





Teacher Edition • Grade 6

# Mysteries & Investigations



Amplify ELA

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Lesson and print materials in digital curriculum.

### **Unit Reading Assessment** ..... ASSESSMENT

Assessment and print materials in digital curriculum.

## Icon Key:


 Steps: Indicates the order of activities in a lesson

 Audio


 Close Reading

 Differentiation


 Digital App

 Exit Ticket

 Highlight/Annotate

 Image

 Materials

 On-the-Fly

 Pair Activity

 PDF

 Poll


 Projection

 Share

 Spotlight

 Student Edition

 Student Groups

 Teacher-Led Discussion

 Teacher Only

 Teacher Speech

 Video

 Warm-Up

 Wrap-Up

 Writing Journal

# Mysteries & Investigations

In Mysteries & Investigations, students “read like an investigator” and embark on a multi-genre study into the mesmerizing world of scientific and investigative sleuthing.

Stories of mystery and suspense are a natural medium for involving 6th graders in close reading because they are internally constructed to raise readers’ curiosity. *The Secret of the Yellow Death: A True Story of Medical Sleuthing* by Suzanne Jurmain and Sir Arthur Conan Doyle’s Sherlock Holmes stories both take place in the late 19th century, a time when the worlds of medical diagnostics and criminal investigations were evolving into scientific fields. As science provided new types of information for investigators, fact-finding became crucial, as did the ability to explain what the information meant.

The lessons based on *The Secret of the Yellow Death* challenge students to grapple with clues, evidence, and scientific data to make meaning as Dr. Walter Reed and his team of scientific investigators seek the truth about yellow fever. Students will discover that not all evidence is created equally, and comes in varying degrees of factuality and credibility. By using the Evidence App throughout Sub-unit 2, students evaluate the evidence that supports or refutes each theory that claims to explain the transmission of yellow fever. As new evidence is revealed, some theories’ claims will become stronger, while others may be proven false. Students also begin to consider not just the methods, but the ethics of scientific investigation as they reflect on the steps and decisions Reed and his team took as they pursued the cause of yellow fever.

Throughout the unit, students step into the role of investigator, read closely to notice the strategies that different characters employ, create their own theories based on available information, and even predict, in the case of Sherlock Holmes, what investigators are most likely to do or not do. Reading *Sherlock Holmes*, students will break down deductive observations of a crime scene and read closely to understand how the detective breaks seemingly-unsolvable mysteries wide open.

After completing the reading, students write an essay explaining which trait is most useful to problem-solving investigators. Through the use of a sample essay, exploration of the text, and discussion, students will complete a series of lessons to craft a well-written essay.

## **Essay Prompt:**

People—like scientists, detectives, and health workers—take many approaches to solving problems. They take bold and brave actions; they work methodically; they think carefully and logically; they collaborate with others; they try new approaches.

Based on the texts you have read, what stands out to you as one important characteristic to have as a problem solver or investigator?

Include two examples of individuals demonstrating this characteristic in your response.



## Fever

SUB-UNIT 1 • 1 LESSON



## *The Secret of the Yellow Death*

SUB-UNIT 2 • 15 LESSONS



## “The Speckled Band”

SUB-UNIT 3 • 5 LESSONS



## “The Red-Headed League”

SUB-UNIT 4 • 3 LESSONS



## Write an Essay

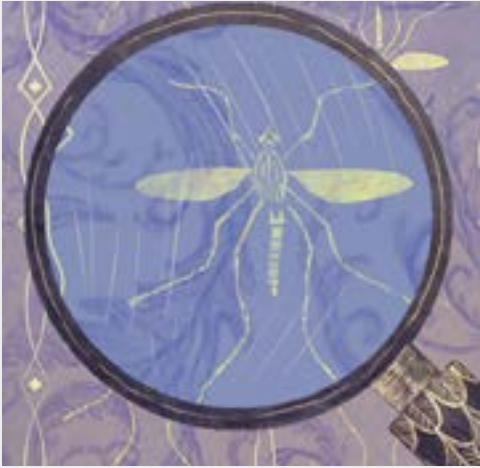
SUB-UNIT 5 • 5 LESSONS



## Clarify & Compare

SUB-UNIT 6 • 1 LESSON

Lesson and print materials in digital curriculum.



# Mysteries & Investigations Unit Reading Assessment

1 LESSON

Assessment and print materials in  
digital curriculum.



# Fever



This opening sub-unit plunges readers into the heart of a yellow fever epidemic in Laurie Halse Anderson's *Fever 1793*. Through the eyes of the protagonist, readers see what happened to Philadelphia as a deadly disease swept through the city.

Students work with this passage of historical fiction to identify how the author uses details that provide a picture of the ways in which the city changed because of the disease.



# Sub-Unit 1



## Lesson 1: A Nightmare in Philadelphia

# Sub-Unit 1 at a Glance & Preparation Checklist

Lesson Objective	Reading
<p><b>Lesson 1: A Nightmare in Philadelphia</b></p> <p><b>Reading:</b> Students read for details that help to explain the impact of yellow fever on the narrator and the city of Philadelphia.</p> <p><b>Writing:</b> Students will write from the perspective of Matilda to describe the impact of yellow fever on her hometown of Philadelphia.</p>	<p><b>Fever 1793:</b></p> <ul style="list-style-type: none"><li>• “September 24th, 1793,” (21–49)</li></ul> <p><b>The Secret of the Yellow Death:</b></p> <ul style="list-style-type: none"><li>• <b>Solo:</b> “A Note to the Reader”</li></ul>

<p><b>Lesson 1</b></p> <p>□ <i>Note that lesson Solos can be completed in the digital curriculum, through the Amplify Mobile Solos app, or in print. Solo Activities PDFs can be found in the Materials section of the digital Unit Guide, along with a Solo Answer Key.</i></p>	<div><div>A</div><div>B</div><div>C</div><div>D</div></div> <p>Pages 15–17</p>
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**Note:** There may be activities in this sub-unit that students will revise or refer to in a subsequent sub-unit. By keeping track of lessons that students complete in a print format, you can have students refer to their print work when they reach these activities. In addition, your students will need to copy any Writing Prompts completed in a print lesson into the corresponding digital writing space if you want that writing to be included in Productivity and other reports.

## Writing Prompt

Write a postcard, from the perspective of Matilda, to her mother. Choose to either write to convince her mother to come back to Philadelphia or to warn her mother to stay away from Philadelphia. Write in Matilda's voice. Use "I" and "my" as if you are Matilda. Use two details from the text that support your position.

## Benchmark Stack

**ELA.K12.EE.3.1**

**ELA.6.C.1.2**

ELA.K12.EE.2.1

ELA.6.R.1.1

ELA.6.R.1.3

ELA.6.V.1.3

## Overview

As Matilda and her grandfather return to Philadelphia after a yellow fever outbreak swept through their city, they encounter a place that feels more like a nightmare than their home. Yellow fever touched, as if the disease has infected the city itself.

As you read, you will learn about the ways that authors use details to develop a character and setting throughout a text. The author focuses on how the disease transformed the city's institutions and dramatically affected all aspects of life for its citizens.

## Suggested Reading

If you want to read more about scientists uncovering the cause and cure for yellow fever, check out Jim Murphy's award-winning *An American Plague: The True and Terrifying Story of the Yellow Fever Epidemic* (2003). Set in Philadelphia during the 18th century, this factually accurate book highlights the key role black people played in helping to fight the disease. If you would like to read a novel about a medical mystery, you may want to pick up *The Great Trouble: A Mystery of London, the Blue Death, and a Boy Called Eel* (2015) by Deborah Hopkinson. Through the eyes of Eel, a brave orphan with a detective's knack for gathering evidence, readers observe cholera's deadly effects on London.

Into science but not a fan of gore and disease? *The Fourteenth Goldfish* (2014) by Jennifer L. Holm is a lighthearted and fantastical tale about the wonders of science and familial love.

# Excerpt: *Fever* 1793

by Laurie Halse Anderson

- <sup>21</sup> The wagon had reached the part of the city where new houses and businesses were under construction. Where there should have been an army of carpenters, **masons**, **glaziers**, plasterers, and painters, I saw only empty shells of buildings, already falling into disrepair after a few weeks of neglect.
- <sup>22</sup> “Grandfather would not allow it,” I said with confidence. “If Mother is still out in the country, then we two shall care for each other. He doesn’t know the first thing about shopping at the market or cooking, and I need him to chop wood and, and...he will make sure I am well.”
- <sup>23</sup> “It is good you have each other,” said Mrs. Bowles in the same **placid** voice. “But you should not leave your house once you arrive. The streets of Philadelphia are more dangerous than your darkest nightmare. Fever victims lay in the gutters, thieves and wild men lurk on every corner. The markets have little food. You can’t wander. If you are determined to return home with your grandfather, then you must stay there until the fever **abates**.”
- <sup>24</sup> Grandfather turned to address us. “We may end up at the Ludingtons’ farm after all,” he said. “Josiah here tells me there’s not much food to be found anywhere, Mattie. I’ll write to them again as soon as we arrive home.”
- <sup>25</sup> “Won’t do you no good,” the driver interrupted. “The post office just closed down. It could take until Christmas before they can deliver letters.”
- <sup>26</sup> Mrs. Bowles patted my arm. “Don’t fret, Matilda. If you like, you may choose to take employment at the orphanage. I’m sure the **trustees** would approve a small wage if you helped with the cleaning or minding the children. They have for Susannah. She’ll help with the laundry.”
- <sup>27</sup> Susannah didn’t look strong enough to wash a teaspoon, much less a tub full of clothing. “What will happen to her when the fever is over?” I whispered.
- <sup>28</sup> Mrs. Bowles lowered her voice. “She is at a difficult age. She’s too old to be treated as a child, but not old enough to be released on her own. Her parents owned a small house. The trustees will sell that and use the money for her dowry. We will hire her out to work as a servant or **scullery** maid. I’m sure she’ll find a husband.”
- <sup>29</sup> A fly bit the ear of the child on Mrs. Bowles’s lap, and his howl cut off the conversation.

**masons:** skilled bricklayers

**glaziers:** craftsmen using glass

**placid:** calm

**abates:** lessens

**trustees:** guardians of a property

- 30 Scullery maid, that was one thing I would never be. I imagined Mother's face when she arrived home and found what a splendid job I had done running the coffeehouse. I could just picture it—I would be seeing the last customers out the door when Mother would come up the steps. She would exclaim how clean and well-run the coffeehouse was. Grandfather would point out the fancy dry goods store I was building next door. I would blush, looking quite attractive in my new dress—French, of course. Perhaps I could hire Susannah to do the washing up. That would be a way of helping.
- 31 I broke off my daydream to take in our surroundings. Grandfather and the driver had stopped swapping stories. He turned to look back at me anxiously. We were in the center of a dying city.
- 32 It was night in the middle of the day. Heat from the brick houses filled the street like a bake oven. Clouds shielded the sun, colors were **overshot** with gray. No one was about; businesses were closed and houses shuttered. I could hear a woman weeping. Some houses were barred against intruders. Yellow rags fluttered from railings and door knockers—pus yellow, fear yellow—to mark the homes of the sick and the dying. I caught sight of a few men walking, but they fled down alleys at the sound of the wagon.
- 33 "What's that?" I asked, pointing to something on the marble steps of a three-story house.
- 34 "Don't look, Matilda," said Grandfather. "Turn your head and say a prayer."
- 35 I looked. It appeared to be a bundle of bed linens that had been cast out of an upper window, but then I saw a leg and an arm.
- 36 "It's a man. Stop the wagon, we must help him!"
- 37 "He is past helping, Miss," the driver said as he urged on the horses. "I checked him on the way out to fetch you this morning. He were too far gone to go to the hospital. His family tossed him out so they wouldn't catch the fever. The death cart will get him soon for burying."
- 38 I couldn't help but stare as the wagon rolled by the stoop. He looked about seventeen and wore well-tailored clothes stained with the effects of the fever. Only his polished boots remained clean. His yellow eyes stared lifelessly at the clouds, and flies collected on his open mouth.
- 39 "Won't there be a burial, a church service?" I asked as the driver turned east onto Walnut Street.
- 40 "Most preachers are sick or too exhausted to rise from their beds. A few stay in the square during the day, that takes care of praying."
- 41 How could the city have changed so much? Yellow fever was wrestling the life out of Philadelphia, infecting the cobblestones, the trees, the nature of the people. Was I living through another nightmare?

**scullery:** small kitchen  
**overshot:** woven



- 42 "What date is this?" I asked Mr. Bowles.
- 43 "Today is September the twenty-fourth," she answered.
- 44 "The twenty-fourth? That's not possible." I counted on my fingers. We fled on the eighth. "When we left, there were reports of a thousand dead. Do you know what the total is now?"
- 45 "It's double that at least," she said. "It slowed down those few cool days, but as soon as the temperature rose again, so did the number of corpses."
- 46 The driver pulled on his reins to stop the horses. The road was blocked by a line of slow-moving carts, each pushed by a man with a rag tied over his face, each holding a corpse.
- 47 "The Potter's Field is ahead," Mrs. Bowles said as she pointed to the front of the line. "That's where they're burying most of the dead. The preachers say a prayer, and someone throws a layer of dirt on top."
- 48 Along one side of the square stretched a long row of mounded earth. The grave diggers had dug trenches as deeply as they could, then planted layer after layer of fever victims. Some of the dead were decently sewn into their winding sheets but most were buried in the clothes they died in.
- 49 "A field plowed by the devil," I murmured. "They're not even using coffins."

Excerpt from *Fever 1793* - Anderson, Laurie Halse. *Fever, 1793*. New York: Simon & Schuster Books for Young Readers, 2000.



•

**wage:** payments for work

**barred against:** blocked

••

**cobblestones:** stones used to  
pave roads

**lurk:** creep/stay hidden

**address:** speak to

**fret:** worry

**dowry:** money from a bride's  
family to the groom's family

**cast:** thrown

**decently:** with care; respectfully

**winding sheets:** sheets for burial

•••

**masons:** skilled bricklayers

**glaziers:** craftsmen using glass

**placid:** calm

**abates:** lessens

**trustees:** guardians of a property

**scullery:** small kitchen

**overshot:** woven





Use the Vocab App to play  
mini games related to the  
words in this lesson.


## A Lesson 1: A Nightmare in Philadelphia


Benchmark: ELA.K12.EE.3.1


**Work Visually:** Students identify key details to infer how yellow fever has impacted the citizens of Philadelphia.

 Direct students to page 109 of the Student Edition.

 Let's take a step back in time to see what daily life was like in Philadelphia in the 18th century. Look at this engraving made during the 1790s, when Philadelphia was the capital of the United States.

 **Writing Journal:** Students complete Activities 1–4 on page 8.

 **On-the-Fly:** Circulate around the room to help students as they analyze the image.

 Discuss responses.

 At the end of this activity, students should have a sense of a city that was important, growing, and thriving—a center of government, during a peaceful time, with a diverse population.

10 min

### Lesson 1—A Nightmare in Philadelphia

Engraving of Philadelphia in 1790s

Describe the details of this image in your Writing Journal.



Second Street north from Market St. with Christ Church, Philadelphia, *Birch's Views of Philadelphia*, Published by W. Birch, Springland Cot. near Neshaminy Bridge on the Bristol Road; Pennsylvania. Decr. 31st 1800., Plate 15.



Go to page 8 in your Writing Journal to complete Activities 1–4 to describe this image.

#### Lesson 1 Materials

No materials.


#### Differentiation: Step A


● **ELL(Dev):** To prepare students to write and speak about the image presented, ensure ELLs have the language to talk about the location of items in the image ("at the top/bottom/side," "in the foreground/background," for example) and remind ELLs that the present progressive verb tense is usually used to describe what is happening in images.


