Lesson 10 (Student Book pages 95–102)

Analyzing Text Structure

Theme: *What Makes Us* Us*?*

LESSON OBJECTIVES

- Analyze how major sections of an informational text fit into the overall structure and contribute to the development of the central ideas.

THE LEARNING PROGRESSION

- **Grade 6** requires students to analyze how paragraphs and chapters fit into the overall structure of a text.
- **Grade 7 builds on the Grade 6 standard by having students analyze the organizational structure of major sections of a text and how they contribute to the development of ideas.**
- **Grade 8** requires students to analyze the structure of paragraphs and the role of each sentence in developing and clarifying a key concept.

PREREQUISITE SKILLS

- Identify organizational structures of texts, including compare-contrast, problem-solution, and cause-effect.
- Analyze how the organizational structure helps develop the main idea of a paragraph.
- Analyze how authors organize texts so that major sections contribute to the whole work.

TAP STUDENTS' PRIOR KNOWLEDGE

- Tell students that they will be working on a lesson about analyzing the text structures authors use to present information. Remind students that authors organize facts, examples, and ideas in their writing to make the concepts clear to their readers.
- To illustrate the point, discuss how a teen might try to persuade a parent that he or she needs a cell phone. *(First, the teen might explain the problems caused by not being able to contact parents during the day and then explain that the solution is to get a cell phone.)*
- Next, ask students how the same teen would present information about the different family cell phone plans offered. *(He or she might explain the different plans and point out their similarities and differences.)*
- Explain that in the first example, the teen organized ideas in a cause-effect structure, presenting a solution to the problem at the end. In the second, the teen used a compare-and-contrast structure. Tell students that writers also organize their ideas in different ways to achieve different goals.
- Point out that identifying how a text is structured will help students better understand the ideas an author wants to convey about a topic.

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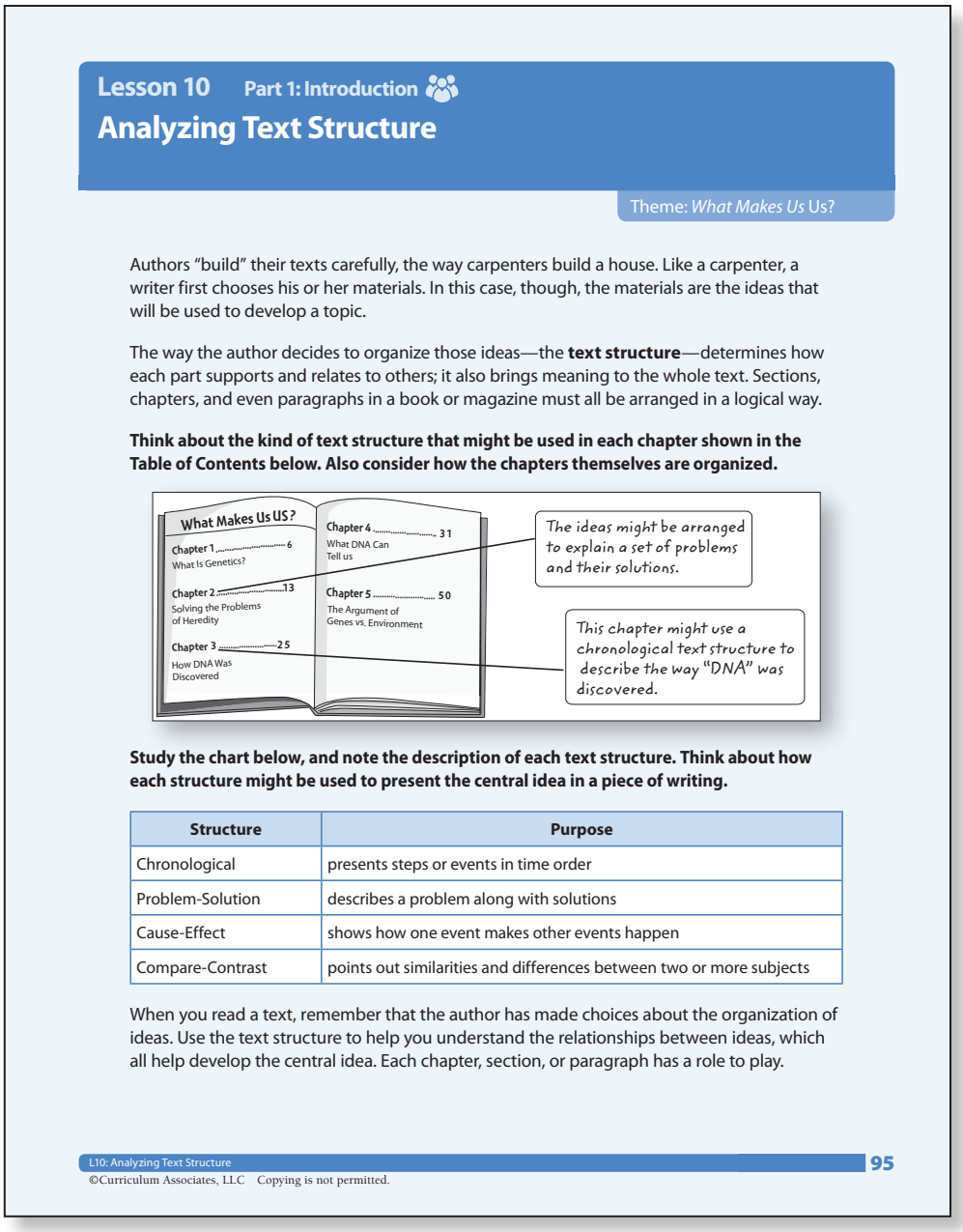
	Prerequisite Skills	*On-Level Skills*
Ready Lessons	✓	✓
Tools for Instruction		✓
Interactive Tutorials		✓

AT A GLANCE

By studying a table of contents from an informational text, students develop their understanding of how authors use different text structures to organize ideas. Students learn that identifying and analyzing text structures helps them understand the relationship between ideas and the central ideas in the text.

