accountability and Mapping Sugar Activity

15%

Review the vocabulary words students identified and defined on pages 9–13 for the previous lesson’s homework.

- ▶ Students share the words they boxed and defined.
- ☛ Student responses may include:
  - subcontinent (p. 10) n. – a large landmass forming a subdivision of a continent
  - reed (p. 10) n. – the straight stalk of any various tall grasses growing in marshy places
  - cultivated (p. 10) v. – to have prepared and worked on (land) in order to raise crops
  - mainland (p. 11) n. – the principal land of a country as distinguished from adjacent lands
  - crystallized (p. 12) v. – to have formed into crystals
  - ritual (p. 12) n. – an established or prescribed procedure for a religious or other rite

Instruct students to form pairs and briefly discuss the information they recorded on their Mapping Sugar Tool for homework.

- ☛ See Model Mapping Sugar Tool.

Instruct students to discuss their response to the reflective writing prompt. Display the prompt for students to see:

**How does the movement you mapped in this activity further refine a central idea you identified in “The Age of Honey”?**

- ▶ Students share the information they mapped and discuss their observations to the reflective writing prompt.
- ☛ Student responses should make a connection between the central idea they identified in the “Age of Honey” (pp. 6–8), that sugar “set people in motion all across the world” (p. 7), and the global spread of sugar that they traced on their map for homework. Students gathered this information from the section “From Magic to Spice” (pp. 9–13), and so should infer that the details the authors include in “From Magic to Spice” further develop the idea that sugar fostered

global connections. Students may also make a connection to the idea developed in the “Age of Honey” that before the Age of Sugar, people produced and consumed locally. The map illustrates how sugar transformed the way people lived because it required that people source their food from other countries.

Inform students that they will continue to update and utilize their individual Mapping Sugar Tools in subsequent lessons.

Students use this tool to record information about the movement of sugar as described in the reading they complete independently for homework, as well as other geographic movement described in the book. The Mapping Sugar Tool supports students’ continued engagement with RI.9-10.2 as they consider how central ideas are developed over the course of the text.

- ① **Differentiation Consideration:** Consider collecting and recording the movement students chart on their individual Mapping Sugar Tools on a large world map, and displaying this map throughout the module. Students might mark the path of sugar as it is brought into a country to be sold with a red line, and the path of sugar as it is produced in a country and sent to another with a blue line. Students might place a pin or another marker on countries where the population was/is greatly affected by this global trade. This collaborative class map could serve as a place to compile and review students’ learning, and students could update their individual tools accordingly.
- ① This activity grounds students in the varied geographies of the text, while simultaneously illustrating the breadth of sugar’s reach and, by extension, how globalization and global markets connect disparate places and peoples.

### Activity 3: Reading and Discussion

**35%**

Instruct students to form pairs. Post or project each set of questions below for students to discuss.

Instruct student pairs to read “The World’s First True University” (pp. 13–16) in its entirety, from “Today, few people have heard” through “a storm unlike any the world had ever seen: Islam,” and answer the following question before sharing out with the class.

- ① If necessary to support comprehension and fluency, consider using a masterful reading of the focus excerpt for the lesson.

#### Why was Jundi Shapur “an exceptional university” (p. 14)?

🗨️ Student responses may include:

- “It was the meeting place of the world’s great minds ... the best scholars West of China all gathered to think and study together” (p. 15)
- “The school created the very first teaching hospital in the world” (p. 15)
- The school created “a fine observatory to track the heavens” (p. 15)

- “Scholars at Jundi Shapur invented new and better ways to refine cane into sugar” (p. 15)

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to read the “Master Timeline: Sugar in World History” (pp. 134–139) and answer the following questions before sharing out with the class.

**How many years have passed since the earliest recorded encounter with sugar and the events described in “The World’s First True University” (pp. 13–16)?**

- The events described in “The World’s First True University” occurred approximately 7,500 years after the first planting of wild sugar cane (p. 134).

**What function does the timeline serve in this text?**

- This timeline records in chronological order the key historical events involved in the story of sugar.
- ① The goal of this question is to contextualize this passage chronologically, as well as introduce students to the timeline provided in the back of their texts. This timeline will serve as an important scaffold to comprehension for students throughout the module.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to read paragraph 1 and answer the following questions before sharing out with the class.