## B Lesson 1 (continued)


Benchmark: ELA.K12.EE.3.1

**Select Text:** Students select details in the description of the city to describe the specific and overall impact of the disease.


 Review the introduction to *Fever* on page 110 in the Student Edition.


 Students complete Activities 1 and 2 on page 110 of the Student Edition.


 Read aloud paragraphs 21–49 of Chapter 16 from *Fever 1793* on pages 105–107 of the Student Edition.


 Direct students to follow along in the text as you read.


 Assign pairs.

 Partners complete Activities 3 and 4 in the Student Edition.

 Discuss responses.

 Students complete Activities 5 and 6 in the Student Edition.

 **Writing Journal:** Students answer question 1 on page 9.

 Discuss responses.

## A Nightmare in Philadelphia

### B Lesson 1—A Nightmare in Philadelphia (continued)

This reading is from *Fever 1793*, a novel by Laurie Halse Anderson. In the novel, yellow fever hits Philadelphia in 1793, and the novel's main character, 13-year-old Matilda (Mattie), flees the city with her grandfather. In this passage, Matilda and her grandfather are returning to Philadelphia, where they hope to find her mother and resume their lives.

1. Follow along as your teacher reads aloud paragraphs 21–49 of Chapter 16 from *Fever 1793* on pages 105–107.
2. Listen for details that help you understand the changes Matilda sees in her city.
3. Review paragraphs 21–25. Think about how the city has changed while Matilda was gone.

Reread this quote: “Where there should have been an army of carpenters, masons, glaziers, plasterers, and painters, I saw only empty shells of buildings, already falling into disrepair after a few weeks of neglect.” (21)

4. What does the phrase “there should have been an army of carpenters, masons, glaziers, plasterers, and painters” suggest? Share your thoughts with your partner.
5. Highlight three details in paragraph 21–25 that show the impact of yellow fever on the daily life of Philadelphians.
6. How has yellow fever impacted the people of Philadelphia?



Go to page 9 in your Writing Journal and answer question 1 to explain your answer.



#### Differentiation: Step B

● *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.

You may want to explain to ELL students that the verb structure “should have been” used in the passage reflects a past event that was possible and expected, but did not happen.

C

- Review paragraphs 37–39.  
Think about how the people in Philadelphia have changed because of yellow fever.
- Matilda finds a man in the street. What happened to him? Share your thoughts with your partner.
- Highlight three details that give you a picture of who the man is and what happened to him.
- What do these details show you about the impact of yellow fever on people's behavior? Share your response with your partner.
- Review paragraphs 32–45 and highlight a detail that supports or gives you a different idea about what has happened to people's behavior.
- What does Matilda mean when she says that yellow fever is infecting "the nature of the people" (41)? Share your response with your partner.



On page 9 of your Writing Journal, answer question 2.

- Discussion Question:** Share your response in the class discussion.  
On a scale of 1 to 6, how serious does the passage make yellow fever sound?

1	2	3	4	5	6
Not Bad					Truly Terrifying

D

Write a postcard, from the perspective of Matilda, to her mother, to either:

- Convince her mother to come back to Philadelphia.
- Warn her to stay away from Philadelphia.



Go to page 10 of your Writing Journal to write your postcard.



### Differentiation: Step D

- ELL(Dev):** Alternate Writing Prompt provides step-by-step directions and sentence starters.
- Moderate:** Alternate Writing Prompt provides sentence starters.

C

## Lesson 1 (continued)

Benchmark: ELA.K12.EE.3.1

**Connect Text:** Students select details to infer how the disease has impacted the behavior and community of Philadelphia.



Read aloud paragraphs 32–45 of Chapter 3 on pages 106–107 of the Student Edition.



Direct students to follow along in the text as you read.



Assign partners.



Partners complete Activities 2–6 on page 111 of the Student Edition.



**Writing Journal:** Students answer question 2 on page 9.



Discuss responses.



Lead a class discussion using Activity 7 in the Student Edition.

12 min

D

## Lesson 1 (continued)

Benchmarks: ELA.K12.EE.3.1, ELA.6.C.1.2

**Write & Share:** Students write a postcard from Matilda to her mother to describe the effect of yellow fever on the city of Philadelphia and encourage her to return home or to stay away.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students complete the Writing Prompt on page 10.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Exit Ticket:** Project.

21 min

End of Lesson 1

# The Secret of the Yellow Death



This sub-unit invites students into the investigative world of epidemiology—the branch of medicine that studies the outbreak, impacts, containment, and potential cures for deadly diseases. This world—and text—provide an effective opportunity for students to practice gathering, weighing, and adding up the evidence to develop an increasingly accurate understanding of the text.

The main text, *The Secret of the Yellow Death: A True Story of Medical Sleuthing*, tells the true-life mission of U.S. Army scientists sent to find the cause for yellow fever in early 1900s Cuba. Students will be drawn in by the vivid (and revolting) descriptions of yellow fever symptoms as well as the dangerous experiments and the desperate scramble for factual evidence that the team needed to unravel the mystery once and for all. They will also have the opportunity to reflect on the ethics of the team's approach to their investigation.

By focusing upon the credibility of the evidence that the team uncovered, students develop a thorough understanding of the transmission of yellow fever, as well as the actions of the researchers and volunteers who, together, unraveled the mystery of the yellow death.

However, yellow fever and other transmittable diseases still pose a threat to people all over the world. In the article “Yellow Fever Circles Brazil's Huge Cities,” students learn about how vaccine shortages, changing climate, and anti-vaccine rumors have left some cities scrambling to prevent the next outbreak.



## Sub-Unit 2



**Lesson 1:**  
Meeting a Monster



**Lesson 2:**  
Monsters and  
Heroes: Introducing  
Dr. Walter Reed



**Lesson 3:**  
Weigh the Evidence:  
Yellow Fever Origin  
Theories



**Lesson 4:**  
Flex Day 1



**Lesson 5:**  
Meeting the Team



**Lesson 6:**  
Investigating  
Breakthroughs and  
Analyzing Evidence



**Lesson 7:**  
Rumors and Reality:  
Introducing Dr.  
Finlay



**Lesson 8:**  
Flex Day 2



## Lesson 9:

The “Monster,”  
Mosquito, and  
Motivation



## Lesson 10:

Heroic or Reckless?



## Lesson 11:

Understanding  
the Risk



## Lesson 12:

Flex Day 3



## Lesson 13:

Do You Consent?  
The Volunteers of  
Camp Lazear



## Lesson 14:

Did Dr. Reed Violate  
the Hippocratic  
Oath?







## Lesson 15:

The Yellow Fever  
Challenge Today



# Sub-Unit 2 at a Glance

Lesson Objective	Reading
<p><b>Lesson 1: Meeting a Monster</b></p> <p><b>Reading:</b> Students will analyze in detail the techniques, examples, and anecdotes that the author uses to introduce and illustrate the topic of yellow fever in <i>The Secret of the Yellow Death: A True Story of Medical Sleuthing</i>.</p> <p><b>Writing:</b> Students will use details from the passage to support their claim about whether they would or would not volunteer to investigate the cause of the disease.</p> <p><b>Audio:</b>  “Meeting the Monster” Audio, paragraphs 1–4</p>	<p><b><i>The Secret of the Yellow Death:</i></b></p> <ul style="list-style-type: none"><li>• “Meeting the Monster” (1–4)</li><li>• <b>Solo:</b> “Meeting the Monster” (1–14)</li></ul>
<p><b>Lesson 2: Monsters and Heroes: Introducing Dr. Walter Reed</b></p> <p><b>Reading:</b> Students look closely at both explicit and figurative language choices in two descriptions to analyze how yellow fever and Dr. Reed are introduced.</p> <p><b>Writing:</b> Students synthesize two descriptions to develop a claim about Dr. Reed using evidence from the text.</p> <p><b>Audio:</b>  “Feeding the Fishes” Audio, paragraphs 1–4</p> <p><b>Module:</b>  Figurative Language</p>	<p><b><i>The Secret of the Yellow Death:</i></b></p> <ul style="list-style-type: none"><li>• “Meeting the Monster” (1–14)</li><li>• “Feeding the Fishes” (1–9)</li><li>• <b>Solo:</b> “Feeding the Fishes” (1–9)</li></ul>
<p><b>Lesson 3: Weigh the Evidence: Yellow Fever Origin Theories</b></p> <p><b>Reading:</b> Read to identify details and evaluate the evidence presented to support/oppose a claim.</p> <p><b>App:</b>  Evidence app</p> <p>We highly recommend that students have access to the digital lesson in order to use the Evidence app.</p> <p><b>Module:</b>  Argument</p>	<p><b><i>The Secret of the Yellow Death:</i></b></p> <ul style="list-style-type: none"><li>• “Feeding the Fishes” (1–9)</li><li>• “Plans” (1–15)</li><li>• <b>Solo:</b> “Plans” (1–15)</li></ul>

## Writing Prompt

## Benchmark Stack

Would you volunteer to travel to a place with yellow fever to investigate the cause of the disease? Describe two details from the text that impact your decision to go or not go.

**ELA.6.R.2.2**

**ELA.6.C.1.3**

ELA.K12.EE.1.1

ELA.K12.EE.2.1

ELA.K12.EE.3.1

ELA.6.V.1.3

How does the author introduce and describe Dr. Walter Reed? Does he seem like a hero who is ready to defeat the “monster,” yellow fever? Use two details to support your position.

**Extra:** Challenge Writing available in the digital lesson.

**ELA.6.R.2.2**

**ELA.6.C.1.3**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.6.R.3.1

No analytical writing prompt.

**ELA.K12.EE.4.1**

**ELA.6.R.2.4**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

## Lesson Objective

## Reading

### Lesson 4: Flex Day 1

The teacher selects from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts.

### Lesson 5: Meeting the Team

**Reading:** Students will identify specific details to determine character traits and to analyze how the author conveys her point of view about the team of researchers.

**Speaking & Listening:** Students will listen, contribute, and respond to a group discussion examining the qualities that make someone a good team member.

**Audio:**

 “Feeding the Fishes” Audio, paragraph 3

#### ***The Secret of the Yellow Death:***

- “Feeding the Fishes” (3)
- “Plans” (1–15)
- **Solo:** “Going Nowhere” (3), “The First Clue?” (6–16)

### Lesson 6: Investigating Breakthroughs and Analyzing Evidence

**Reading:** Students will read, organize, and use evidence from the text to analyze the theories about yellow fever transmission and evaluate which claims are supported by evidence and which claims are not.

**Writing:** Based on their evaluation of the team’s current evidence, students identify and explain which theory of transmission is most supported by evidence.

**App:**

 Evidence app

We highly recommend that students have access to the digital lesson in order to use the Evidence app.

**Audio:**

 “Going Nowhere” and “The First Clue” Audio

#### ***The Secret of the Yellow Death:***

- “Going Nowhere” (3)
- “The First Clue?” (6–15)
- **Solo:** “Bugs” (1–21)

### Lesson 7: Rumors and Reality: Introducing Dr. Finlay

Students will compare and contrast text and graphics to evaluate the effectiveness of each medium to convey an idea.

#### ***The Secret of the Yellow Death:***

- “Feeding the Fishes” (7)
- “Bugs” (7–15)
- **Solo:** “I Have No Such Thing” (1–18), “Delirious” (1–2)



## Writing Prompt

## Benchmark Stack

Each Flex Day activity provides practice with particular skills and benchmarks. Consult the Flex Day Activities Guide to see what is targeted by each activity.

No analytical writing prompt.

**ELA.6.R.2.1**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.K12.EE.4.1

ELA.6.R.2.2

ELA.6.C.1.3

Based on the team's findings, which claim currently appears to be most supported by evidence? Explain two pieces of evidence in your response.

**ELA.6.R.2.4**

**ELA.6.C.1.3**

**ELA.6.V.1.1**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.6.R.2.1

ELA.6.R.2.2

ELA.6.R.3.2

No analytical writing prompt.

**ELA.6.R.3.2**

ELA.K12.EE.4.1

ELA.6.R.2.1

ELA.6.R.2.2

ELA.6.R.2.3

ELA.6.R.2.4

## Lesson Objective

## Reading

### Lesson 8: Flex Day 2

The teacher selects from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts.

### Lesson 9: The “Monster,” Mosquito, and Motivation

**Reading:** Students analyze how Dr. Lazear’s and Dr. Carroll’s motivations for placing the infected mosquito on Dr. Carroll’s arm is introduced and elaborated in the text.

**Writing:** Students will use details from the text to support their analysis and inference about what motivated the scientists’ actions.

**Audio:**

 “Meeting the Monster” Audio, paragraph 2

#### *The Secret of the Yellow Death:*


- “Meeting the Monster” (2)
- “I Have No Such Thing” (1–18)
- **Solo:** “Did the Mosquito Do It?” (1–12), “Doctor, Are You Sick?” (1–23, 27–30)

### Lesson 10: Heroic or Reckless?

**Reading:** Students compare and contrast Suzanne Jurmain’s and Mabel Lazear’s presentations of Dr. Lazear’s infection.

**Writing:** Students will gather evidence from Jurmain’s text and use Dr. Lazear’s perspective to explain his actions and motivations.

**Audio:**

 “Doctor, Are You Sick?” Audio, paragraphs 4–12

#### *The Secret of the Yellow Death:*

- “Doctor, Are You Sick?” (1–25)
- **Solo:** “Sorting It Out” (1–12), “Problems” (10–15), “We Are Doing It for Medical Science” (12–14)

### Lesson 11: Understanding the Risk

**Reading:** Students read closely and paraphrase particular sentences to understand the risks and rewards of becoming a medical volunteer at Camp Lazear.

#### *The Secret of the Yellow Death:*

- “Sorting It Out” (1–12)
- “Problems” (10–15)
- “We Are Doing It for Medical Science” (consent form)
- **Solo:** “Testing Times” (1–8), “More Bugs” (1–12, 17–24)

### Lesson 12: Flex Day 3

The teacher selects from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts.

## Writing Prompt

## Benchmark Stack

Each Flex Day activity provides practice with particular skills and benchmarks. Consult the Flex Day Activities Guide to see what is targeted by each activity.

Select one question from the options below and use evidence and details from the text to develop your claim:

1. If he had known the results, would Dr. Lazear have allowed the mosquito to bite Dr. Carroll?
2. If he had known the results, would Dr. Carroll have let the mosquito bite him?

**Extra:** Challenge Writing available in the digital lesson.

**ELA.K12.EE.3.1**

**ELA.6.C.1.3**

ELA.K12.EE.1.1

ELA.6.R.2.4

Now that you have weighed the evidence to determine whether Dr. Lazear accidentally or intentionally became infected with yellow fever, write a letter from his perspective to his wife, Mabel Lazear.

**ELA.K12.EE.6.1**

**ELA.6.R.2.3**

**ELA.6.R.3.3**

**ELA.6.C.1.2**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.6.R.2.1

ELA.6.R.2.2

ELA.6.R.2.4

No analytical writing prompt.

**ELA.6.R.2.2**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.K12.EE.4.1

ELA.6.R.2.1

ELA.6.R.3.2

Each Flex Day activity provides practice with particular skills and benchmarks. Consult the Flex Day Activities Guide to see what is targeted by each activity.

## Lesson Objective

## Reading

### Lesson 13: Do You Consent? The Volunteers of Camp Lazear

**Reading:** Students trace the steps of the experiments at Camp Lazear to explain the findings and provide an objective summary.

**Writing:** Students in each group summarize the key methods and findings of the experiment.

**App:**

 Evidence app

We highly recommend that students have access to the digital lesson in order to use the Evidence app.