STEP BY STEP

- Read the first paragraph that includes an analogy of how authors build their texts and the definition of *text structure*.
- Then encourage students to study the graphic and read the callouts. Discuss the kind of text structure that is likely to appear in each chapter shown in the table of contents. Also have students consider how the chapters themselves are organized.
- Explain that the chart describes the purposes of common types of text structures. Read the first two rows, and ask students why those organizational patterns might be good ways to arrange the content of Chapters 2 and 3 in the graphic.
- Then read the last two rows. Ask students what topics might be arranged by cause-effect and compare-contrast.
- Reinforce the idea that identifying text structure will help students understand the relationships between ideas and how those ideas all help to develop the central ideas.



Lesson 10 Part 1: Introduction

Analyzing Text Structure

Theme: *What Makes Us* Us?

Authors "build" their texts carefully, the way carpenters build a house. Like a carpenter, a writer first chooses his or her materials. In this case, though, the materials are the ideas that will be used to develop a topic.

The way the author decides to organize those ideas—the **text structure**—determines how each part supports and relates to others; it also brings meaning to the whole text. Sections, chapters, and even paragraphs in a book or magazine must all be arranged in a logical way.

Think about the kind of text structure that might be used in each chapter shown in the Table of Contents below. Also consider how the chapters themselves are organized.

Study the chart below, and note the description of each text structure. Think about how each structure might be used to present the central idea in a piece of writing.

Structure	Purpose
Chronological	presents steps or events in time order
Problem-Solution	describes a problem along with solutions
Cause-Effect	shows how one event makes other events happen
Compare-Contrast	points out similarities and differences between two or more subjects

When you read a text, remember that the author has made choices about the organization of ideas. Use the text structure to help you understand the relationships between ideas, which all help develop the central idea. Each chapter, section, or paragraph has a role to play.

Genre Focus

Informational Texts: Scientific Account

Tell students that in this lesson they will read informational texts. One type of informational text is a scientific account, or a piece of writing that provides information about scientific research or another science-related topic.

- Its purpose is to explain scientific findings or any event or discovery with ties to science.
- It can be written by professional scientists to relate findings to the scientific community or to contribute to knowledge in a particular field of study. It may also be written by someone with scientific expertise for the general public.
- It often opens with an explanation about the thesis or theory behind the scientific topic and then gives examples or further details to elaborate on it.
- Some may include charts, graphics, or photos. Others may have sidebars with additional facts or subheadings to show how the ideas are organized.

Explain that students will read "It's All in Our DNA" and "Nature Versus Nurture: The Great Debate," two scientific accounts describing the influence of DNA on our lives. "The Discovery of DNA's Structure" tells about the discovery of the structure of DNA.

AT A GLANCE

Students identify the text structure of an informational article. They explain why the structure is a good choice for the ideas in the text.

STEP BY STEP

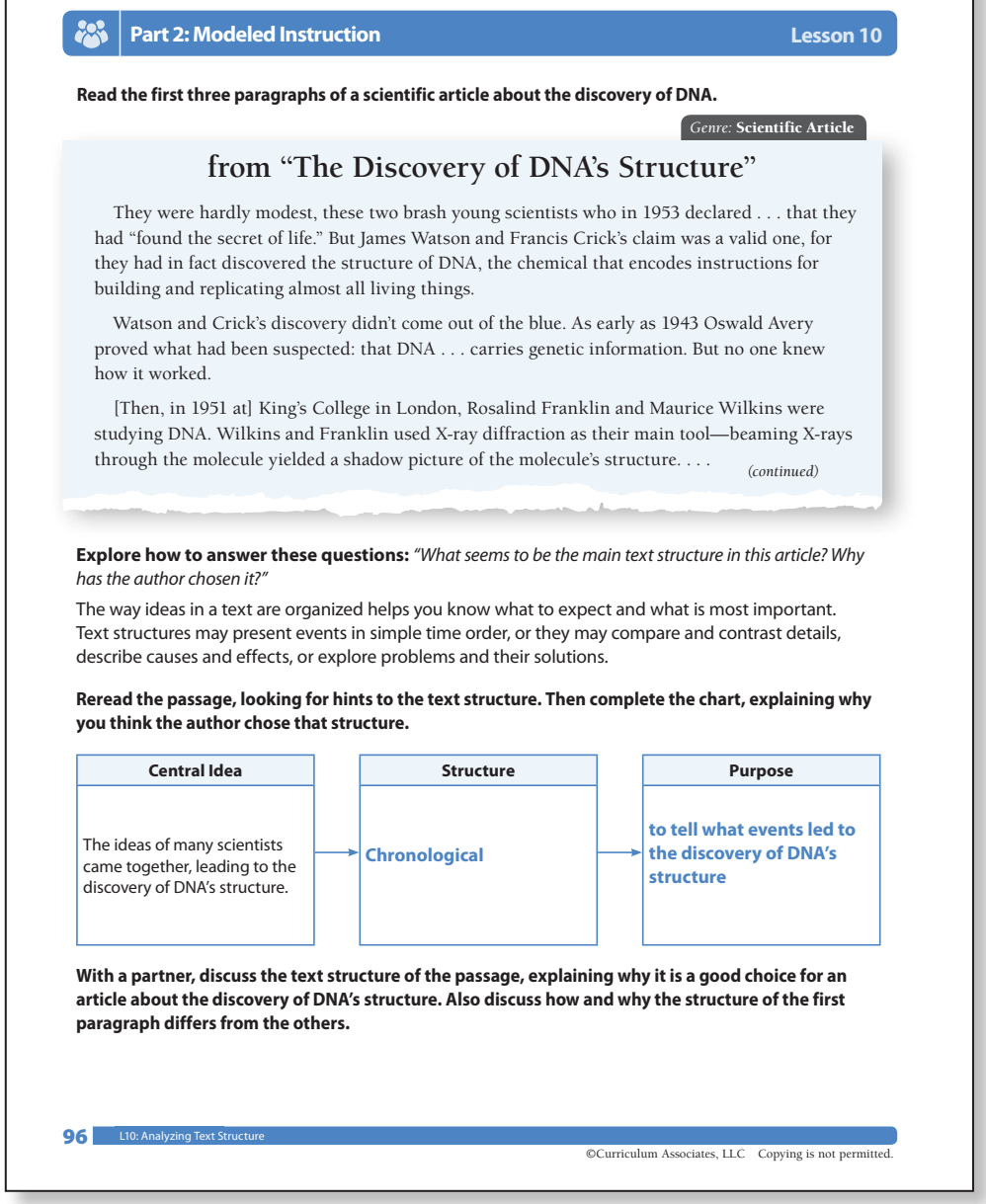
- Ask volunteers to tell what they learned on the previous page about the kinds of text structures.
- Tell students that in this lesson they will read about the discovery of DNA's structure.
- Read aloud "The Discovery of DNA's Structure."
- Then read the questions: "What seems to be the main text structure in this article? Why has the author chosen it?"
- Now tell students you will use a Think Aloud to demonstrate a way of answering the questions.