**Who gathered in Jundi Shapur?**

- Student responses should include:
  - “Greek scholars” (p. 15)
  - “Jews” (p. 15)
  - “A group of Christians called Nestorians” (p. 15)
  - “Persians,” one of whom was a doctor who had traveled to India, and brought with him the “wisdom of the Hindus”(p. 15)

**Why did they come?**

- The “scholars” and “learned doctor[s]” came to Jundi Shapur to share their knowledge, “ancient and scholarly traditions,” and “wisdom.” Jundi Shapur was a place where “the best scholars west of China all gathered to think and study together” (p. 15).

### What kind of movement are the authors describing in this paragraph?

- This paragraph describes the “move[ment]” of “scholars” from all over the world to gather in one location – Jundi Shapur (p. 15). Students may also identify that this paragraph describes not just the physical movement of people, but also the movement of knowledge between people from different countries through the shared process of teaching and learning.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to read paragraph 2 and answer the following questions before sharing out with the class.

### What words and phrases can help you to make meaning of “refine” in this context (p. 15)?

- The word “invented” and the phrase “came into sugar” (p. 15) indicate that *refine* in this context means “a process that turns one product into another; in this case, sugar cane into sugar.”

### What connections do the authors draw between sugar and Jundi Shapur in this paragraph?

- The authors first connect sugar and Jundi Shapur through their description of the traveling scholars, who shared the Indian knowledge of sugar as medicine with people from all over the globe who were studying at Jundi Shapur. Secondly, sugar and the university are connected because Jundi Shapur scholars “invented new and better ways to refine cane sugar” (p. 15). Finally, the authors make a connection between the spread of knowledge about sugar and Jundi Shapur’s global connections—because Jundi Shapur “had links with many of the great civilizations of Asia, the Mediterranean, and Europe,” the new idea about sugar coming out of Jundi Shapur spread all over the globe (p. 15).

### What kind of movement are the authors describing here?

- The authors are describing the “spread” of knowledge and ideas in this paragraph—specifically the spread of knowledge about the “special sweetness” of sugar (p. 15).

### What purpose does the description of Jundi Shapur serve in the authors’ analysis?

- The authors’ description of Jundi Shapur strengthens their analysis of the connection between the spread of ideas and the spread of a commodity.

① **Differentiation Consideration:** If students struggle to trace the connection the authors are constructing between the spread of sugar and the spread of ideas, consider posing the following question for class discussion:

**What is the authors' purpose in linking the spread of sugar with the story of Jundi Shapur?**

- The authors link the spread of sugar with the story of Jundi Shapur to strengthen their analysis of the connection between the spread of ideas and the spread of a commodity.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to read the Notes and Sources section of the text, beginning on page 140. Ask students to read the notes that correspond with the pages they are exploring in class today (pp. 13–16) aloud with their partners, and answer the following questions before sharing out with the class.

**What is the function of the Notes and Sources section? How does the information provided enhance your understanding of the text?**

- ▶ Students read the notes that correspond with pages 13 and 15, and discuss the question with their partners before sharing out with the class.
- Student responses may include:
  - The Notes and Sources section explains where the authors get their information from. In the page 13 note about Jundi Shapur, the authors point to several websites they used as reference.
  - The Notes and Sources section provides interesting asides that don't necessarily fit with the focus of the main text. For example, the page 13 note discusses Rudolph Steiner's opinion that Jundi Shapur was a "dark influence on humanity" (p. 142).
  - The Notes and Sources section directs us to other sources that offer more or different information to supplement our understanding.
  - The Notes and Sources section directs us to other places within *Sugar Changed the World* that discuss the same or similar topics. For example, the note for page 15 directs the reader to pages 5–7 of the text for more information about "sharkara" (p. 142).

① The purpose of this question is to introduce and familiarize students with another crucial resource in *Sugar Changed the World*. Students make use of the additional information provided in the Notes and Sources section throughout this module.

Lead a brief whole-class discussion of student responses.

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Instruct student pairs to read paragraphs 3–4 and answer the following questions before sharing out with the class.