***The Secret of the Yellow Death:***

- “We Are Doing It for Medical Science” (12–14)
- “Testing Times” (1–8)
- “More Bugs” (17–24)
- **Solo:** “Celebration” (1–14)

### Lesson 14: Did Dr. Reed Violate the Hippocratic Oath?

**Reading:** Students paraphrase the complex text of the Hippocratic oath to apply its tenets to their evaluation of the ethics of Dr. Reed’s experiments.

**Module:**

 Paraphrase and Summarize

***The Secret of the Yellow Death:***

- “Testing Times” (1–8)
- “Bugs” (7–16, 21)
- “Chapter Notes” (56, 72)
- Hippocratic oath (1–14)

**Solo:** “Yellow Fever Circles Brazil’s Huge Cities” (1–39)

### Lesson 15: The Yellow Fever Challenge Today

Students consider features of a newspaper article and analyze key sections to identify the main causes of a potential yellow fever outbreak.

“Yellow Fever Circles Brazil’s Huge Cities” (1–39)

**Solo:** *The Secret of the Yellow Death*: “Epilogue” (1–12)

## Writing Prompt

## Benchmark Stack

No analytical writing prompt.

**ELA.6.R.2.2**

**ELA.6.C.1.4**

**ELA.6.V.1.1**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.6.R.2.1

ELA.6.R.2.4

No analytical writing prompt.

**ELA.K12.EE.4.1**

**ELA.6.R.2.4**

**ELA.6.R.3.2**

ELA.K12.EE.1.1

ELA.K12.EE.2.1

ELA.K12.EE.3.1

ELA.K12.EE.5.1

ELA.K12.EE.6.1

ELA.6.R.2.1

No analytical writing prompt.

**Extra:** Challenge Writing available in the digital lesson.

**ELA.6.R.2.1**

ELA.K12.EE.2.1

ELA.K12.EE.4.1

ELA.6.R.2.2

ELA.6.V.1.3

# Sub-Unit 2 Preparation Checklist

## Lesson 1

*Note that lesson Solos can be completed in the digital curriculum, through the Amplify Mobile Solos app, or in print. Solo Activities PDFs can be found in the Materials section of the digital Unit Guide, along with a Solo Answer Key.*

A B  
C D

Pages 84–88

## Lesson 2

- ❑ The B.E.S.T. Module: Figurative Language, available in the digital lesson, provides an introduction to the Reading Benchmark ELA.6.R.3.1 and can be used to prepare students for this lesson.

E F  
G H

Pages 89–93

## Lesson 3

*We highly recommend students have access to the digital lesson in order to evaluate evidence and information in the Evidence App.*

- ❑ The B.E.S.T. Module: Argument, available in the digital lesson, provides an introduction to the Reading Benchmark ELA.6.R.2.4 and can be used to prepare students for this lesson.

I J  
K

Pages 94–95

## Lesson 4: Flex Day

- ❑ Review each lesson activity to identify which one(s) will best support your students' skill progress.
- ❑ Each activity requires distinct preparation. Review the Instructional Guide for each activity you will assign.
- ❑ Prepare any texts, materials, or directions you may need to project or distribute.

## Lesson 5

*No additional prep.*

L M  
N

Pages 95–99

## Lesson 6

*We highly recommend students have access to the digital lesson in order to evaluate evidence and information in the Evidence App.*

- ❑ You may prepare for this lesson by becoming familiar with the evidence that students will encounter in the reading in order to better assist them with the task of evidence evaluation.

O P  
Q R

Pages 100–103

## Lesson 7

- ❑ The comic strip activity in this lesson can also be done as a project outside of the Writing Journal with students creating their own comic strips. You will need paper and art supplies if you decide to complete the comic strip in this manner.

S T  
U

Pages 104–107

## Lesson 8: Flex Day

- ❑ Review each lesson activity to identify which one(s) will best support your students' skill progress.
- ❑ Each activity requires distinct preparation. Review the Instructional Guide for each activity you will assign.
- ❑ Prepare any texts, materials, or directions you may need to project or distribute.

## Lesson 9

- ❑ Plan how you will assign students into groups.

V W  
X Y  
Z

Pages 108–112

## Lesson 10

- ❑ The reading assigned with the Solo is longer than normal. You may want to plan time during class for students to complete some of this work.
- ❑ In preparation for the four corners activity, identify the corners or spaces in the room for students to gather during the activity.

A<sup>2</sup> B<sup>2</sup>  
C<sup>2</sup>

Pages 113–117

## Lesson 11

*We recommend students have access to the digital lesson in order to evaluate evidence and information in the Evidence App.*

D<sup>2</sup> E<sup>2</sup>  
F<sup>2</sup>

Pages 118–120

## Lesson 12: Flex Day

- ❑ Review each lesson activity to identify which one(s) will best support your students' skill progress.
- ❑ Each activity requires distinct preparation. Review the Instructional Guide for each activity you will assign.
- ❑ Prepare any texts, materials, or directions you may need to project or distribute.

## Lesson 13

*We recommend students have access to the digital lesson in order to evaluate evidence and information in the Evidence App.*

G<sup>2</sup> H<sup>2</sup>  
I<sup>2</sup>

Pages 122–125



## Lesson 14

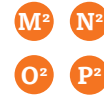
- The B.E.S.T. Module: Paraphrase and Summarize, available in the digital lesson, provides an introduction to the Reading Benchmark ELA.6.R.3.2 and can be used to prepare students for this lesson.



Pages 128–131

## Lesson 15

- Plan how you will assign students into groups.



Pages 136–139

**Note:** There may be activities in this sub-unit that students will revise or refer to in a subsequent sub-unit. By keeping track of lessons that students complete in a print format, you can have students refer to their print work when they reach these activities. In addition, your students will need to copy any Writing Prompts completed in a print lesson into the corresponding digital writing space if you want that writing to be included in Productivity and other reports.



# The Secret of the Yellow Death

Suzanne Jurmain

112

## Overview

When yellow fever attacked the bustling city of Havana, Cuba, the U.S. Army sent a team of four doctors and researchers on a mission to investigate the cause. Through their research, they identified three theories of transmission, but only through scientific experimentation did they discover the truth. But experiments can have deadly consequences, not only for the patients who are infected, but also for the doctors themselves.

As you read, you will encounter the evidence that Dr. Reed and his team discovered. By carefully identifying, organizing, and evaluating the evidence from the book, you will learn how to use strong evidence to support and prove a theory.

## Suggested Reading

*The Secret of the Yellow Death: A True Story of Medical Sleuthing* by Suzanne Jurmain, is a gripping account of the American and Cuban scientists who risked their lives to crack one of the biggest mysteries of the 19th century: yellow fever. Young readers will be riveted to the stories of scientists who dedicated themselves to fighting the disease, often at the expense of their own health. Jurmain reveals yellow fever's catastrophic impact on entire cities while giving readers a glimpse into the hearts and minds of the fearless volunteers and doctors determined to conquer a monstrous disease. With the exactness of a scientist and the vivid imagination of a murder-mystery writer, Jurmain satisfies readers' desire for suspense, while preparing them to discuss the threat and consequences of recent global epidemics.



Excerpts from:

# *The Secret of the Yellow Death*

by Suzanne Jurmain

# *The Secret of the Yellow Death: A True Story of Medical Sleuthing*

*by Suzanne Jurmain*

## A Note to the Reader

- <sup>1</sup> Just over one hundred years ago a band of scientists and volunteers from two countries decided to fight against one of the world's deadliest diseases. Some members of this group came from Cuba; some, from the United States. Unfortunately, today relatively little is known about the Cubans who took part in this important battle, while libraries contain many rich sources of information about the American team. For this reason, I have concentrated on the extremely well documented American part of the story. But readers should remember that without the great Cuban scientific contribution, there might have been no story to tell.
-

# Meeting the Monster

## paragraphs 1–14

- <sup>1</sup> Summer 1899
- <sup>2</sup> The young man didn't feel well. First, there was the chill: an icy, bone-freezing chill in the middle of a warm summer evening. Then there was the terrible crushing headache. His back hurt. His stomach twisted with pain. And then he was hot, boiling hot, with a fever that hovered around 104 degrees. His skin turned yellow. The whites of his eyes looked like lemons. Nauseated, he gagged and threw up again and again, **spewing** streams of vomit black with digested **clots** of blood across the pillow. Sometimes he cried out or babbled in **delirium**. Violent **spasms** jolted his body. It took two grown men to hold him in his bed as a nurse wiped away the drops of blood that trickled from his nose and mouth. Nights and mornings passed. Then, five days after that first freezing chill, the young man died: another victim of a terrible disease called yellow fever.
- <sup>3</sup> Doctors didn't know what caused it. They couldn't cure it. But they knew that yellow fever was a killer. For centuries the disease had swept through parts of the Americas and Africa, leaving behind a trail of loss and misery. It turned cities into ghost towns and left the local graveyards filled with corpses. In New Orleans, Dr. Kennedy took sick and collapsed while he was tending patients. In Philadelphia, Dr. Hodge's little girl caught the fever, turned yellow, and died in two short days. And when the sickness killed the Memphis snack shop woman Kate Bionda, she left behind her husband and two small children. The fever struck the rich. It struck the poor. It killed the humble, and it **humbled** the important. Jefferson Davis, president of the Confederate States of America during the U.S. Civil War, lost his son to yellow fever. George Clymer, who'd signed the Declaration of Independence, watched helplessly as the sickness struck his wife and family. And every single year the illness **took its toll**. In 1793, 4,044 people in Philadelphia died during a plague of yellow fever. New Orleans counted 8,101 yellow fever deaths in 1853. And when the disease hit Memphis, Tennessee, in 1878, 17,000 citizens sickened in a single month. Stores closed. Work stopped. Thousands fled, and those who remained wandered through a nightmare city—where sick children huddled next to dying parents and hungry dogs roamed the silent streets searching for their lost dead masters.
- <sup>4</sup> "Yellow fever [is] . . . an enemy which **imperils** life and cripples **commerce** and industry," Surgeon General John Woodworth told the U.S. Congress in 1879. And he was right. In one single century—between 1800 and 1900—the disease sickened approximately 500,000 U.S. citizens and killed about 100,000.
- <sup>5</sup> The question was, what could be done about it?

**spewing:** gushing

**clots:** solidified lumps

**delirium:** confusion or madness

**spasms:** jerks

**humbled:** brought down

**took its toll:** caused destruction

**imperils:** puts into danger

**commerce:** trade; buying and selling of goods

**one-celled  
microscopic  
organisms:** living  
things made up of  
one cell

**raged:** spread  
wildly

**epidemics:**  
widespread attack  
of a disease

**deathtrap:**  
extremely  
dangerous place

**contracted:** caught

**alarmed:** very  
worried or  
disturbed

- <sup>6</sup> By the 1890s doctors had found that many illnesses are caused by **one-celled microscopic organisms** called bacteria. With the help of this new knowledge, they taught the public how to kill these dangerous bacterial “germs” with things like heat and disinfectant. They also learned how to use dead or weakened germs to make vaccines—special types of medicine that prevent illness by forcing a living body to produce its own disease-fighting substances. Slowly, physicians began to conquer deadly sicknesses like cholera, typhoid, anthrax, and diphtheria. But yellow fever still **raged**. Researchers studied the disease. Doctors argued about the cause. Scientists peered through their microscopes, looking for the yellow fever germ. But there was no progress. Each year the hot summer weather brought on yellow fever **epidemics**. Each year desperate people burned clothing, bedding, and even buildings that had housed yellow fever victims in hopes of stopping the disease. Frantic doctors bled the sick, stuck them in mustard baths, dosed them with opium, or gave them drugs that might make them vomit out the germ—but nothing helped. Each year thousands of people caught the disease. Thousands died of it. And then, suddenly, something happened—something that at first didn’t seem to have anything to do with yellow fever or with medical science.
- <sup>7</sup> On February 9, 1898, the U.S. battleship Maine blew up in the harbor of Havana, Cuba. Two hundred and sixty-eight American servicemen were killed. U.S. officials told a shocked nation that Spanish government agents had deliberately caused the explosion. And by the end of April the United States had decided to go to war with Spain.
- <sup>8</sup> In the next four months American soldiers beat the Spanish army in Cuba. They beat the Spanish navy in the Pacific. And when the Spanish-American War ended in July, the victorious U.S. forces had won the right to govern Cuba and Puerto Rico (two islands off the southern coast of Florida), as well as the Pacific Ocean islands of Guam and the Philippines. Unfortunately, the war had also brought the United States face-to-face with another deadly enemy: yellow fever.
- <sup>9</sup> Because of the disease, the newly conquered Cuban territory was a **deathtrap**. Yellow fever epidemics swept the country. Visitors often **contracted** the illness soon after landing on the island’s shores. Some U.S. troops had already died of the disease in Cuba, and Washington officials were **alarmed**.
- <sup>10</sup> What would happen to American soldiers in Cuba if a full-scale epidemic broke out on the island? Or, worse, what would happen if homecoming U.S. troops carried yellow fever back to North America? That was the kind of thinking that gave United States officials nightmares.
- <sup>11</sup> Something had to be done.
- <sup>12</sup> Somehow the country had to find a way to prevent more attacks of yellow fever.



- <sup>13</sup> But before U.S. scientists could stop or cure the disease, they had to understand it. They had to know what caused the sickness. They had to know what spread it. And it was important that they find out soon.
- <sup>14</sup> On May 24, 1900, the U.S. government sent orders to four American army doctors. Their mission was to go to Cuba and find the cause of yellow fever.

## “Feeding the Fishes”

paragraphs 1–12

- <sup>1</sup> June 21–24, 1900
- <sup>2</sup> The USS *Sedgwick* lurched, and Major Walter Reed, M.D., **promptly** threw up. The ship was barely out of New York. Already he was seasick. And now, now that he was facing the biggest, most important challenge of his whole career, Dr. Walter Reed didn’t need to waste time leaning over the rail and doing what he called “feeding the fishes.”
- <sup>3</sup> For roughly twenty years, Reed had dreamed of being able to do something big, something important, something that he hoped would “**alleviate** human suffering.” It was a dream he’d had when he was a young army doctor tending settlers, soldiers, and Apaches on lonely **frontier outposts**. It was something he’d thought about when he went back to school at age thirty-nine to study bacteriology—a brand-new branch of medical science that dealt with the disease-causing germs that researchers called bacteria. For ten more years Reed had hoped to make a major contribution while he did research and taught students at the U.S. Army Medical School in Washington, D.C. And now, finally, at age forty-nine, he had a chance to take on the most exciting and important project of his whole career. Just a few weeks earlier, the U.S. Army had ordered Dr. Walter Reed to go to Cuba, **head** a team of three other doctors, and find the cause of yellow fever.
- <sup>4</sup> But where was he going to start? Before leaving Washington, Reed had read the latest medical books and done some **preliminary** experiments. He’d looked at scientific articles on yellow fever, and he’d also talked to people who’d spent time studying the illness. By now he knew that there were several current theories on the cause of the disease, and he could tick off on his fingers the first three items that had to be investigated.
- <sup>5</sup> First was an idea suggested by Dr Giuseppe Sanarelli. A few years earlier this Italian researcher had announced that a type of bacteria called *Bacillus icteroides* was the cause of yellow fever. That sounded good. But Reed’s recent experiments had shown that *Bacillus icteroides* actually caused a pig disease called hog cholera. Now scientists were arguing about which research results

**promptly:**  
immediately

**alleviate:** lessen

**frontier:** wild or  
unexplored lands

**outposts:** distant  
military camps

**head:** lead

**preliminary:** early

were right, and Walter Reed knew that his team would have to find a way of **settling** the issue. That was a big project, and it was only the beginning.