Think Aloud: When I'm trying to figure out the text structure, I look for clue words and phrases that show the relationship between ideas or events. I notice that in the first sentence, the date 1953 is used. Then I see another date in the second paragraph—1943—and another date in the third paragraph, 1951. These dates might signal the type of structure.

- Direct students to the chart, and read the Central Idea box. Discuss how the details in the text support this central idea.
- Then ask students what type of organizational structure uses dates. Have them write the structure in the second box.

Think Aloud: Once I recognize the structure, I think about why the author chose it and how it helps me understand the relationship between ideas related to the topic. Because this article is about the history of the discovery of the structure of DNA, the author wants to show the order of events that led to the discovery.

- Have students write the purpose behind the use of the text structure to complete the chart.
- Then have students answer the question at the bottom of the page. Invite volunteers to share their answers with the class. Be sure students understand that the first paragraph serves to introduce the nature of the question that scientists wanted to answer through their research.



Part 2: Modeled Instruction Lesson 10

Read the first three paragraphs of a scientific article about the discovery of DNA.

Genre: **Scientific Article**

from "The Discovery of DNA's Structure"

They were hardly modest, these two brash young scientists who in 1953 declared . . . that they had "found the secret of life." But James Watson and Francis Crick's claim was a valid one, for they had in fact discovered the structure of DNA, the chemical that encodes instructions for building and replicating almost all living things.

Watson and Crick's discovery didn't come out of the blue. As early as 1943 Oswald Avery proved what had been suspected: that DNA . . . carries genetic information. But no one knew how it worked.

[Then, in 1951 at] King's College in London, Rosalind Franklin and Maurice Wilkins were studying DNA. Wilkins and Franklin used X-ray diffraction as their main tool—beaming X-rays through the molecule yielded a shadow picture of the molecule's structure. . . .

(continued)

Explore how to answer these questions: *"What seems to be the main text structure in this article? Why has the author chosen it?"*

The way ideas in a text are organized helps you know what to expect and what is most important. Text structures may present events in simple time order, or they may compare and contrast details, describe causes and effects, or explore problems and their solutions.

Reread the passage, looking for hints to the text structure. Then complete the chart, explaining why you think the author chose that structure.

Central Idea	Structure	Purpose
The ideas of many scientists came together, leading to the discovery of DNA's structure.	Chronological	to tell what events led to the discovery of DNA's structure

With a partner, discuss the text structure of the passage, explaining why it is a good choice for an article about the discovery of DNA's structure. Also discuss how and why the structure of the first paragraph differs from the others.

Tier Two Vocabulary: *Brash*

- Point out the word *brash* in paragraph 1. Tell students this word has multiple meanings. When words have more than one meaning, it's important to use the context to determine which meaning is being used.
- Remind students of the different types of context clues: restatement, synonym, antonym, example, and definition. Have students identify the context clues that helped them determine which meaning is being used. *(hardly modest)* Ask them what kind of clue it is. *(antonym)* Then have students give the meaning for *brash* as used in the text *(rude, self-confident)*.
- Ask students what other meaning the word *brash* has *(hasty, foolish)*. Have them use a dictionary to check their meaning.

AT A GLANCE

Students continue reading about the discovery of DNA's structure. They answer a multiple-choice question and analyze the text's structure.

STEP BY STEP

- Tell students that they will continue reading about the discovery of DNA's structure.
- The Close Reading helps students recognize how the overall structure helped them understand the importance of the ideas. The Hint will help them understand how ideas are related to each other.
- Have students read the text and underline the most important idea, as directed by the Close Reading.
- Ask volunteers to share the idea they found. Discuss why it is central to the article. If necessary, ask, "What clue words help you determine the overall text structure of this paragraph? How does this structure help you understand the central idea?"
- Have students circle the answer to the question, using the Hint to help. Then have them respond to the question in Show Your Thinking. *(Sample response: The author begins by presenting the solution to a problem and then uses sequence to tell how the work of different scientists led to the discovery of DNA's structure.)*