**What connections do the authors make in the final two paragraphs between the different types of movement described in this passage?**

- The authors connect the movement of people to the spread of ideas, and the spread of ideas to the spread of sugar (pp. 15–16).

**What central idea about sugar emerges in “The World’s First True University”?**

- Student responses should draw upon the understanding they have built throughout this lesson in order to identify a central idea that makes a connection between the movement of ideas and knowledge, and the spread of sugar. For example, because the “best scholars west of China all gathered to study and think together” at Jundi Shapur, “links” were created between “many of the great civilizations of Asia, the Mediterranean, and Europe ...” and “word of sugar ... began to spread” (p.15).

Lead a brief whole-class discussion of student responses.

## Activity 4: RI.9-10.7 Review

15%

Introduce the Image Analysis Activity. Explain that just as the Timeline and the Notes and Sources section of *Sugar Changed the World* function as resources that support comprehension of the text, the images that the authors choose to include also help to develop or refine the ideas presented in the text itself.

Remind students of their work with RI.7 in Grade 9 Module 1 Unit 3 and offer the definition of *medium* as different materials or methods used to communicate, such as a painting and a book.

- ① Students previously engaged with similar ideas in a literary context in their work with RL.9-10.7 in 9.1.3. If students struggle with these concepts, consider returning to the analysis students completed in 9.1.3 Lesson 13 as an example.

**What different mediums are included in *Sugar Changed the World* in pages 1–16?**

- Text, photographs, and paintings are three different mediums that appear in *Sugar Changed the World*.

**How might the comparison of two representations of the same subject enrich our understanding of the subject?**

- Emphasizing something in one medium may draw our attention to details and ideas that may not stand out in another medium, or it may help reinforce details and ideas stated in another medium but with additional emphasis.

Direct students to the image of two boys eating cane on page 7. Guide students in discussion of the following questions:

### What details are emphasized in this photograph?

- Student responses may include:
  - The two boys appear very young.
  - They are both munching on sugar cane.
  - They seem to be enjoying their sugar cane.

### What details are emphasized in the caption?

- Student responses may include:
  - This photograph was taken in 1901.
  - The two boys work in the cane fields.
  - The two boys are enjoying eating the sugar cane.
  - The plant was both an “energy source and a curse.”

### How do these details develop a key idea in “The Age of Honey”?

- The enjoyment the boys felt while eating the sugar cane was emphasized in both the image and the caption. This develops the idea that sugar is something that we all crave. However, the caption complicates this enjoyment by emphasizing the fact that these very young boys most likely worked in the cane fields. This develops the idea that sugar also caused people to suffer. These details develop the key idea in “The Age of Honey” that sugar cane brought both enjoyment and misery.

① **Differentiation Consideration:** If students struggle to connect the details in the images to key ideas in “The Age of Honey,” consider displaying several key quotes to guide student analysis, and asking students to discuss how the details in the image develop the key ideas as expressed in these quotes. For example, consider displaying the following quotes from “The Age of Honey” to guide student analysis.

- Student responses may include:
  - “A perfect taste made possible by the most brutal labor: That is the dark story of sugar” (p. 7)
  - “Sugar is a taste we all want, a taste we all crave” (p. 8)

- ① Working as a class to analyze an image from a familiar section of text prepares students to work independently in the following Image Analysis Activity.

Lead a brief whole-class discussion of student responses.

## Activity 5: Image Analysis Activity and Assessment

**25%**

Distribute the Image Analysis Tool. This tool is used to assess student learning.

Explain to students that the following activity asks them to choose an image on page 13, 14, or 15, and consider how this image and the caption that accompanies it develops a central idea of “The World’s First True University.” Explain to students that both the image in the text and the caption that describes it can be understood as two different accounts of the same subject. As such, the image and the caption can leave out or emphasize different details.

- ① The process of distinguishing the image and the text that accompanies it is integral for student analysis later in the module, when students engage with contradictory accounts presented in image and caption.

Instruct students to fill out the Central Idea box of their tool with the central idea that they identified during Reading and Discussion.

Ask students to identify details emphasized first in the image of their choice and then in the caption that accompanies this image. Finally, ask students to explore how these details contribute to the development of a central idea.