- 6 Next on the list was an old theory—one that had been around for years. It claimed that healthy people got the disease by touching clothing, bedding, or furniture that had been used by yellow fever patients. That idea was so popular that it had appeared in medical books. Many health **authorities** believed it. So did many doctors. Of course, no scientist had ever proved the theory to be true. But it was definitely a matter for Reed and his assistants to consider.
- 7 And then, finally, there was another idea. A very different one. For almost twenty years, in more than one hundred experiments, a Cuban doctor named Carlos Finlay had tried to prove that mosquito bites caused yellow fever. Time and time again, the Cuban scientist had attempted to show that bugs could carry the disease by letting mosquitoes he thought might be infected with the germ bite groups of healthy patients. But none of Finlay's patients ever developed a truly clear-cut case of yellow fever from the bites. The experiments were unsuccessful. Many scientists laughed at the Cuban doctor's failures. The mosquito theory didn't seem to fit the facts, and no one understood why Finlay still continued to believe it. Maybe, some people said, the Cuban doctor was "touched." Others came right out and called him "crazy." Even Reed's boss, the surgeon general of the army, George Sternberg—a leading American bacteriologist—thought that the mosquito theory was a joke. Investigating it was "useless," he told Reed. And there was a good chance that the army surgeon general was right. Most sensible scientists did think the mosquito theory sounded pretty **flaky**. And *Bacillus icteroides*? Well, because of his own research, Reed privately thought that was probably pretty flaky, too.
- 8 But, of course, what Reed *thought* didn't matter. Science wasn't about opinions or theories. It was about facts. And Reed's job was clear. With the help of his team, he had to find the facts. He had to test each one of the theories.
- 9 He had to find out—once and for all—if any of them was right. And if all three current theories were wrong, Reed would have to come up with a new idea—and test that. It was a big job. A tough one. But if Reed and his team could do it . . . if somehow they could find the cause of yellow fever, it might help scientists prevent the disease—or cure it.
- 10 But that was all in the future.
- 11 At the moment, the only cure Reed really needed was a **remedy** for seasickness. In a letter to his wife and daughter, he said that there seemed to be "two or three tons of brick in . . . [his] stomach."
- 12 And when the USS *Sedgwick* rolled again, Dr. Walter Reed leaned over, threw up, and "fed the fishes."

**settling:** deciding  
**authorities:**  
experts in power  
**flaky:** unreliable  
**remedy:** treatment

# Plans

## paragraphs 1–15

- <sup>1</sup> June 25, 1900
- <sup>2</sup> The sun was warm. The sea was blue. The orange juice, black coffee, and dry toast had stayed down. And Walter Reed was standing at the rail watching as his ship steamed past wharves, past the wreck of the battleship Maine, and into the harbor of Havana, Cuba.
- <sup>3</sup> When the ship docked at around eleven, Reed was ready to move. An epidemic of yellow fever had recently broken out in the Cuban town of Quemados. Some people in Havana were also sick with the disease. Even the chief U.S. medical officer for Western Cuba, Reed's good friend Major Jefferson Kean, had come down with the illness several days earlier. There was no time to waste.
- <sup>4</sup> Reed quickly loaded his bags into a carriage and drove through the **bustling** city streets of Havana and across eight miles of country roads until he reached the U.S. Army post at Camp Columbia. After dropping his bags at the Officers' Quarters, he was off again, dashing across the grounds to visit Major Kean in the camp's yellow fever hospital just outside the base.
- <sup>5</sup> There the news was good. Kean's case was fairly mild. He was expected to live. At the bedside Reed probably chatted like any other visitor, but he must have also **assessed** the patient with a scientific eye. Was Kean's skin yellow? Was his temperature high? Were his gums bleeding? What had he been doing in the days before he got sick? Had he been near mosquitoes? Infected clothing? Reed had read descriptions of yellow fever, but this was the first live case he'd ever seen. He was hungry for information. He wanted clues. But he couldn't spend the rest of the day at Kean's bedside. If Reed was going to get the research started, he had to organize his team.
- <sup>6</sup> The first meeting had already been called, and late in the afternoon Reed walked onto the garden patio outside Camp Columbia's Officers' Quarters to greet the three men he'd be working with.
- <sup>7</sup> They were all there, **formally** dressed in their crisp white tropical army uniforms. On one side was the tall, thin, balding Dr. James Carroll, a blunt, outwardly charmless man who seemed to be more comfortable looking through a microscope than making conversation. Near Carroll was the chatty Cuban-born, U.S.-educated Dr. Aristides Agramonte, looking like a **dandy** with his pointed, curled mustache. And **rounding out** the group was the quiet, bearded, darkly handsome Dr. Jesse W. Lazear.
- <sup>8</sup> All of the men had graduated from medical school. All had studied bacteriology, and together they brought a wealth of talent to the project.

**bustling:** filled with noise and activity

**assessed:** judged

**formally:** fancily

**dandy:** overly fancy-looking man

**rounding out:** completing

Carroll had a real passion for lab work. Agramonte, an honors graduate of Columbia University Medical School, had already spent time investigating yellow fever. And Lazear, a former college football player who'd studied medicine in both the United States and Europe, had headed one of the **clinical** labs at America's prestigious Johns Hopkins University. All three men had worked with Reed in the past, and they listened **intently** as the chief scientist outlined his program.

- 9 The first job, Reed told his colleagues, was to prove that *Bacillus icteroides* was—or was not—the cause of yellow fever.
- 10 That would take a lot of lab work, and each scientist would have his own specific job.
- 11 Agramonte would do **autopsies**. He'd surgically open the bodies of dead yellow fever victims and take out samples of blood, stomach, heart, kidney, and other organ tissues.
- 12 Carroll, the best bacteriologist, would take those samples to the lab. He would place tiny amounts of the tissue Agramonte harvested in tubes or dishes filled with a food substance like gelatin or **bouillon**. Then he would watch to see if any of the tissue samples grew *Bacillus icteroides* or any other bacteria that might prove to be the cause of yellow fever.
- 13 Lazear would help examine the bacteria and tissues under a microscope.
- 14 Reed would coordinate the work and help out wherever he could. That covered the important points. But there was one thing more. As he looked around at his assistants, Reed said that he hoped the group would stick closely to his plan. Finding the cause of yellow fever was a tremendous challenge, and he wanted the men to combine their efforts and attack the problem as a team.
- 15 Everyone agreed. Work was scheduled to start the following morning. And, as they left the meeting, the four men must have known they were about to start a very dangerous project. People who had had yellow fever were immune. They couldn't possibly get the disease again. But none of the men on Reed's team had ever had a **full-blown** attack of yellow fever. Reed had certainly never had the disease. Neither had Lazear or Carroll. Though there was a chance that the Cuban-born Agramonte might have had a very mild case as a small child, he was not definitely immune. And all four doctors knew that by being on the fever-stricken island of Cuba, by coming close to sick patients, and by studying bacteria in the lab, they were running a serious risk of getting yellow fever.

**clinical:** medical  
**intently:** with focus

**autopsies:**  
examinations of  
dead bodies

**bouillon:** seasoned  
broth

**full-blown:**  
completely  
developed

# Going Nowhere

paragraphs 1–13

- <sup>1</sup> Early July 1900
- <sup>2</sup> The lab didn't look like much. It was an old wooden shack at Camp Columbia, stuffed with wooden tables, shelves, jars, flasks, test tubes, a hot oven for sterilizing, an incubator to provide the warmth needed for growing bacteria, and a couple of microscopes. From morning until lunch, from lunch until dinner, Reed and Carroll worked side by side, juggling tubes and peering through microscope lenses. Lazear came and went, taking his turn at studying the steady stream of tissue specimens Agramonte sent from his autopsy lab in Havana.
- <sup>3</sup> The problem seemed simple. If *Bacillus icteroides* caused yellow fever, it ought to be found in the bodies of yellow fever victims. All Reed and his colleagues had to do was look. So, as the warm July days sped past, the four doctors searched for *Bacillus icteroides* in blood samples that had been taken from live yellow fever patients. They also tried to find the bacteria in blood and bits of tissue that had been taken from the dead. With delicate loops made of platinum wire they **streaked** infected blood onto gelatin-filled plates and popped these **cultures** in the incubator to see if warmth and the gelatin food would make Dr. Giuseppe Sanarelli's mysterious bacteria grow. They tried to grow the bacteria by placing tiny samples of the livers, spleens, **kidneys**, intestines, and hearts of yellow fever victims in test tubes filled with bouillon that bacteria liked to eat. But nothing much grew in the tubes or on the plates. And no matter how carefully the men looked through their microscopes, they couldn't find a single sample of *Bacillus icteroides*.
- <sup>4</sup> Yet yellow fever was all around the team that summer. Men and women in Havana were dying of the disease. American officers were coming down with yellow fever, even though Walter Reed never mentioned that in personal letters.



A modern photo showing millions of bacteria growing in clusters on a glass plate filled with gelatin. The Reed team hoped to find the yellow fever germ by growing bacteria on plates like this.

**streaked:** laid in a band

**cultures:** preparations for cells to grow in a lab

**kidneys:** organ that separates extra water and waste from blood

- 5 Almost every day, he sat down at the long wooden table in his quarters and wrote a cheerful, chatty letter to his “precious wife,” Emilie. He told her that he’d bought himself “a large **Cork** [sic] helmet for wearing in the sun” and that he’d eaten cake and watermelon for dinner. He asked her to tell him all about the strawberry patch, the flower garden, and the relatives at home. But when Emilie sent a letter that asked about Reed’s chance of getting yellow fever while in Cuba, her husband answered, “I have said nothing about yellow fever because I didn’t want to give you any worry, especially as I wasn’t taking any risks whatever.”
- 6 No risks whatever?
- 7 The truth was, all of Reed’s activities were risky.
- 8 But, **apparently**, Reed didn’t want his wife to know it. When he wrote his letters home, Reed didn’t tell Emilie that yellow fever was sweeping across Cuba. He didn’t say that he might get the illness from handling infected tissue specimens. And he also didn’t mention one other troubling fact: the team was making very little progress.
- 9 By the middle of July, Reed and his colleagues had produced dozens of gelatin cultures and bouillon preparations. They had spent hours looking at organ tissue under the microscope. But they couldn’t find *Bacillus icteroides*—or any other type of germ that might possibly be the cause of yellow fever.
- 10 That bothered Dr. Jesse Lazear.
- 11 At work the former football player always did his job. To team members, he was always “pleasant” and “polite.” In his spare time, he wrote cheery letters home, telling his pregnant wife about the tropical rain and the funny way that the charmless Dr. Carroll’s ears stuck out. But sometimes, when he sat alone, writing to his family, Lazear couldn’t hold his feelings back. The laboratory work wasn’t going well, he reported. The project was getting nowhere. And as for his teammates . . . Well, it wasn’t Carroll’s ears he was concerned about. It was Carroll. The tall, balding bacteriologist had a “dull” expression. He didn’t seem imaginative. All he seemed to care about was studying “germs for their own sake.” And Reed? Reed seemed to be stuck. All he seemed to care about, Lazear wrote, was hunting for *Bacillus icteroides*. But Lazear thought that looking for the strange **bacillus** was a waste of time. A dead end. To make progress, the team needed a new direction. And Jesse Lazear had ideas—good ideas—about what that direction ought to be. Unfortunately, the rest of the team didn’t seem to be taking those ideas very seriously. “I . . . want to do work which may lead to the discovery of the real organism,” Lazear told his wife.
- 12 But how could he? Reed gave the orders. Lazear had to obey. Nothing seemed likely to change.
- 13 And then, quite suddenly, something happened.

**cork:** city in Ireland  
**apparently:** as it  
was discovered  
**bacillus:** disease-  
causing bacteria



# The First Clue?

paragraphs 1–16

<sup>1</sup> *Mid–Late July 1900*

<sup>2</sup> On one hot summer day, the team got word that American soldiers were dying of an illness at the Pinar del Rio army **post**, located about one hundred miles from Camp Columbia in Cuba. But was the sickness yellow fever? No one seemed to know, and army officials ordered Dr. Agramonte to investigate.

<sup>3</sup> It was a good choice. Agramonte, a charming and sophisticated man, was also a very smart, well-qualified physician. He'd examined plenty of living yellow fever patients. He'd autopsied the bodies of those who'd died of the disease. He knew all the symptoms of the illness, and he headed to Pinar del Rio right away.

<sup>4</sup> One of the sick soldiers had died just hours before Agramonte reached the camp. The body was waiting, and Agramonte promptly did an autopsy.

<sup>5</sup> As he worked, the doctor looked for the usual signs of yellow fever: the yellow eyes, the yellowish liver, the yellow skin, all of which were caused by serious damage to the liver. Since liver injury can prevent the blood from clotting and because yellow fever can also make the body's veins and **arteries** "leak," Agramonte thoroughly checked the corpse for signs of bleeding. Was there liquid blood in parts of the **digestive tract**? Partially digested blood that looked like coffee grounds inside the stomach? One by one, the doctor noted down his findings, and by the time he put his scalpel down, Agramonte knew one thing for certain. The soldier on the table had died of yellow fever.

<sup>6</sup> After leaving the autopsy room, the doctor walked through the camp's hospital ward, moving carefully from bed to bed. To his horror, there were more patients showing **telltale** signs of yellow fever. There was no mistaking the yellow skin and eyes, the bleeding gums, the high temperatures, and the slow pulse rates. Somehow the doctors at Pinar del Rio had failed to recognize a yellow fever outbreak.

<sup>7</sup> Agramonte immediately telegraphed the news to headquarters. Reed jumped on a train the following morning. By July 21 he had joined his colleague at the camp, and the two men began to search for the cause of the disease.

<sup>8</sup> The **statistics** were clear. Thirty-five soldiers at the army post had come down with yellow fever. Eleven had been killed by the vicious illness. How had all those young Americans become infected?

<sup>9</sup> One man, a prisoner who'd been locked up in the guardhouse, had died of the disease. But he hadn't been near any yellow fever patients before or during his imprisonment. He hadn't ever touched clothes or sheets that had been used by other yellow fever victims. How could he possibly have gotten sick?

<sup>10</sup> And what about the eight other men who shared his cell? They had breathed the same air the sick man had breathed. They had touched his clothes,

**post:** place where soldiers carry out duties

**arteries:** blood vessels that carry blood with oxygen

**digestive tract:** system of the body that breaks down food

**telltale:** very clear; revealing

**statistics:** numerical information

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brushed against his blankets, and handled his dishes. But those eight men had stayed completely well.

- 11 So what had caused the dead prisoner's attack of yellow fever?
- 12 Reed and Agramonte examined the possibilities.
- 13 It wasn't *Bacillus icteroides*. That much was clear. After weeks of work, the team had found no evidence that Sanarelli's bacteria had anything to do with yellow fever. That eliminated one theory.
- 14 Contact with infected clothing and bedding didn't seem to have spread the disease to the dead prisoner's cellmates. That discredited the idea that yellow fever was somehow spread by touch.
- 15 So where had the disease come from? And how had it **managed** to strike only one soldier in a locked guardhouse?
- 16 That was a mystery, but wrapped inside that mystery was a clue.