ANSWER ANALYSIS

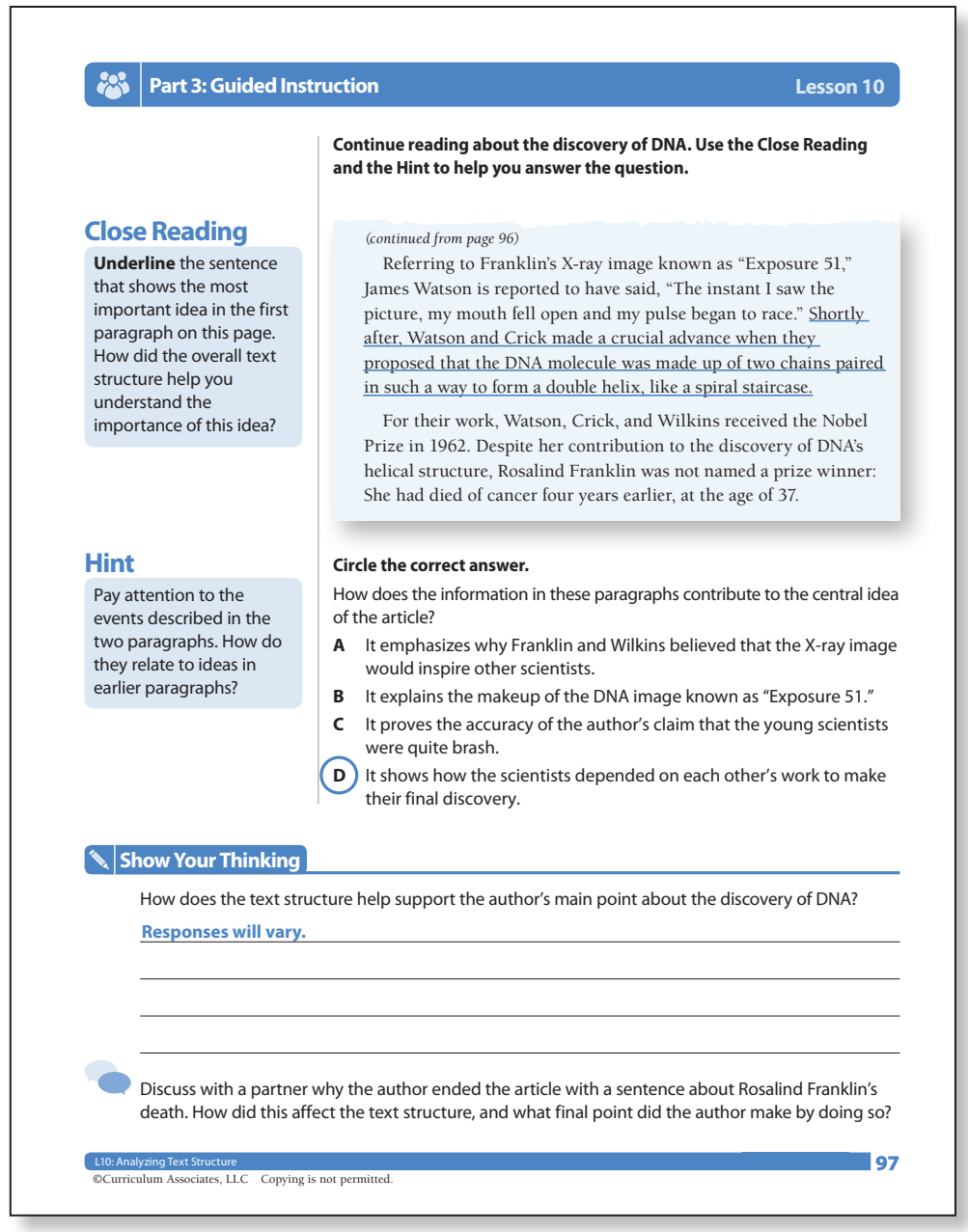
Choice A is incorrect. The central idea is the discovery of DNA's structure, not that the X-ray image would inspire other scientists.

Choice B is incorrect. The article does not explain the actual makeup of DNA.

Choice C is incorrect. The author's claim that the scientists were brash is a detail, not the central idea.

Choice D is correct. These paragraphs support the idea that several scientists worked to discover the structure of DNA and that they built on each other's research.

ERROR ALERT: Students who did not choose D might not have read the question carefully. Point out that the question asks them to identify how the ideas in these paragraphs develop the text's central idea. Have students eliminate choices that are details.



Part 3: Guided Instruction Lesson 10

Continue reading about the discovery of DNA. Use the Close Reading and the Hint to help you answer the question.

Close Reading

Underline the sentence that shows the most important idea in the first paragraph on this page. How did the overall text structure help you understand the importance of this idea?

(continued from page 96)

Referring to Franklin's X-ray image known as "Exposure 51," James Watson is reported to have said, "The instant I saw the picture, my mouth fell open and my pulse began to race." Shortly after, Watson and Crick made a crucial advance when they proposed that the DNA molecule was made up of two chains paired in such a way to form a double helix, like a spiral staircase.

For their work, Watson, Crick, and Wilkins received the Nobel Prize in 1962. Despite her contribution to the discovery of DNA's helical structure, Rosalind Franklin was not named a prize winner: She had died of cancer four years earlier, at the age of 37.

Hint

Pay attention to the events described in the two paragraphs. How do they relate to ideas in earlier paragraphs?

Circle the correct answer.

How does the information in these paragraphs contribute to the central idea of the article?

A It emphasizes why Franklin and Wilkins believed that the X-ray image would inspire other scientists.

B It explains the makeup of the DNA image known as "Exposure 51."

C It proves the accuracy of the author's claim that the young scientists were quite brash.

D It shows how the scientists depended on each other's work to make their final discovery.

Show Your Thinking

How does the text structure help support the author's main point about the discovery of DNA?

Responses will vary.

Discuss with a partner why the author ended the article with a sentence about Rosalind Franklin's death. How did this affect the text structure, and what final point did the author make by doing so?

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Tier Two Vocabulary: *Crucial*

- Point out the word *crucial* in paragraph 1. Help students use the context to figure out its meaning. Remind them that they may have to read the entire paragraph to find clues to the word's meaning. *("critical;" "of great importance")*
- Once they have determined the meaning, have students think of two synonyms for *crucial (key, vital, critical)*. Remind students that synonyms can have slightly different meanings and connotations.
- Have students share their list with the class. Discuss why the author might have chosen the word *crucial* instead of a synonym, such as *important*.

AT A GLANCE

Students read a passage twice about our DNA. After the first reading, you will ask three questions to check your students' comprehension of the passage.