- ① Consider providing the following definitions of words found in the captions associated with the images on pages 14 and 15: *Judicial* means “pertaining to judgment in courts of justice or to the administration of justice”; *ambassador* means “a diplomatic official of the highest rank, sent by one sovereign or state to another as its representative”; *mythic* means “existing only in traditional or legendary stories”; and *epic* means “noting or pertaining to a long poetic composition, usually centered upon a hero, in which a series of great achievements or events is narrated in an elevated style.”
- ▶ Students write the definitions of *judicial*, *ambassador*, *mythic*, and *epic* on their copy of the text or in a vocabulary journal.
- ① **Differentiation Consideration:** If students struggle with this tool, consider modeling several columns of the tool before students begin to work independently. See the Model Image Analysis Tool for examples of this modeling.
- ▶ Students complete their Image Analysis Tool.
- 🗨 See Model Image Analysis Tool.

- ① Student work on the Image Analysis Tool serves as the lesson assessment.
- ① The Image Analysis Tool will be used in the next lesson (Lesson 3) when students discuss their work on the Image Analysis Tool.

## Activity 6: Closing

**5%**

Display and distribute the homework assignment. For homework, instruct students to continue with their AIR through the lens of the focus standard of their choice, and to prepare for a 3–5 minute discussion of their text based on that standard.

- ▶ Students follow along.

## Homework

Continue to read your AIR text through the lens of a focus standard of your choice and prepare for a 3–5 minute discussion of your text based on that standard. Students should also be prepared to share the work they have done on their Image Analysis Tools with the class.

## Model Mapping Sugar Tool



### THE WORLD

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## Image Analysis Tool

<b>Name:</b>		<b>Class:</b>		<b>Date:</b>	
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<b>Central Idea:</b>	
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<b>Finding Details:</b> What details are emphasized in this image?	<b>Detail 1:</b>	<b>Detail 2:</b>	<b>Detail 3:</b>

<b>Finding Details:</b> What details are emphasized in this caption?	<b>Detail 1:</b>	<b>Detail 2:</b>	<b>Detail 3:</b>

**Connecting the Details:**

How do the details emphasized in the image and the caption contribute to the development of a central idea in this passage?

## Model Image Analysis Tool

<b>Name:</b>		<b>Class:</b>		<b>Date:</b>	
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<p><b>Central Idea:</b></p> <p>Image: page 14</p>	<p>The exchange of ideas between many different countries resulted in the spread of sugar.</p>
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<p><b>Finding Details:</b></p> <p>What details are emphasized in this image?</p>	<p><b>Detail 1:</b></p> <p>There seems to be a man of greater importance than all of the rest—he stands out from all of the other people in the image because he is sitting on a throne, wearing a crown, and has a beard.</p>	<p><b>Detail 2:</b></p> <p>The chessboard is large and in the center of the image.</p>	<p><b>Detail 3:</b></p> <p>The interaction between the king and the other two men is the focus of this image. The interaction seems to be positive. One man appears to be speaking to the king.</p>
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<p><b>Finding Details:</b></p> <p>What details are emphasized in this caption?</p>	<p><b>Detail 1:</b></p> <p>The caption emphasizes the spread of knowledge, because the foreign ambassador from India is “showing [Kasra Anushirvan] the game of chess” (p. 14).</p>	<p><b>Detail 2:</b></p> <p>This caption emphasizes how the exchange of knowledge from one man to another can spread to an entire culture: Kasra the Just learned chess, and subsequently “chess was introduced to Persia during his reign” (p. 14).</p>	<p><b>Detail 3:</b></p> <p>This caption emphasizes that this exchange is the same kind of interaction as the “exchange of ideas and knowledge” that happened at Jundi Shapur (p. 14).</p>
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<p><b>Connecting the Details:</b></p> <p>How do the details emphasized in the image and the caption contribute to the development of a central idea in this passage?</p>	<p>The image and the caption on page 14 emphasize the exchange of chess knowledge between the Indian Ambassador and the King of the Sassanid Empire. This emphasis develops the central idea that the exchange of ideas between many different countries resulted in the spread of sugar; it is another example of how the exchange of ideas and knowledge between people from different countries resulted in the exchange of materials and resources.</p>
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