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## Bugs

### paragraphs 1–21

- 1 Late July 1900
- 2 After weeks of work, the team had finally found a clue, and it was just the kind of clue Jesse Lazear probably had hoped for. It fit in with his private thoughts exactly, because for the last few months—while Reed, Carroll, and Agramonte had been focused on finding *Bacillus icteroides*—Dr. Jesse Lazear had been thinking about bugs.
- 3 Since May 1900 he'd been studying insects and **considering** the possible relationship between yellow fever and mosquitoes. Scientific articles had taught him that biting ticks could spread the deadly Texas fever germ through an entire herd of cattle. From reading, Lazear had also learned that mosquitoes infected with a tiny microbe could **transmit** the sickness that people called malaria. If insects could spread the tiny germs that caused those two diseases, he reasoned, there was a good chance they could carry the germ of yellow fever, too. Right from the start, Lazear had wanted the team to do mosquito research. But none of the other doctors had seemed particularly interested.
- 4 Until now.
- 5 Now all four doctors were willing to admit that something must have carried yellow fever through the bars of that Pinar del Rio guardhouse. Something had allowed the disease to strike a single prisoner. And that something could have been a mosquito.

**managed:**  
succeeded  
**considering:**  
thinking about  
**transmit:** pass on  
**formally:** fancily



- <sup>6</sup> It was time to investigate further, and the first step was to consult an expert.
- <sup>7</sup> At some time, possibly in late July, members of the Reed team drove up to a house on Aguacate Street in Havana. They had come to visit Dr. Carlos Finlay, the Cuban scientist who had tried for years to prove that mosquitoes carried yellow fever. For decades medical researchers around the world had laughed at “crazy” Dr. Finlay and his lunatic ideas. But the **formally** dressed, white-whiskered gentleman who greeted the Americans didn’t seem like a **mad** scientist. He was a **dignified**, highly educated, bespectacled sixty-seven-year-old who knew six languages—including English—and spoke all of them with a slight **stutter**. During the day, Dr. Finlay treated patients—whether or not they could afford to pay. At night, he **devoted** time to scientific research. For twenty years he’d ignored the rude remarks that others made about his work on yellow fever. For twenty years he’d continued to believe his theory. And now he was eager to share his thoughts with the others.
- <sup>8</sup> Yellow fever, he told the team, was probably spread by the bite of one particular kind of mosquito—a striped insect that was called the *Aedes aegypti* (pronounced *a-dees egypti*) mosquito by scientists.
- <sup>9</sup> That was the first point.
- <sup>10</sup> The second point, Dr. Finlay noted, was that mosquitoes—including *Aedes aegypti*—spread disease by sucking blood.
- <sup>11</sup> When a mosquito bites, it is actually using its long, needlelike nose (called a proboscis) to stab through the skin and draw blood from its victim. If the mosquito bites a sick person, it sucks in germ-infected blood. Later, when that infected mosquito bites again, it uses its **proboscis** to inject those germs into a healthy person’s body.
- <sup>12</sup> The process is simple, but only a female mosquito can carry it out—because only a female mosquito is capable of sucking blood.
- <sup>13</sup> As a rule, both males and females eat plant juice and fruit nectar. Females, however, also need blood meals to help them **manufacture** the thousands of eggs that they lay in ponds, pools, puddles, and containers of still water.
- <sup>14</sup> To illustrate this point, Dr. Finlay handed the Americans a batch of tiny black “cigar-shaped” specks. They were dried *Aedes aegypti* eggs that he had recently scooped out of a bowl of water in his own library. If those eggs were placed in water and kept relatively warm, Finlay told the team, they would grow into adult mosquitoes in about two weeks.
- <sup>15</sup> The visit had been enormously helpful. As they left Finlay’s Havana house, carrying the batch of mosquito eggs, the Americans must have been excited. There was a new theory to test. There were new experiments to plan. But, excited or not, the team still wasn’t ready to devote all its energy to bugs. Carroll, who still had serious doubts about the mosquito theory, would keep on working with his microscope in hopes of finding the actual yellow fever

**mad:** crazy or foolish

**dignified:** respectable

**stutter:** problem getting words out

**devoted:** gave

**proboscis:** sharp nose-like part of the mosquito

**manufacture:** produce

germ. Agramonte would continue to do autopsies of yellow fever **victims** because their bodies might hold some new, important clue. Reed wouldn't be able to do much initially because he had to spend a few weeks in the United States, finishing up a report on **typhoid** fever that he had started earlier. That left Lazear—whose **passionate** interest made him the perfect person to take charge of the new mosquito research program.

- <sup>16</sup> First, he would hatch the eggs that Dr. Finlay had provided and raise a crop of *Aedes aegypti* mosquitoes that had never been exposed to any illness. Then he would have the females bite a group of yellow fever patients so that the disease-free bugs could pick up the infection. Finally, to prove that the insects could actually carry the disease germ, Dr. Lazear would have to allow female *Aedes aegypti* mosquitoes that had bitten yellow fever patients to bite healthy animals or humans. Then he would have to see if the healthy creatures developed the disease.
- <sup>17</sup> And that was a problem. As far as the team knew, animals didn't get yellow fever. That meant the infected mosquitoes would have to bite a group of people.
- <sup>18</sup> But who? Who was going to be bitten?
- <sup>19</sup> The decision would have to be made soon. Reed had to return to the United States August 2, and it was important to get the new mosquito research started.
- <sup>20</sup> On the night of August 1—when, for some unknown reason, Agramonte was not present—Reed, Carroll, and Lazear met at Camp Columbia. They discussed the problem and decided that all three of them would volunteer for the experiments.
- <sup>21</sup> Of course, if Carlos Finlay and Jesse Lazear were right—if mosquitoes did carry the disease germs—a human volunteer bitten by an infected bug could get yellow fever and die of the disease. That was the risk. But all three doctors were prepared to **face** it. To fight the illness they were ready to take what Dr. Carroll later called “a soldier's chances.”
- 

**victims:** people who have been harmed

**typhoid:** type of disease

**passionate:** having strong feelings

**face:** deal with or handle

# “I Have No Such Thing”

paragraphs 1–18

<sup>1</sup> August 1–30, 1900

<sup>2</sup> It sounded so simple. All Lazear had to do was put the mosquito eggs in water, keep the water in a warm place, and wait a couple of weeks until the eggs hatched and grew into mature insects.

<sup>3</sup> But it wasn't that easy. Some eggs just floated on the water and didn't hatch. Some insects died before they were completely grown up. Others dropped dead almost as soon as they became adults. Still, Lazear didn't give up. He tended his mosquitoes as if they were babies. Each day, he checked the progress of his little group. He made sure the adult insects were fed sweetened water and bits of banana. Sometimes he even let the females bite him and his lab attendants to make sure that they had **nourishing** drinks of blood. At last, when the insects were fully grown, Dr. Lazear put each mature female in a test tube. He plugged the opening with a fluffy cotton stopper and carried his tubes of mosquitoes to the yellow fever wards at Las Animas Hospital in Havana.

<sup>4</sup> On the hot August days, Lazear walked through the wards, stopping occasionally at a yellow fever patient's bedside to let one of his female mosquitoes bite.

<sup>5</sup> It was a delicate process. First he turned the tube upside down so that the mosquito would fly upward into the glass end of the tube. Then Lazear swiftly removed the cotton plug and placed the open end of the tube flat on the patient's arm or belly. Patiently, he watched as the mosquito settled, inserted its proboscis through the skin, and sucked. After that, Lazear waited until the insect flew toward the top of the container. Then he picked up the tube, replaced the stopper, and noted down the date, the name of the patient who had been bitten, the number of days the patient had been ill, and the **severity** of the case. After several days passed, he let each one of these “infected” mosquitoes bite himself or another healthy volunteer.

<sup>6</sup> But nothing happened. No one got sick.

<sup>7</sup> Was the mosquito theory wrong? Was it another dead end?

<sup>8</sup> The results were discouraging. Scientific progress, however, doesn't usually happen overnight,



A female mosquito biting.

**nourishing:**  
healthy and  
beneficial

**severity:** level of  
harshness

and Jesse Lazear was trying to be patient. Day after day, he tended his bugs. He wrote up his notes, and—even when he wasn't thinking about bugs—he must have worried. Far away, back in the States, his wife was lying in a hospital, suffering through **complications** of her second pregnancy. The baby was due any day, and Jesse Lazear was waiting for news.

- <sup>9</sup> August 15 passed. Then August 20. Finally, on August 25 a telegram arrived. Dr. Lazear's wife had successfully given birth to their second child, a baby girl. Of course, Lazear wouldn't actually get to meet his new daughter until he went home for a few weeks of leave in October. But it was a wonderful thing to think about. And by the end of August, Jesse Lazear probably needed all the wonderful thoughts that he could get, because his insect experiments were going very badly.
- <sup>10</sup> For weeks Lazear had **pinned** his hopes on the mosquito theory. For weeks he'd waited for a breakthrough. But by August 25 Jesse Lazear had tried to use mosquitoes to produce yellow fever in healthy people on nine **distinct** occasions. All his experiments had failed. Many of his bugs had died. Almost every day there were new frustrations, and the events on August 27 were all too typical. On that day an insect, one that had bitten a yellow fever patient on the second day of his sickness twelve days earlier, refused to bite another volunteer at Las Animas Hospital. Worse still, the bug looked weak. Lazear figured it would probably spoil his experiment by dying before morning, but he brought it back to the laboratory at Camp Columbia anyway.
- <sup>11</sup> Carroll was in the lab when Lazear came in, and the two men began to chat about the insect work. The truth was the mosquitoes seemed absolutely "harmless." Keeping them alive had become a major nuisance—and, **in passing**, Lazear told Carroll how his sickly bug had behaved that very morning.
- <sup>12</sup> Carroll had never believed in the mosquito theory, but he could easily see his colleague needed help. Since there was a chance that blood would help perk up the little insect, Carroll offered to let the feeble bug bite him.
- <sup>13</sup> At two p.m. Lazear turned the test tube upside down on Carroll's arm. He held it in place, and waited for the feeble mosquito to fly down and suck.
- <sup>14</sup> But the bug refused to settle. It fluttered here and there, landing again and again on the smooth sides of the tube. Minutes passed. The two men waited. Then, finally, Carroll took the tube out of Lazear's hand. He held it against his own arm and sat there patiently until, at last, the insect landed, bit, and drank its fill.
- <sup>15</sup> That took care of that.
- <sup>16</sup> Lazear put his test tubes full of bugs away, and Carroll went on with his lab work.
- <sup>17</sup> Later that week, on August 30, James Carroll and Alva Pinto, another army doctor, went down to a nearby beach to take a swim. The water was warm,

**complications:**  
additional  
difficulties /  
medical problems

**pinned:** focused

**distinct:** separate  
and different

**in passing:**  
casually

but suddenly Carroll felt a chill. Moments later he had a headache—a fierce headache that seemed to be burning a hole straight through his brain. The pain was terrible, and by the time Carroll pulled himself out of the ocean, he didn’t look well. Dr. Pinto glanced in his direction, saw the bacteriologist, and made an instant **diagnosis**. “Yellow fever,” he said **succinctly**.

<sup>18</sup> “Don’t be a . . . fool,” Carroll responded. “I have no such thing.”

## Delirious

paragraphs 1–29

<sup>1</sup> August 31–September 4, 1900

<sup>2</sup> Of course, James Carroll had always known that Cuba was full of dangerous diseases. He’d known that coming to the island was a risk. And, yes, the bite from Lazear’s sickly little bug could possibly have given him the fever. But James Carroll had never believed in the mosquito theory. He’d never thought that insects carried the disease. Besides, he couldn’t afford to get the illness. He was a forty-six-year-old married man with five small children to support—and yellow fever often killed people over forty.

<sup>3</sup> Still, there was no getting around the fact that his temperature was rising. Something was making him sick. And he needed to know exactly what the illness was.

<sup>4</sup> It might be malaria. That could cause high fevers. It was a bad disease; but, still, it could be treated. It wasn’t usually as deadly as yellow fever. Besides, malaria was often found in Cuba. Carroll could have picked up the infection. And the scientist knew there was an easy way of finding out.

<sup>5</sup> Early in the morning on August 31, James Carroll dragged himself over to the lab. He jabbed himself with a needle and drew some blood. Then he smeared it on a glass slide and put the slide under the microscope. Carefully, he peered through the eyepiece, focused the lenses, and began to look.

<sup>6</sup> For several minutes he scanned the slide. There were plenty of roundish red cells. There were a few irregularly shaped white cells. But no definite sign of malaria—or of yellow fever. The trouble was, that didn’t prove a thing. Diagnosing illness with a microscope was often difficult. Sometimes yellow fever patients had fewer white cells in their blood. But often yellow fever blood looked pretty normal. And malaria? That was tricky, too. Sometimes it was hard to see the tiny organisms that caused the illness in a single drop of blood.

<sup>7</sup> Clearly, the microscope wasn’t going to provide a simple answer. And as James Carroll looked up from the eyepiece, he must have known that there was nothing else to do but wait.

**diagnosis:** act of recognizing a disease

**succinctly:** without wasted words



Modern photo of a drop of blood that has been placed on a glass slide for viewing under a microscope. The slide Dr. Carroll examined the morning he felt ill probably looked like this

- 8 If it was malaria, he'd know it soon. There would be violent, **periodic** fevers, vomiting, sores around his lips, and soaking sweats. And if it was yellow fever, well, he'd recognize the bloodshot eyes, the bleeding nose and gums, and the awful yellow skin. One way or another, he'd find out about his illness soon enough.
- 9 Nobody knows how long Carroll sat in front of his microscope that morning. But he was still there when Lazear and Agramonte walked through the laboratory door—and stared. Carroll looked awful. His face was flushed; his eyes were red. But he tried to joke. The illness was nothing, he said. He'd just somehow “caught cold.”
- 10 Both doctors begged him to go to bed. Carroll, however, was a stubborn man. As a youngster he'd struggled against poverty. He'd fought to go to medical school. He was used to **hardships**, and he wasn't the sort who'd let a little bout of sickness beat him down. Still, finally, he agreed to stretch out on a sofa.
- 11 It didn't help. By afternoon, James Carroll was lying in the hospital. At seven p.m. his temperature had reached 102. Soon there was no question about the diagnosis: the scientist had come down with yellow fever.
- 12 But how could he have gotten the disease? In a state **bordering** on panic, Lazear and Agramonte reviewed the possibilities.
- 13 Could it have happened when Carroll visited the autopsy room at Las Animas Hospital in Havana a few days earlier? Could that be where he'd picked up the infection?
- 14 Or had it happened in the Camp Columbia lab when Carroll let Lazear's **enfeebled** little insect bite his arm?
- 15 Both doctors knew that there was only one good way to find an answer. They would have to let the mosquito that bit Carroll bite another person. Then they would have to see if that victim developed a clear-cut case of the disease.

**periodic:** repeating at a certain time

**hardships:** situations of need

**bout:** short attack

**bordering:** almost like

**enfeebled:** weakened



- <sup>16</sup> The experiment was basically simple. But to do it, they had to have a healthy volunteer.
- <sup>17</sup> Agramonte wasn't a good candidate. There was a chance he'd had a very mild case of yellow fever while growing up in Cuba and now might be completely immune to the disease.
- <sup>18</sup> Lazear wasn't a great choice either. He'd already been bitten several times by mosquitoes that had previously bitten yellow fever patients. Since those bites hadn't made him sick, there was a chance he, too, might actually be immune to the disease.
- <sup>19</sup> A fresh volunteer would be best.
- <sup>20</sup> The scientists had barely come to that conclusion when Private William Dean walked by the lab and happened to look in.
- <sup>21</sup> Dean, a young unmarried man, had just arrived in Cuba. He'd never been near Carroll or any other yellow fever victims, but he had certainly heard a lot about the team's experiments.
- <sup>22</sup> "You still fooling with mosquitoes, Doctor?" Dean asked, as he stood in the doorway.
- <sup>23</sup> "Yes," said Lazear. "Will you take a bite?"
- <sup>24</sup> "Sure. I ain't scared of 'em," Dean replied.
- <sup>25</sup> Lazear looked at Agramonte. Agramonte nodded. The young private seemed to be the perfect volunteer.
- <sup>26</sup> Dr. Lazear picked up the tube containing the mosquito that had bitten Carroll. He **inverted** the tube, pulled out the cotton plug, and placed the opening flat against Dean's bare arm. The bug flew down, and all three men waited while it settled on the soldier's skin, inserted its proboscis, and sucked blood.
- <sup>27</sup> For the next few days, Lazear and Agramonte didn't tell anyone at Camp Columbia about Carroll's mosquito bite or Dean's. Instead, they tried to work. They worried about Carroll, and they wondered privately if young Dean was going to get sick.
- <sup>28</sup> Carroll himself lay in the hospital, fighting the disease. Roger Ames, the army doctor with the most experience in treating yellow fever, monitored the patient and saw the scientist's temperature rise to 104. He watched as Dr. Carroll's skin and bloodshot eyes turned lemon yellow. The sick man's pulse was slow. His condition was definitely critical, but there was very little Dr. Ames could do. Available drugs like quinine, castor oil, mercury **compounds**, and opium had no effect on yellow fever. To combat the disease, Ames ordered nurses to keep the patient quiet. He made sure that Dr. Carroll ate nothing while the fever soared but insisted that the scientist sip lemonade or water every hour.