STEP BY STEP

- Have students read the passage silently without referring to the Study Buddy or Close Reading text.
- Ask the following questions to ensure students' comprehension of the text:

  What are two examples of dominant traits? What does it mean that these traits are "dominant"? *(Brown hair is dominant over red. Brown eyes are dominant over blue. These traits are stronger, so they are the most likely to be inherited and present themselves in offspring.)*

  Why is eye color called a "complex trait"? *(Several genes work together and influence a person's eye color.)*

  What is one thing scientists hope they can do by gathering information about DNA? *(They hope that certain diseases can be avoided if they are able to isolate the genes that are vulnerable to those diseases.)*

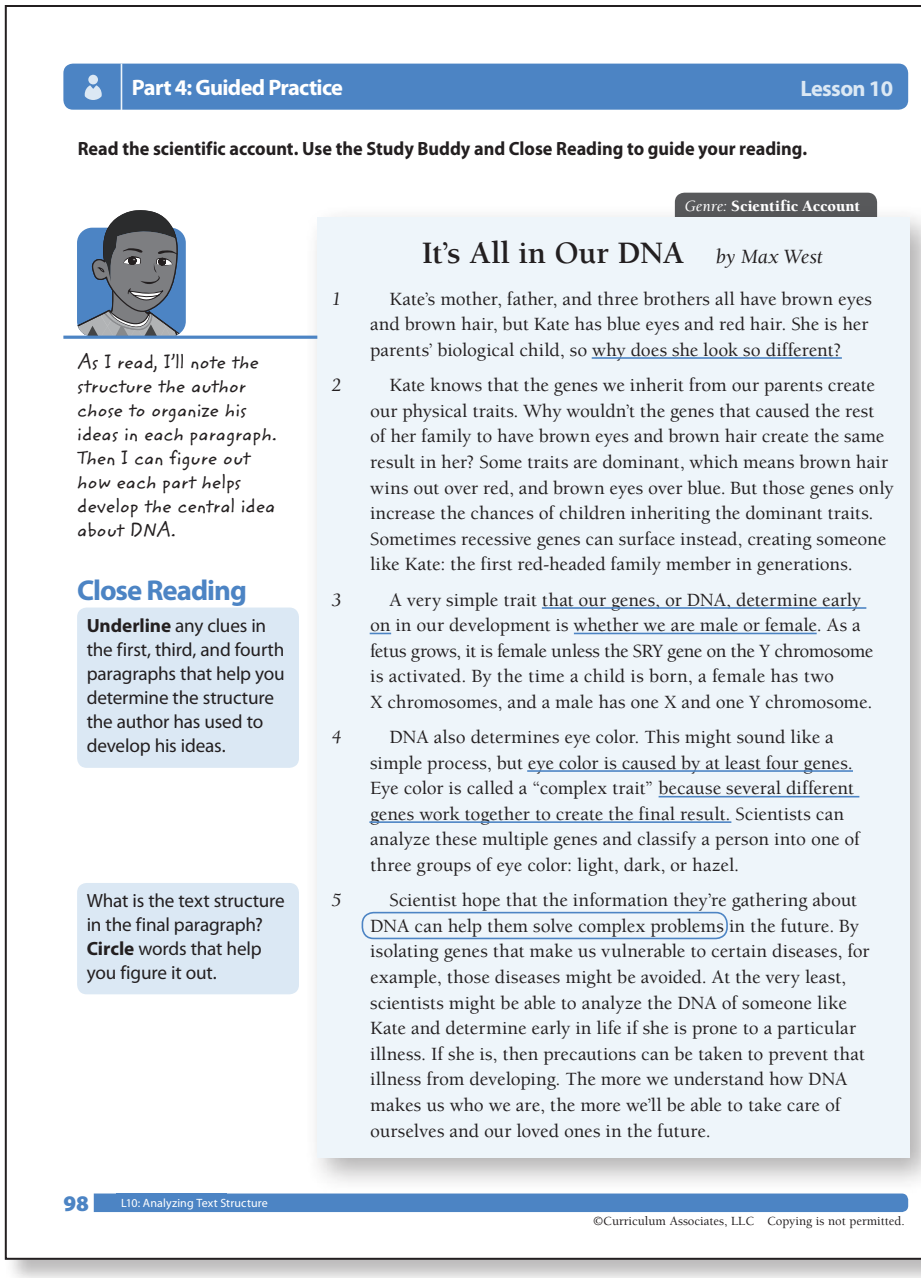
- Then ask students to reread paragraph 1 and look at the Study Buddy think aloud. What does the Study Buddy help them think about?

Tip: The Study Buddy tells students to think about the text structure the author uses to organize the ideas in each paragraph. This will help students figure out how each part helps develop the central idea about DNA.

- Have students read the rest of the passage. Tell them to follow the directions in the Close Reading.

Tip: The Close Reading guides students to underline clues that help them to determine the structure. Recognizing common clue words that signal a particular text structure will help students determine the structure the author chose to use.

- Finally, have students answer the questions on page 99. Use the Answer Analysis to discuss correct and incorrect responses.



Part 4: Guided Practice Lesson 10

Read the scientific account. Use the Study Buddy and Close Reading to guide your reading.

As I read, I'll note the structure the author chose to organize his ideas in each paragraph. Then I can figure out how each part helps develop the central idea about DNA.

Close Reading

Underline any clues in the first, third, and fourth paragraphs that help you determine the structure the author has used to develop his ideas.

What is the text structure in the final paragraph? **Circle** words that help you figure it out.

Genre: **Scientific Account**

It's All in Our DNA *by Max West*

1 Kate's mother, father, and three brothers all have brown eyes and brown hair, but Kate has blue eyes and red hair. She is her parents' biological child, so why does she look so different?

2 Kate knows that the genes we inherit from our parents create our physical traits. Why wouldn't the genes that caused the rest of her family to have brown eyes and brown hair create the same result in her? Some traits are dominant, which means brown hair wins out over red, and brown eyes over blue. But those genes only increase the chances of children inheriting the dominant traits. Sometimes recessive genes can surface instead, creating someone like Kate: the first red-headed family member in generations.

3 A very simple trait that our genes, or DNA, determine early on in our development is whether we are male or female. As a fetus grows, it is female unless the SRY gene on the Y chromosome is activated. By the time a child is born, a female has two X chromosomes, and a male has one X and one Y chromosome.

4 DNA also determines eye color. This might sound like a simple process, but eye color is caused by at least four genes. Eye color is called a "complex trait" because several different genes work together to create the final result. Scientists can analyze these multiple genes and classify a person into one of three groups of eye color: light, dark, or hazel.

5 Scientist hope that the information they're gathering about DNA can help them solve complex problems in the future. By isolating genes that make us vulnerable to certain diseases, for example, those diseases might be avoided. At the very least, scientists might be able to analyze the DNA of someone like Kate and determine early in life if she is prone to a particular illness. If she is, then precautions can be taken to prevent that illness from developing. The more we understand how DNA makes us who we are, the more we'll be able to take care of ourselves and our loved ones in the future.

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ELL Support: Regular Plural Nouns

- Explain to students that nouns name people, places, or things. Students can look at the endings of nouns to know how many.
- Point out the plural noun *brothers* in paragraph 1 and discuss with students how the plural was formed. *(add* s*)* Then work with students to identify other regular plural nouns in this account. *(eyes, genes, traits)*
- Next, work with students to form the plural of some singular nouns in this account. Point out the singular nouns *mother, family,* and *illness*. Have students identify the plural forms and explain how they are formed. *(mothers: add* s*; families: change* y *to* i *and add* es*; illnesses: add* es*)*

STEP BY STEP

- Have students read questions 1–3, using the Hints to help them answer the questions.

Tip: The first Hint reminds students to look for clues that signal four types of text structures. Remind students to also look back at the phrases they underlined in other paragraphs as they answer the questions.

- Discuss with students the Answer Analysis below.

ANSWER ANALYSIS

1 The correct choice is A. The words *caused* and the phrase *create the same result* signal a cause-and-effect relationship between genes and traits. Choices B, C, and D are incorrect. They list other types of text structures, none of which are used in the second paragraph. These structures would be signaled by key words such as *first*, *then*, *like*, and *different from*.

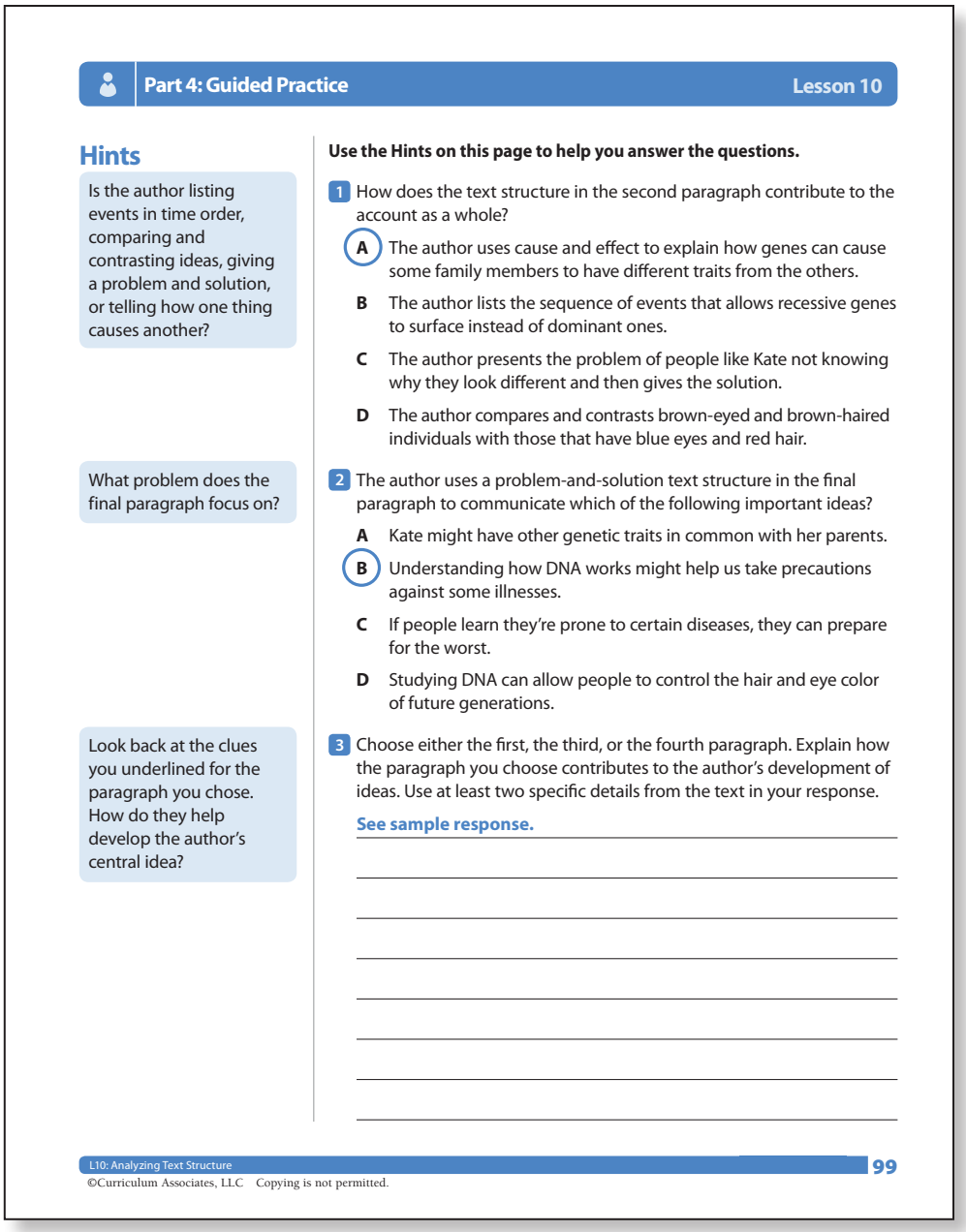
2 The correct choice is B. The phrase *solve complex problems* signals the problem and solution the author is presenting in the last paragraph. The problem is illnesses, and the solution is the study of DNA to determine how to take precautions against or cure those illnesses. Choices A, C, and D are incorrect. None of these choices describe the focus of the final paragraph.

3 Sample response: The first paragraph uses a compare/contrast structure. It contrasts Kate's physical features with those of her family to emphasize their difference. Ideas in the paragraph serve to introduce the central idea of the account, which is that DNA causes differences in people.

RETEACHING

Use a chart to verify the correct answer to question 1. Draw the chart below, and work with students to fill in the boxes. Sample responses are provided.