**inverted:** turned  
upside down

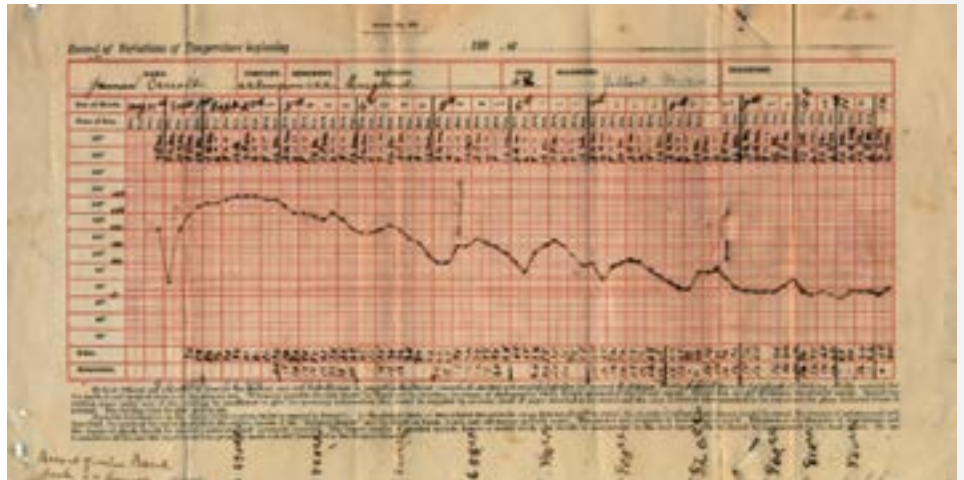
**compounds:**  
mixtures

- <sup>29</sup> At one point Carroll felt a sharp pain in his chest that seemed to stop his heart. Sometimes he babbled **feverishly**. But experiments were often on his mind. Once, when he ordered his nurse, Ms. Warner, to give the lab mosquitoes a meal of ripe banana, she **obligingly** obeyed. But when Dr. Carroll said that a mosquito bite had caused his illness, Nurse Warner was seriously shocked. A mosquito causing yellow fever? Why, everybody knew that Finlay's theory was a joke. The whole idea was crazy, and, before she went off duty, Ms. Warner had formed her own opinion of the sick man's silly statement. "Patient **delirious**," she noted briefly on the chart.

## Did the Mosquito Do It?

paragraphs 1–12

- <sup>1</sup> September 5–8, 1900
- <sup>2</sup> The situation was serious. Carroll was desperately ill. Lazear and Agramonte were waiting to see if Dean would come down with yellow fever. And Reed, far away in Washington, D.C., could only wait for bulletins and wonder. Was Carroll's attack simply a tragic accident? Or was it an important clue—a clue that would finally crack the yellow fever mystery? Upset and distracted, Reed poured out his feelings in a letter to his old friend Major Jefferson Kean. "I cannot begin to describe my mental **distress** and depression over this most unfortunate **turn of affairs**," Reed wrote. To Reed, Carroll's illness was terrible. It was worrying. But, from a scientific point of view, it was also fascinating. And the team's chief investigator desperately wanted to know how Carroll had gotten sick. "Can it be that [the mosquito] was the source of infection?" he asked Kean.



Dr. Carroll's fever chart. This record shows his temperature, pulse, and rate of breathing during his attack of yellow fever.

**feverishly:** wildly and excitedly

**obligingly:** helpfully

**delirious:** restless and confused

**distress:** stress and trouble

**turn of affairs:** change in events



3 As the days went by, Reed got reports from Camp Columbia. For the most part, the word was grim. Carroll was suffering from violent headaches. Light hurt his eyes. The attack was **severe**. The fever was high. For several days it seemed Carroll might die. Then suddenly on September 7, there was wonderful news. For the first time in a week the sick man's temperature was normal. The outlook for recovery was good, and Reed immediately **dashed off** a note:

4 *My Dear Carroll:*

5 *Hip Hip Hurrah . . .*

6 *Really I can never recall such a sense of relief in all my life, as the news of your recovery gives me. . . .*

7 *God bless you, my boy.*

8 Then on the back of the envelope Reed scribbled: "Did the Mosquito Do It?"

9 It was the big question. And—though Reed didn't know it when he wrote that note—Lazear and Agramonte already had a clue.

10 On September 5, about a week after he had been bitten by the mosquito, Private Dean didn't feel well.

11 At first the soldier was just a little weary and **lightheaded**. Then his eyes became bloodshot. His face flushed red, and his temperature soared. Soon Private Dean was in the hospital. It seemed that the mosquito that had bitten Carroll had caused another case of yellow fever.

12 In the hospital, Dean suffered through a mild case of the disease. Carroll slowly started to recover, and Jesse Lazear was excited. On September 8 he sat down and sent his wife the latest news. "I rather think I am on the track of the real germ," he wrote, "but nothing must be said as yet, not . . . a hint. I have not mentioned it to a soul."

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## "Doctor, Are You Sick?"

paragraphs 1–30

1 *September 9–26, 1900*

2 In September an epidemic of yellow fever broke out in Havana. The hospitals admitted two hundred and sixty-nine cases, and one out of every five patients died. It was more important than ever to find a solution to the yellow fever problem, but **manpower** was in short supply. Carroll was still so weak from his attack that he couldn't stand or change position without help. Agramonte was getting ready to return to the United States for a brief vacation. Reed was still in Washington, putting the **finishing touches** on his report.

**severe:** harsh

**dashed off:** quickly wrote

**lightheaded:** dizzy

**manpower:** number of workers

**finishing touches:** final changes

- 3 In Cuba, however, Jesse Lazear was working hard. Day after day he tended the insects, carried out experiments, and jotted down his records in a big lab notebook and another smaller book he carried in the pocket of his shirt. At last the work seemed to be paying off. The results looked promising. Both Carroll and Dean had developed yellow fever after mosquito bites. The trouble was, Lazear couldn't be absolutely certain that Carroll's case hadn't been an accident. He couldn't be one hundred percent sure that Carroll hadn't gotten yellow fever from another source. And there were other questions, too. Why, for instance, had Carroll and Dean become sick when other people bitten by "infected" mosquitoes had managed to stay healthy? Was there something different or special about the insects that had bitten those two men? To make a breakthrough, Lazear would have to be able to answer all those questions. He'd need to know exactly how and when a mosquito could transmit the yellow fever germ—and he'd need to prove it beyond the slightest doubt. There were lots of experiments he had to do. And Jesse Lazear was doing them when, on September 13, he was bitten by a mosquito.
- 4 No one ever knew exactly how it happened. Later, Lazear said that the incident had taken place at Las Animas Hospital in Havana. He was holding a test tube containing a mosquito against a patient's belly when a wild mosquito flew down and landed on his hand. The whole thing was an accident, he said.
- 5 And maybe that was true.
- 6 But if that was how it happened, then why did Jesse Lazear write a mysterious note in the team's lab notebook on September 13, 1900? Why did he write the following?



This picture, taken in Cuba before the Reed team began work, shows Dr. Lazear holding his son, Houston, as the child's nanny stands by. Another child, a daughter, was born in the United States while Lazear was doing yellow fever research.

- 7 Guinea pig No. 1—red
- 8 Sep. 13 This guinea pig bitten today by a mosquito which developed from egg  
laid by a mosquito which bit Tanner—8/6.
- 9 This mosquito bit Suarez 8/30
- 10 Hernandez 9/2
- 11 De Long 9/7
- 12 Fernandez 9/10
- 13 And who—or what—was “Guinea pig No. 1”?
- 14 It wasn’t a four-footed animal; that much was plain. Lazear didn’t use guinea  
pigs in his experiments because they were immune from yellow fever. No  
healthy human volunteer ever claimed to have been bitten in a mosquito  
experiment that day. In fact, the only healthy person who seemed to have  
been bitten on September 13 was Dr. J. Lazear himself.
- 15 So was “Guinea pig No. 1” actually Lazear? Did Dr. Lazear deliberately let an  
infected mosquito bite him? And, if his bite was really part of an experiment,  
why did he tell a tale about a wild mosquito? Why didn’t he identify himself as  
“Guinea pig No. 1”?
- 16 Did he lie because his family might disapprove of such a dangerous  
experiment?
- 17 Did he think his **life insurance** company would cancel out his **policy** if he  
admitted that he’d dared to take a deadly risk?
- 18 Nobody will probably ever know the answers. But the results of that mosquito  
“accident” were immediate and clear. Five days later, on the morning of  
September 18, Jesse Lazear just didn’t feel well. At six p.m. the doctor had  
a chill. Later that same evening, Private John Kissinger found the scientist  
sitting at his desk and busily writing up his research notes. To Kissinger,  
Lazear seemed “nervous.” The doctor’s face looked “flushed,” and his eyes  
were red.
- 19 “Doctor, are you sick?” the soldier asked.
- 20 “Yes, Kissinger, I do feel sick.”
- 21 “Have you reported to Dr. [Ames]?”
- 22 “No, Kissinger,” Lazear replied, and kept on working.
- 23 By midnight, Lazear must have wanted to lie down, but it was morning  
before he had all the facts on paper. By then he was much too sick to struggle.  
At eleven a.m. Dr. Jesse Lazear was carried to the hospital on a stretcher.  
His temperature was high, and he told the attending nurse that he had  
yellow fever.
- 24 Two days later, his temperature had risen to 104. His attack was clearly  
worse than Carroll’s, but Lazear was young. He was strong. There was still  
a good chance that he might recover.

**life insurance:**  
protection against  
loss; system that  
gives money to  
family after death

**policy:** agreed plan

- <sup>25</sup> Reed, far away in Washington, tried to be optimistic. “I can but believe Lazear will pull through,” he wrote to Carroll. “I hope & pray that he does.” But Carroll, who stopped by to visit, was alarmed. As he sat beside the hospital bed, the older scientist saw a flash of panic in Lazear’s eyes. Then, suddenly the sick man’s belly heaved and a stream of thick black vomit shot out of his mouth. It was the worst possible sign, and both Carroll and Lazear knew that patients who vomited black, partially digested blood usually died of yellow fever.
- <sup>26</sup> For the next day or so, Lazear’s temperature stayed high. Frantic with delirium, he leaped out of bed and raced around his hospital room until two female nurses and a **hospital corpsman** forced him back onto his cot.
- <sup>27</sup> On September 24, a nurse noted that Dr. Lazear’s temperature was getting lower. By morning on September 25, it hovered just below 100. Then, late that afternoon, the doctor’s pulse began to quicken. His breath began to come in desperate pants. By 8:45 that evening, it was over. At age thirty-four, the scientist had died of yellow fever.
- <sup>28</sup> On the following day, friends, officers from headquarters, and all the members of the Camp Columbia medical staff turned out to watch as Dr. Lazear was buried in a flag-draped coffin with **full military honors**.
- <sup>29</sup> On that same day, far away in Massachusetts, Mabel Lazear, the doctor’s wife and the mother of their two small children, opened a telegram and stared at seven terrible words scrawled on the printed form: “Dr. Lazear died at 8 this evening.”
- <sup>30</sup> The news was cruel. It was also particularly shocking because no one had ever told Mrs. Lazear that her husband had been taken sick.

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## Sorting It Out

### paragraphs 1–29

- <sup>1</sup> *September 27–November 2, 1900*
- <sup>2</sup> Lazear was dead. Carroll was an **invalid**. Agramonte was on vacation in the United States. And in Washington, D.C., Reed—who was “terribly depressed” by the dreadful loss of Lazear—was very frustrated.
- <sup>3</sup> Three men—Lazear, Carroll, and Dean—had been bitten by mosquitoes. Each had developed yellow fever; but, as Reed pointed out in a letter he wrote to Carroll, the first two cases didn’t “*prove*” that infected bugs had actually caused the illness. Lazear *might* have picked up yellow fever from the patients he was seeing at Las Animas Hospital. Carroll *might* have been infected by the **remains** of yellow fever victims when he visited the autopsy lab. That left the third case: Dean.

**hospital  
corpsman:**  
medical military  
professional

**full military  
honors:** special  
ceremony for  
military

**invalid:** sick, weak  
person

**remains:** dead  
bodies

- 4 As far as anyone knew, the young soldier couldn't have gotten yellow fever from anything except the mosquito. He definitely hadn't been in contact with yellow fever victims before his bite. But what about the few days afterward? Had Dean come close to any yellow fever patients or the remains of yellow fever victims between the time that he'd been bitten and the time he'd gotten sick? Had he been in Havana, where the disease was raging? Was there anything except the mosquito that could possibly have given him the illness?
- 5 Reed had to find out; and, a few days after Lazear's death, he headed back to Cuba. This time the sea voyage was pleasant, and Reed was soon greeting James Carroll and the rest of the medical staff at Camp Columbia.
- 6 Although it had been about a month since Carroll's illness, the bacteriologist was still feeble and unwell. There was no chance he'd be able to do much work, and Reed promptly ordered his colleague to go back home to the United States for a rest. Agramonte was still away, so Reed plunged into the work on his own—and one of the first items on his **agenda** was investigating the interesting case of Private Dean.
- 7 On one October day he met Dean on the patio outside the Officers' Quarters. There, according to one of the young doctors who was **stationed** at Camp Columbia, the two men held the following discussion.
- 8 "My man," Reed said, "I am studying your case of yellow fever and I want to ask you a few questions." Then, to test Dean's honesty, Reed held up a coin. "I will give you this ten dollar gold piece if you will say you were off this [base] at any time . . . until you returned sick with yellow fever," he told the soldier.
- 9 Dean probably could have used the money, but he apparently wasn't interested in telling lies.
- 10 "I'm sorry, sir," the private replied truthfully, "but I did not leave the post at any time during that period."
- 11 That was exactly what Reed had been hoping to hear. If Dean truly hadn't left Camp Columbia before or after his mosquito bite, there was no way he could have been **exposed** to the yellow fever epidemic in Havana. There was no way he could have had contact with the patients in the military yellow fever ward just outside the army base. As far as Reed could tell, young Dean had never been close to any yellow fever victims. It seemed that the mosquito really had given Private Dean a case of the disease.
- 12 But Reed was still cautious. He told Dean to sit down and tell him the whole story of his experiences. When the young man finished, Reed was impressed. Dean seemed honest. The case looked **watertight**; still, Reed had lots of questions. Why, for instance, if a mosquito bite had caused Dean's attack, had Dr. Carlos Finlay failed to produce a batch of yellow fever cases when he'd let infected bugs bite humans? Why had some of Lazear's volunteers stayed healthy when they were bitten by infected bugs? *Why did some bites from infected insects cause the disease when others didn't?*