Structure	Signal Words	Purpose
Cause-Effect	*caused, create the same result*	explain why genes cause some family members to have different traits



Part 4: Guided Practice Lesson 10

Hints

Is the author listing events in time order, comparing and contrasting ideas, giving a problem and solution, or telling how one thing causes another?

What problem does the final paragraph focus on?

Look back at the clues you underlined for the paragraph you chose. How do they help develop the author's central idea?

Use the Hints on this page to help you answer the questions.

1 How does the text structure in the second paragraph contribute to the account as a whole?

(A) The author uses cause and effect to explain how genes can cause some family members to have different traits from the others.

B The author lists the sequence of events that allows recessive genes to surface instead of dominant ones.

C The author presents the problem of people like Kate not knowing why they look different and then gives the solution.

D The author compares and contrasts brown-eyed and brown-haired individuals with those that have blue eyes and red hair.

2 The author uses a problem-and-solution text structure in the final paragraph to communicate which of the following important ideas?

A Kate might have other genetic traits in common with her parents.

(B) Understanding how DNA works might help us take precautions against some illnesses.

C If people learn they're prone to certain diseases, they can prepare for the worst.

D Studying DNA can allow people to control the hair and eye color of future generations.

3 Choose either the first, the third, or the fourth paragraph. Explain how the paragraph you choose contributes to the author's development of ideas. Use at least two specific details from the text in your response.

See sample response.

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Integrating Standards

Use these questions to further students' understanding of "It's All in Our DNA."

1 What are the two central ideas of "It's All in Our DNA"? Provide details from the text that support these central ideas.

DNA determines our physical traits. Kate looks different from her brothers. The recessive genes she got from her parents surfaced instead of the dominant traits in her brothers.

Studying DNA can help scientist solve complex problems. Understanding DNA may help scientists isolate genes that make us vulnerable to certain diseases and help avoid those diseases.

2 What is the author's purpose and point of view in this account?

The author's purpose is to inform readers about how DNA determines our traits and to convince us that studying it is important.

Part 5: Independent Practice Lesson 10

Read the scientific article. Then answer the questions that follow.

Nature Versus Nurture: The Great Debate

by Isaac Sekada

1 Experts have long argued over the nature-versus-nurture debate. What factors are most responsible for making people who they are? Members of the nature camp argue that genes are the biggest factor in shaping a person's health, personality, and perhaps even his or her choices in life. Many of these experts believe that we are all hardwired from birth to be the adults we later become.

2 Members of the nurture camp, on the other hand, argue that upbringing, environment, and life experiences are the most important factors in making us who we are. Based on their view, a factor such as growing up in a rural setting rather than in an urban one, for example, might easily shape the kind of person we become.

3 But whose answer is more accurate? Is it nature or nurture that shapes who we are?

4 There is no doubt that many of our qualities are passed down through our genes. Facial features, hair color, and height are genetically passed from biological parents to their offspring. Do you have dimples? What about freckles? Are you nearsighted? Is your hair curly? If you answered "yes" to any of these questions, you can thank your biological parents for the genes they passed on to you.

5 Many diseases are also linked to genes. Cystic fibrosis, a disease that attacks the lungs and digestive system, is caused by a defective gene. In order for a person to have any symptoms of the disease, though, he or she must inherit the defective gene from both parents. Thus, many people who carry the defective gene will never pass cystic fibrosis on to their offspring.

6 Genetic links to other diseases are not as easy to pinpoint. For example, studies have shown that early-onset Alzheimer's, which can attack the brain in people as young as age thirty, is linked to genetic inheritance in most patients. However, experts believe that late-onset Alzheimer's, which affects people over sixty years old, may be caused by a combination of genetic factors, health choices, and the environment.

7 In other words, there is plenty of gray area in the nature-versus-nurture debate even when the science of genetics is the main focus. In many cases, genetic inheritance—the nature side of the debate—cannot fully explain why certain health issues occur.

8 Also, physical features and health issues do not necessarily determine the more subtle aspects of the people we turn out to be. Think of the people in your school. Why are some students lazy while others work hard? Why are some well behaved while others get into trouble? Why are some students shy while others are more outgoing?

9 To gain insight into such questions, researchers in England recently studied a large sampling of both identical twins and non-identical twins from areas all across England. The goal of the study was to find out whether nature or nurture was more responsible for shaping people. Experts gathered data about the test subjects' personality traits—forty-five types of traits in all—and then recorded that data on a map of England. The results of the study showed that in sixty percent of the country, children's behavioral traits were linked

Part 5: Independent Practice Lesson 10

more closely to genes than to their surroundings. So, as some experts reasoned, this proves that nature is a stronger force than nurture, right?

10 But there was a catch. The same study found that in London, England's capital city, the test subjects' environment played a stronger role than their genes. Experts think that the close proximity of families with diverse backgrounds in London's urban setting may have strongly affected the test subjects' personalities and behavior. For example, twin siblings raised in the same home may have chosen to associate with two entirely separate circles of friends. One sibling may have chosen to hang out with street gangs, while the other may have chosen to adopt a group of studious friends. This could shape the twins' personalities and behavior in very different ways.

11 After reading the findings of the above study, it would be easy to say that the nature-versus-nurture debate is a draw. The study seems to suggest that genes control who some people become and environment controls who other people become. But, as one of the researchers on the project explains, the study has shown that it is a person's environment that determines how the person's genetic makeup reveals itself. So, while nature and nurture work together to some degree, at least one group of experts believes it is nature—the environment—that has the upper hand in shaping our unique personalities.

Answer Form
1 Ⓐ Ⓑ ● Ⓓ
2 Ⓐ ● Ⓒ Ⓓ
Number Correct ⁄2

1 How do paragraphs 1 and 2 contribute to the structure of the article as a whole?

A They describe a problem and give a possible solution that the author will explain in detail.

B They introduce an argument that the author will then support with several reasons.

C They provide two opposing opinions that the author will continue to analyze.

D They present a sequence of events caused by a situation that the author will later describe.

2 How do paragraphs 6 and 7 contribute to the author's development of ideas in the article?

A They show that genes have more influence than environment.

B They show that the nature-versus-nurture debate is complicated.

C They suggest that environmental factors may cause certain illnesses.

D They say that the nature-versus-nurture debate is a pointless exercise.

AT A GLANCE

Students independently read a longer article and answer questions in a format that provides test practice.

STEP BY STEP

- Tell students to use what they have learned about reading closely and analyzing text structures to read the passage on pages 100 and 101.
- Remind students to underline or circle important points.
- Tell students to answer the questions on pages 101 and 102. For questions 1 and 2, they should fill in the correct circle on the Answer Form.
- When students have finished, use the Answer Analysis to discuss correct responses and the reasons for them. Have students fill in the Number Correct on the Answer Form.

ANSWER ANALYSIS

1 The correct choice is C. Phrases such as *on the other hand* and *rather than* signal that the author is comparing the two sides of the debate that he will analyze. Choice A is incorrect. The author is not presenting a problem. Choice B is incorrect. The author is presenting a debate, or argument, but he is not choosing one side and then supporting his argument with reasons. He is explaining the debate and presenting evidence that supports each side of the issue. Choice D is incorrect. The author does not present a sequence of events. ***(DOK 2)***

Theme Connection

- How do all the passages in this lesson relate to the theme of what makes us who we are?
- What is one fact or idea you learned about DNA or heredity from each passage in this lesson?

2 The correct choice is B. The author says "not as easy to pinpoint" and "plenty of gray area," which shows that there is no clear evidence that proves one side is completely correct. Choice A is incorrect. These paragraphs do not show that genes have more influence than environment. Choice C provides one detail from these paragraphs but does not explain how this detail contributes to the author's development of ideas. Choice D is incorrect because the author never implies that the debate is pointless, merely that it is complicated. ***(DOK 2)***

3 Sample response: The structure of the paragraph is compare and contrast. It contrasts the influence of nature on development by describing details that support the other side of the debate. It shows that environment also has a strong influence on people. ***(DOK 3)***

4 Sample response: Paragraph 4 is structured around direct questions such as, Do you have dimples? and Are you nearsighted? The questions quickly convey the fact that genes produce common features such as dimples, freckles, nearsightedness, and curly hair. The author might have structured the paragraph around these questions to pull readers directly into a challenging topic that might seem distant from their everyday lives. At the very least, rapid-fire questions can be more interesting to read than a series of simple sentences. ***(DOK 3)***

Part 5: Independent Practice Lesson 10

3 Explain how paragraph 10 connects to the paragraph that comes before it and continues the analysis of nature versus nurture. Use at least **one** detail from the text in your response.

See sample response.

4 In paragraph 4, the author asks four questions, one right after the other. Explain why the author might have done this. Use at least **two** details from the passage to support your response.

See sample response.

Self Check *Go back and see what you can check off on the Self Check on page 86.*

Integrating Standards

Use the questions and tasks as opportunities to interact with "Nature Versus Nurture: The Great Debate."

1 What is the effect of paragraph 3? How do these questions help you understand the author's purpose and point of view?

These questions are used to make the reader connect to the article and recognize the central idea by stating exactly what the author will discuss. The author's purpose is to explain claims and evidence used to support each side of the debate. The author is unbiased and finds the debate interesting.

2 What does the author mean by "…experts believe that we are hardwired from birth" in paragraph 1? What is the impact of this phrase?

The author means that the nature camp believes we are who we are because of genetics and nothing can change who we become. This phrase emphasizes that the nature camp firmly believes in their opinion.

3 What evidence does the author provide to support the claims of each side of the debate? Cite evidence from the text.

The author cites several facts and a study that support each side's claims. The findings of the London study support both sides.

4 Discuss in small groups: What side of the debate do you agree with? Give reasons from the text to support your argument.

Discussions will vary. Encourage students to give reasons to support their response based on textual evidence. Remind students to be respectful of each other's opinions and to follow discussion rules.

Writing Activities

Evaluate an Argument

- Have students reread "Nature Versus Nurture: The Great Debate" and choose one side of the debate presented by the author. Have them underline the evidence the members of that side use to support their claim.
- Have students write a paragraph analyzing the evidence presented and determine whether or not it is sound and adequately supports the claim. Encourage students to consider what additional evidence could be used to support the claim. Allow time for students to share their analysis with the class.

Commas with Words and Phrases

- Explain that commas are often used to separate clauses from the rest of the sentence.
- Read sentence 2 in paragraph 5 of "Nature Versus Nurture: The Great Debate." Point out the appositive phrase and explain that an appositive phrase identifies or renames a preceding noun. Nonessential appositives are set off with commas. Read the next two sentences. Point out the introductory phrases and the interrupter. Explain that these are also separated by commas.
- Have students write a paragraph that contains at least one of each type of phrase, using commas correctly.

LISTENING ACTIVITY

Listen Closely/Ask Questions

- Have students form small groups. One at a time, have each member explain why they think it is important to study DNA.
- Tell students to listen carefully and then respond to the speaker's opinion by asking him or her at least one question.
- Each speaker should listen closely to each question and respond to it.

DISCUSSION ACTIVITY

Talk in a Group/Talk About Traits

- Have students talk in small groups about the theme "What Makes Us *Us*?"
- Provide the following prompts to begin the discussion: How do people inherit their traits? What are environmental factors that some people think impact these traits?
- Appoint one member of each group to take notes. Allow 10 to 15 minutes for discussion. Then have each group share its results with the class.

MEDIA ACTIVITY

Be Creative/Create a Time Line

- Have students reread the "The Discovery of DNA's Structure" and underline the main dates and events listed.
- Have them research the events and scientists involved to learn more about them and find images of the scientists or their discoveries.
- Finally, have students create an illustrated time line of the discovery. Have students display their time lines in the classroom.

RESEARCH ACTIVITY

Research and Present/Give a Presentation

- Have students choose something they learned from one of the readings and conduct a research project to learn more about it. For example, they might research one of the scientists or the debate of nature versus nurture.
- Have students create a presentation about their topic. Remind them to use facts, details, and descriptions as well as visuals during their presentations.