**agenda:** organized plan

**stationed:** sent for duty

**exposed:** introduced to

**watertight:** without mistakes

**plowed:** rushed through

**painstaking:** extremely detailed

**governor-general:** official who governs

- <sup>13</sup> Sitting at the long wooden table in his quarters, Reed **plowed** through material and tried to find an explanation. He went through Lazear's **painstaking** notes on the experiments. He read and reviewed scientific articles. Carefully, he counted the days between the time the mosquitoes were infected and the time they seemed to be able to pass the disease to others. Carroll, he noticed, had been bitten by a mosquito that had been infected twelve days before it bit him, while the mosquito that bit Dean had been infected sixteen days before his bite. That was interesting. And, Reed noted, it fit in with other facts. Recently, a scientific article had stated that there was always a space of about fourteen days between the appearance of the first group of cases and the appearance of the second group in yellow fever outbreaks.
- <sup>14</sup> Twelve days. Fourteen days. Sixteen days. The numbers whirled around Reed's brain, and gradually the data began to make some sense.
- <sup>15</sup> There seemed to be a reason that some mosquito bites produced yellow fever and some did not. And perhaps that reason was timing.
- <sup>16</sup> To Reed it seemed that after a mosquito sucked in yellow fever germs, those germs had to stay in the mosquito's body for *at least* twelve days before the insect could pass the illness to another victim.
- <sup>17</sup> If Reed was right, then Dr. Finlay's earlier experiments had failed probably because the Cuban scientist hadn't let the yellow fever germs remain inside his insects long enough. And Lazear's early experiments? Well, they too hadn't succeeded probably for that reason.
- <sup>18</sup> By the middle of October, Reed was pretty sure that he was onto something. But in science "pretty sure" isn't good enough. If Reed was going to prove absolutely that mosquitoes carried yellow fever, if he was going to demonstrate exactly how the insects did it, he was going to have to confirm his hunches with experiments. And experiments cost money.
- <sup>19</sup> On the morning of October 12, Reed climbed into a carriage and headed to Havana for an appointment with Major General Leonard Wood, the **governor-general** of Cuba. As the two men stood by a window that looked out toward the bustling Cuban harbor, Reed came directly to the point. "General Wood," he said, "will you give me \$10,000 to continue and complete these [yellow fever] experiments?"
- <sup>20</sup> General Wood had started his military career as an army doctor. He understood that the team's work was important, and he answered very quickly. "I will give you \$10,000, and if that proves insufficient, I will give you \$10,000 more."
- <sup>21</sup> The sum of ten thousand dollars in 1900 was roughly equivalent to two hundred and fifty thousand dollars in today's money. It was a huge commitment, and to celebrate, Reed went out to lunch with his old friend



Jefferson Kean, the chief U.S. medical officer for western Cuba. Together the two men drank a toast to success with a bottle of red wine. Then it was back to work—and Reed was busy.

22 He couldn't yet prove that yellow fever was *always* caused by a mosquito bite, but he could tell the scientific world that in one case—Dean's—a mosquito bite had caused a single, clear-cut attack of yellow fever. And that was big news. It was news that could make scientific history. Most important, it was news that might save lives—and Reed wanted to present it at once.

23 In the space of eight days Reed wrote a five-thousand-word report stating that his team had found evidence that clearly indicated that the bite of a mosquito could cause a case of yellow fever. Then he packed his bags and boarded a ship headed for the United States. When the ship docked, he traveled west, and at three thirty on the afternoon of October 23, 1900, Major Walter Reed stepped up to the podium in an Indianapolis lecture room and began to read his report to the members of the American Public Health Association.

24 First, Reed thanked Dr. Finlay for suggesting the mosquito theory and for providing the mosquito eggs that the team had used for research. He carefully described the team's experiments. Then, finally, he read the most important words:

25 *From, our study thus far of yellow fever, we draw the following conclusions:*

1. *Bacillus icteroides* **stands in no causative relation to** yellow fever. . . .
2. *The mosquito serves as the intermediate host [the carrier] for the . . . [germ] of yellow fever.*

26 It was an exciting, **groundbreaking** statement, but not everyone believed it. The *Philadelphia Medical Journal* called Reed's report "pure **speculation**." The *Washington Post* just scoffed. In an article on November 2, 1900, the *Post* said:

27 *Of all the silly and nonsensical **rigmarole** about yellow fever . . . the silliest beyond compare is to be found in the arguments . . . engendered by the mosquito hypothesis [theory].*

28 The trouble was that Reed didn't have much evidence. At the moment he could show that one single case of yellow fever had been caused by a mosquito. But a single case didn't *prove* anything. It could be an accident, a **fluke**. And good scientists believed only facts that had been tested and proved time after time in carefully set-up experiments.

29 If Walter Reed was going to convince the scientific world that mosquitoes were the cause of yellow fever, he clearly had a lot more research work to do.

**stands in no causative relation to:** is not the cause of

**groundbreaking:** new and important

**speculation:** unproven ideas

**rigmarole:** long complicated statements

**fluke:** thing that happens because of luck

## Problems

### paragraphs 1–15

- 1 *November 1900*
- 2 As soon as he returned to Cuba at the beginning of November, Walter Reed started to use the ten thousand dollars that General Wood had provided to make arrangements for a brand-new series of experiments.
- 3 The first job was setting up a new camp where the team could carry out the tests, and Reed knew exactly how he wanted it to be constructed. The new camp had to be built on a site that had absolutely no mosquitoes. It had to be located in a place that had never been inhabited by yellow fever patients. And it had to be set up in a lonesome, isolated area—an area that strangers (who might be carrying the yellow fever germ) weren't likely to visit.
- 4 Of course, that list of requirements sounded picky. But each of those conditions was important. Each was **designed** to guarantee that there would be no accidental cases of yellow fever in the new station. To prove that mosquitoes carried yellow fever, Reed knew that he would have to show that each case of the disease in the new camp was deliberately caused by the team's own insect experiments and not by some chance infection or **contamination**.
- 5 Dr. Agramonte had just returned from his vacation; and, at Reed's request, the Spanish-speaking scientist took charge of searching for a campsite. After scouting the countryside around Camp Columbia, he found a bare, isolated two-acre patch of land that the team could rent for twenty dollars a month. It was a dry, wind-blown place where mosquitoes didn't live or breed. It had never been inhabited by yellow fever victims, and it seemed perfect. Reed drew up plans. Workers started to put up tents and buildings on the spot, and someone named the brand-new station Camp Lazear in honor of the scientists' dead colleague.
- 6 But that was only the beginning.
- 7 While workers hammered nails at the new campsite, Reed focused his mind on other problems. And one of the biggest was mosquitoes.
- 8 Keeping the insects alive had always been difficult. Now it was harder than ever. The autumn months brought cooler weather. The lower temperatures killed mosquitoes. And while Reed was struggling to keep a few bugs alive for his experiments, a huge tropical storm hit the island of Cuba. **Gale-force** winds knocked over trees. Rain poured down. Temperatures plummeted into the low sixties. And, when Reed walked into the officers' mess hall for lunch on November 15, he told the other Camp Columbia doctors that there was bad news. Most of the laboratory mosquitoes that Lazear had raised from Finlay's eggs had died of the cold. Worst of all, there were very few dried mosquito eggs left. Work on the new experiments would have to stop until the team could breed more bugs. That could take weeks, and Reed sounded so upset

**designed:**  
deliberately  
planned

**contamination:**  
contact with the  
disease

**gale-force:** very  
strong



that the other Camp Columbia doctors tried to cheer him up. The weather was sure to get warmer, they told him. There were lots of mosquitoes left in Cuba. And to prove that point a bunch of young doctors left the mess hall and went bug hunting in a nearby dump. There, among the piles of rusty old containers, they saw a flock of striped *Aedes aegypti* mosquitoes buzzing around a can. The can was full of water, and floating in that water were enough mosquito eggs and mosquito larvae (immature mosquitoes) to keep the team supplied for months.

- <sup>9</sup> That was one piece of good news. Then, around the middle of November, there was another. James Carroll returned from sick leave. He still wasn't one hundred percent healthy, but he immediately pitched in by helping to raise, infect, and keep records of the mosquitoes that were going to be used in the new series of experiments.
- <sup>10</sup> Things were going well, but the team still had to face one enormously important problem: Where were the scientists going to find volunteers who were willing to take part in the new experimental tests?
- <sup>11</sup> To present a watertight case, the team had to show that the mosquito hypothesis was true and that all the other old ideas about the cause of yellow fever were completely false. With the help of his colleagues, Reed had already proved that *Bacillus icteroides* didn't cause the illness. Now the team needed to deal with the last two remaining theories. First, they had to prove once and for all that infected mosquitoes did cause yellow fever. And, second, they needed to show that being in contact with infected clothing and bedding was definitely not the cause of the disease. To do that, they needed two sets of human volunteers for a series of experiments. The first set would have to



A highly magnified modern photo of a fish about to eat a tiny immature mosquito. Mosquitoes live in water before they become adults. In very warm weather, it may take a mosquito egg a week to develop into a mature insect; in cold weather, it may take almost a month. By eating large quantities of immature mosquitoes (larvae), fish (like the one in his photo) help to keep down the number of these insect pests.

spend several weeks wearing and using clothing and sheets that had been stained by the sweat, vomit, urine, and **feces** of yellow fever patients. The second set would have to do what Carroll, Dean, and Lazear had done. They would have to be bitten by infected mosquitoes.

- <sup>12</sup> But how many normal, healthy, sensible people would volunteer for such disgusting and dangerous experiments?
- <sup>13</sup> Of course, Reed could order soldiers to take part in the tests without telling them about the dangers or asking their permission. In 1900 scientists sometimes did something that is now illegal in the United States and many other countries. They sometimes dosed **unsuspecting** patients with disease germs or untested drugs without bothering to explain the risks or to ask these victims for **consent**. But Reed refused to do that. Like William Osier, the famous nineteenth-century doctor and professor of medicine, Walter Reed thought that “deliberately injecting a poison . . . into a human being, unless you obtain that man’s sanction [permission], is . . . criminal.”
- <sup>14</sup> If Reed was going to do yellow fever experiments, he wanted to be honest and up-front about it. He wanted volunteers to know they were risking sickness and death by participating. What’s more, he wanted to do something new—something that scientists hadn’t done before. Because he felt his yellow fever insect experiments were extremely dangerous, Reed wanted each and every volunteer to sign a consent form indicating in writing that he or she was willing to **undertake** the experiment and truly understood the **hazards**.
- <sup>15</sup> The question was, would Reed find anyone brave enough to sign up?

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## “We Are Doing It for Medical Science”

paragraphs 1–15

- <sup>1</sup> *November 1900*
- <sup>2</sup> As the days went by, Reed and his team began looking for volunteers. Candidates had to be young and healthy—because young, healthy people had the best chance of surviving yellow fever. They had to be single, so that their sickness or death would not injure an entire family. And, of course, they had to be willing to risk getting the disease.
- <sup>3</sup> The truth, however, was that yellow fever was so common in Cuba that anyone who set foot on the island and hadn’t previously had the illness was likely to come down with it anyway. And that piece of information gave the Reed team an idea.
- <sup>4</sup> Immigrants from Spain were landing in Cuba all the time. Many were young, healthy, and single. All of them knew that they might get yellow fever in Cuba.

**feces:** solid bodily waste

**unsuspecting:** unaware

**consent:** permission

**undertake:** carry out

**hazards:** dangers

And, maybe, the team thought, since these newcomers were already running the risk of getting the disease naturally, some of them would be willing to volunteer for the experiments.

5 With Reed's permission, Agramonte interviewed a group of recent immigrants and carefully explained the requirements and terms. Each volunteer who signed Reed's consent form and agreed to be bitten by mosquitoes would be paid \$100 (the equivalent of about \$2,400 in today's money). In addition, those who came down with yellow fever would receive an extra \$100 and the very best medical care the U.S. Army team could possibly provide. By the time Agramonte had finished, four Spanish men—Antonio Benigno, Nicanor Fernandez, Becente Presedo, and Jose Martinez—had agreed to volunteer and had signed a consent form written in English and Spanish.

6 It was a start. And Agramonte wasn't the only recruiter.

7 One afternoon, medical officer Dr. Roger Ames saw a twenty-four-year-old **civilian clerk** named John Moran walking across the Camp Columbia **parade ground**. When Moran stopped to chat, Ames told the young man that Reed was offering money to anyone who'd volunteer for the new series of experiments. Was Moran interested in signing up?

8 Like everyone else at Camp Columbia, Moran knew that Dr. Jesse Lazear had died of yellow fever. He knew that the disease had just about killed Carroll. But young John Moran badly wanted to become a doctor. He needed a lot of money to pay for medical school. When Ames spoke, Moran later wrote in his **memoirs**, the first idea that popped into his head was, "Just think, Johnny, what that . . . [amount of money] will mean to you." The offer was tempting. But Moran didn't want to make a snap decision. He told Ames to let him "sleep over it." Then he went back to his quarters to discuss the proposal with his roommate, Private John Kissinger.

9 At midnight the men were still talking. The danger was clear. The money was attractive. But that wasn't all. As the night wore on, Moran got more and more excited about being part of the experiments. Signing up was more than just a fast way to make some cash. It was a chance to help save lives. A chance to help make medical history. In fact, getting involved in the fight to conquer yellow fever seemed so important that Moran decided to refuse the money. He was going to take part in the experiments solely for the sake of helping science.

10 "[Don't be] a fool," Kissinger told him. But Moran had made up his mind. He was positive. Finally, even Kissinger was convinced. "Whatever you do, John, I am with you," Kissinger said. "We'll volunteer together."

11 The next morning, the two men went to Reed's room in the Officers' Quarters. The door was open. "Good morning," Reed said. "What can I do for you?" For a minute Moran struggled for words. Then the young man poured out the story. He and Kissinger were volunteering, Moran told Reed, "without the bonus or money award which [the army was] offering. . . . We are doing it," Moran said, "for medical science."

**civilian clerk:**  
worker who is not  
in the military

**parade ground:**  
area where soldiers  
perform drills and  
marches

**memoirs:** book of a  
person's memories



The undersigned, Antonio Benino *Antonio Benino*  
being more than twenty-five years of age, native of Ceroeda,  
in the province of Corima, the son of Manuel Benino  
and Josefa Castro here states by these presents, being in  
the enjoyment and exercise of his own very free will, that he consents  
to submit himself to experiments for the purpose of determining the  
methods of transmission of yellow fever, made upon his person by the  
Commission appointed for this purpose by the Secretary of War of the  
United States, and that he gives his consent to undergo the said ex-  
periments for the reasons and under the conditions below stated.

The undersigned understands perfectly well that in case of the  
development of yellow fever in him, that he endangers his life to a  
certain extent but it being entirely impossible for him to avoid the  
infection during his stay in this island, he prefers to take the  
chance of contracting it intentionally in the belief that he will  
receive from the said Commission the greatest care and the most skill-  
ful medical service.

It is understood that at the completion of these experiments, with-  
in two months from this date, the undersigned will receive the sum of  
\$100 in American gold and that in case of his contracting yellow fever  
at any time during his residence in this camp, he will receive in addi-  
tion to that sum a further sum of \$100 in American gold, upon his re-  
covery and that in case of his death because of this disease, the  
Commission will transmit the said sum (two hundred American dollars)  
to the person whom the undersigned shall designate at his convenience.

The undersigned binds himself not to leave the bounds of this camp  
during the period of the experiments and will forfeit all right to the  
benefits named in this contract if he breaks this agreement.

And to bind himself he signs this paper in duplicate, in the Experi-  
mental Camp, near Quemados, Cuba, on the 26th day of November  
nineteen hundred.

On the part of the Commission:  
Walter Reed  
Maj. & Surg., U.S.A.

The contracting party,  
Antonio Benigno

An English translation of the consent form stating the volunteer Antonio Benigno (misspelled as "Benino") was willing to participate in the mosquito experiments.

- <sup>12</sup> Now, some people say that Reed turned to the two volunteers and said, “I take my hat off to you, gentlemen.” And some people claim that Reed said simply, “I salute you.” But Moran wrote in his memoir that Reed just “gladly accepted” with “a gleam in his eyes . . . of pleasure and satisfaction.”
- <sup>13</sup> Later, however, the major voiced his actual feelings. Those who volunteered for the experiments, Reed said, showed a type of “courage [that] has never been **surpassed** in the **annals** of the Army of the United States.”
- <sup>14</sup> That was high praise, and soon many men deserved it. In the weeks that followed, fifteen other Americans signed up for the experiments. Although many agreed to accept money for their participation, at least one other man refused the reward and agreed to take part solely **for the sake of science**.

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## Testing Times

### paragraphs 1–8

- <sup>1</sup> *November–December 1900*
- <sup>2</sup> On November 20, 1900, Camp Lazear officially opened. Volunteers and other personnel were housed in seven newly **erected** tents. Two specially constructed small wooden buildings were ready to be used for the experiments, and a barbed-wire fence kept out unwanted visitors.
- <sup>3</sup> To make sure all the men in his experimental group were healthy, Reed ordered medics to take the volunteers’ pulse and temperature three times a day. There were going to be no slip-ups, no accidental illnesses, nothing that would allow critics to find fault with the experiments—not if Reed could help it. Everything seemed to be in place, but Reed still had a nagging worry. He knew he’d made sure that his volunteers were young and healthy enough to have a good chance of surviving yellow fever. He knew the men who were volunteering understood the risks. He’d made sure that any volunteer who got the disease would have the best possible medical care. But what if the worst happened? What if one of the volunteers died during the experiments? If that happened, Reed wrote his boss, Army Surgeon General George Sternberg, “I shall regret that I ever undertook this work. The responsibility for the life of a human being weighs upon me very heavily.”
- <sup>4</sup> Still, thousands of people in Cuba, Africa, and the Americas were dying of yellow fever every year. If the team failed to find the cause, the vicious disease would undoubtedly kill thousands more. Somehow, Reed had to take the necessary steps to find an answer; and on Friday evening, November 30, experiments in Building 1, the “infected clothing” building, got under way.

**surpassed:** beaten by another

**annals:** historical records

**for the sake of:** for the purpose of

**erected:** built

- 5 From the outside the little wooden structure looked like a shack. Its tiny windows were screened and tightly closed to keep out fresh air and mosquitoes. Inside there were three beds, a group of closed boxes, and a stove that heated the place to a germ-friendly temperature of between 90 and 100 degrees. At the entrance stood three American volunteers: Dr. Robert Cooke, Private Warren Jernegan, and Private Levi Folk. As members of the scientific team watched through a window, the three American servicemen entered the building, opened the boxes, and took out nightshirts, underwear, blankets, sheets, and towels that were soiled with the blood, vomit, urine, and **feces** of yellow fever patients. The stench was terrible. One man threw up, and all three volunteers ran outside gagging. Then they went back into the stinking house. They dressed themselves in the filthy clothing, put the dirty sheets and blankets on their beds, waved some of the towels and bedding around to spread the “germs,” and slept in the hot, **fetid** little building for the next twenty nights.
- 6 Three weeks later, on December 19, Cooke, Folk, and Jernegan walked out of the “infected clothing building.” None of them was sick.
- 7 That certainly seemed to show that yellow fever wasn’t caused by contact with infected items. But the team wanted to be absolutely sure. To prove that the test results could not have been an accident, they repeated the experiment—twice. Two other groups of men did exactly what Cooke, Folk, and Jernagen had done, and each time the volunteers stayed healthy. That confirmed the findings, and the team knew they’d made real progress. Since starting work, they’d shown that *Bacillus icteroides* and infected clothing didn’t have anything to do with the spread of the disease.
- 8 But could they prove that infected mosquitoes were the cause of yellow fever?

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## More Bugs

### paragraphs 1–28

- 1 *November–December 1900*
- 2 Everything **was riding on** the mosquito work. Almost as soon as Camp Lazear opened, the team began to experiment with bugs.
- 3 In November, Private John Kissinger was bitten twice by infected insects. His roommate, John Moran, was also bitten twice. So were several other men. But—although Reed used only mosquitoes that had bitten yellow fever patients at least twelve days before—none of the volunteers ran a temperature. None developed a chill. And none of them showed the slightest sign of yellow fever.

**feces:** solid bodily waste

**fetid:** bad smelling

**was riding on:** depended on

- 4 Something was wrong.
- 5 Reed, Carroll, and Agramonte anxiously examined the data. Surely, there had to be some **logical** explanation. But what?
- 6 Maybe, Reed thought, the colder fall weather had somehow affected the mosquitoes. Maybe it took longer for the germ to **mature** inside the insect when temperatures were cool.
- 7 Patiently, the scientists adjusted the timing. Then they tried again.
- 8 On December 5 at eleven thirty a.m., one of the doctors pressed a glass tube containing an infected mosquito against John Kissinger's arm. After that insect had bitten the young soldier, the doctor repeated the procedure with other infected mosquitoes. By the end of the morning, Kissinger had five itchy bites.
- 9 Three days later, Private Kissinger woke a few minutes before midnight feeling, he later said, a little cool. He was just getting up to close the tent flap, when suddenly his body felt like ice. For several long minutes, he huddled, freezing, in his cot. Then, as a little warmth crept back into his limbs, he reached out, lit a candle, and took his temperature. The **mercury** registered 101. Kissinger quickly sent a guard to fetch the doctor who was sleeping about twenty-five feet away. Ames arrived in minutes. By then, John Kissinger was in agony. "I felt," he later said, "as though six Ford cars had run over my body. Every bone . . . ached. My spine felt twisted and my head swollen and my eyes felt as if they would pop out of my head, even the ends of my fingers . . . [were] aching."
- 10 John Kissinger had yellow fever.
- 11 At Reed's request, a panel of **distinguished** Cuban yellow fever **specialists**—including Dr. Finlay—examined the young private and confirmed the diagnosis.
- 12 For the first time one of the team's mosquito experiments had worked.
- 13 In his quarters Reed grabbed a pen and started a letter to his wife. "It is with a great deal of pleasure that I hasten to tell you that we have succeeded in producing an unmistakable case of yellow fever," he started formally. Then all his excitement burst out. "Rejoice with me, sweetheart," he wrote. ". . . I could shout for very joy that heaven has permitted me to establish this. . . . Indeed, my precious heart, you cannot tell what a relief from suspense and anxious waiting this day has been."
- 14 It was a big breakthrough. But it was only one experiment. Reed and the rest of the team knew that the results of any one experiment could be an accident. More confirming evidence was needed, and the researchers waited **tensely** for the next results.
- 15 Then, a few days later, Antonio Benigno and two of the other Spanish

**logical:** making sense

**mature:** develop

**mercury:** chemical that measures temperature

**distinguished:** great and well-known

**specialists:** experts

**tensely:** with nervousness



immigrants who had been bitten by infected mosquitoes became sick. When the panel of experts from Havana examined the patients, the diagnosis was clear. All three Spanish immigrants had come down with yellow fever.

- <sup>16</sup> The evidence now seemed to show that mosquitoes could carry the illness, but Reed and the team were still not completely satisfied. As Kissinger and the Spaniards slowly recovered, the scientists set out to establish one final and important fact.
- <sup>17</sup> For years people had claimed that the yellow fever germ could somehow **contaminate** whole buildings like a kind of poison gas. The idea was so common that once, in 1898, every building in the Cuban town of Siboney had been burned down to stop a yellow fever epidemic. Now Reed, Carroll, and Agramonte wanted to show that a building could be infected with yellow fever *only* if it contained infected mosquitoes. And that meant doing a new experiment in Building 2, the other wooden building at Camp Lazear.
- <sup>18</sup> Inside the little wooden shack was absolutely spic and span. A large wire mesh screen split the room into two parts. Two perfectly clean beds stood on one side of the screen. On the other side was another clean bed and fifteen live, free infected mosquitoes.
- <sup>19</sup> At noon on December 21, two male volunteers entered and lay on the beds on the mosquito-free side. John Moran lay undressed on the clean bed in the mosquito area. Within half an hour, he had been bitten by seven bugs. After breaks, during which the participants left the hut, the procedure was repeated one more time that day and again on the next.
- <sup>20</sup> By late afternoon on December 22, Moran had fifteen bites and the volunteers on the other side of the screen had none. John Moran then returned to his tent. The two other men slept on the mosquito-free side of the room for the next eighteen nights—breathing the same air that Moran had breathed, being close to the bedding he had touched, and listening to the whine of the mosquitoes on the other side of the screen.
- <sup>21</sup> December 23 came. Then December 24. Both Moran and the other “infected mosquito building” volunteers seemed healthy. Then on December 25 at ten a.m., Moran felt a little strange. He took his temperature, noted that it was 100 degrees, and carefully wrote the figure on his chart. Two hours later, Moran checked again. His fever had climbed to 103. When Christmas dinner was served, Moran went to the mess hall and picked at his turkey, cranberries, and mashed potato. Then he went back to his tent and lay on his cot. Around three in the afternoon, Reed walked in. “Merry Christmas, Moran,” he said. “Anything new?” Moran pointed to the temperature chart. Reed checked the figures, looked at Moran’s flushed face, put his hand on the young man’s forehead—and called an ambulance.
- <sup>22</sup> John Moran had joined the list of yellow fever victims.

**contaminate:**  
introduce harmful  
materials



- <sup>23</sup> The two men who had slept on the mosquito-free side of the building remained in perfect health. It was clear—once again—that infected mosquitoes and nothing else caused the disease.
- <sup>24</sup> The work was almost done. The experiments had been a success. In the hospital, John Moran was soon on the road to recovery; and, to Reed's immense relief, none of the infected volunteers had died in any of the tests. By the end of December the team had done what they set out to do. They had established that infected mosquitos carried yellow fever. They had proved a theory, and they had also discovered an important way to fight the dreadful sickness. Because scientists now knew that mosquitoes transmitted yellow fever, they also knew that killing mosquitoes would immediately stop the spread of the disease. With the help of Dr. Finlay and a group of volunteers, the American team had taken a huge step toward conquering a deadly illness.

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## Celebration

paragraphs 1–14

- <sup>1</sup> *Late December 1900*
- <sup>2</sup> It was time to honor the Cuban scientist who had started it all.
- <sup>3</sup> On December 22, Major General Leonard Wood, the **governor-general** of Cuba, and members of the local medical community gave a huge banquet to honor Dr. Finlay. Reed traveled into Havana for the festivities. Carroll, who was always short of money, didn't go because he couldn't afford a dress uniform. Still, the room at Old Delmonico's Restaurant in Havana was jammed with Cubans and Americans. There were toasts and speeches, handshakes and applause. Dr. Finlay was given a bronze statuette and congratulated in Spanish and in English. For years he'd been laughed at. For years people had said his mosquito theory was a joke. And now—now that a bunch of Americans had proved his hypothesis—Carlos Juan Finlay was the toast of Havana, one of the greatest, most famous men in Cuba.
- <sup>4</sup> It was a wonderful, happy time. Everybody seemed to be celebrating, and on Christmas Day two of the officers' wives gave a party at Camp Columbia. Since there weren't many pine trees in Cuba, the women decorated a **guava** bush. They wrapped up presents. And when Reed opened his, the whole group burst out laughing. The officers' wives had given Major Reed a big wire model of a mosquito, which Reed accepted, he later wrote his wife, "with many blushes."
- <sup>5</sup> On December 27 there was another party. This time it was a ball that kept Reed up till one a.m. Then, a few days later, it was December 31, the last New Year's Eve of the nineteenth century.

**governor-general:**  
official who governs

**guava:** kind of  
tropical fruit

- 6 It was a beautiful, **balmy** evening. Reed sat at the big table in his quarters, pen in hand. As the hands of the clock moved toward midnight, he wrote to his wife:
- 7 *11:50 P.M. Dec 31, 1900 Only ten minutes of the old century remain, Lovie dear. Here I have been reading that most wonderful book—La Roche on Yellow Fever—written in 1853. Forty-seven years later it has been permitted to me and my assistants to lift the impenetrable veil that has surrounded the causation of this most dreadful pest of humanity. . . . The prayer that has been mine for twenty or more years, that I might be permitted in some way or sometime to do something to **alleviate** human suffering has been answered!*
- 8 With the help of Dr. Finlay and the team, Reed had done something most people only dream of. He had made a discovery that would save lives, prevent pain, and make the world a better, happier place.
- 9 It was a sweet moment.
- 10 But it didn't mark a final victory in the war on yellow fever.
- 11 Scientists still had to find a cure for the disease. They still needed to track down and **isolate** the actual germ. And of course there were dozens of other basic questions still to answer. Why, for instance, had a few volunteers not gotten sick when they were bitten? What happened to the germ inside the insect's body? And could a female mosquito possibly transmit the yellow fever germ to her **offspring** through her eggs?
- 12 Someday, Reed hoped, researchers might find the answers to those questions.
- 13 Someday, he hoped, investigators would find the germ, invent a **preventative** vaccine, and maybe even figure out a cure.
- 14 But right now the clocks at Camp Columbia were striking midnight. Outside a corps of army **buglers sounded taps** to mark the passing of the century. And as Dr. Walter Reed put down his pen, he knew with happy certainty that the first part of one great scientific problem had been solved.

**balmy:** warm

**alleviate:** lessen

**isolate:** separate

**offspring:** young

**preventative:**  
stopping  
something bad  
before it happens

**buglers:** players of  
the bugle, a kind of  
trumpet

**sounded taps:**  
played a song  
used at sunset and  
military funerals

Carlos Finlay became a hero in Cuba. The scientist, who died in 1915, would have been pleased to know that in 1933 the Cuban government issued these stamps in honor of the hundredth anniversary of his birth.



## Epilogue

### paragraphs 1–12

- <sup>1</sup> After December 31, 1900, the battle against yellow fever continued.
- <sup>2</sup> As soon as the results of the Reed team's work were known, public health officials **launched** an all-out **campaign** against the mosquitoes that carried the disease. In the United States and Cuba a virtual army of sanitation workers used poison **fumes** to kill mosquitoes that lurked in buildings and wiped out eggs by spraying oil on the pools, ponds, puddles, and containers of still water where the insects liked to breed. Killing the mosquitoes killed the yellow fever germs the insects carried, and by the end of 1901 there were no cases of the illness in Havana, Cuba. By 1905 the United States was free of the disease. And between 1902 and 1914—thanks to an effective battle against germ-bearing mosquitoes in Central America—U.S. workers were able to safely build the Panama Canal.
- <sup>3</sup> As the threat of yellow fever gradually **receded**, people showered Dr. Finlay and the Reed team scientists with honors, thanks, and praise. Statues of Carlos Finlay were set up in Cuba. A medical society and an American elementary school were named after him; and—though he never won—Dr. Finlay was **nominated** for one of science's greatest awards, the Nobel Prize in medicine, three times before his death in 1915.
- <sup>4</sup> Although Walter Reed died of **appendicitis** in 1902, soon after his return from Cuba, he, too, became a hero. Researchers adopted Reed's belief that all volunteers in scientific experiments should be fully informed of all the risks. In 1909 the American government named the Walter Reed Army Hospital in Washington, D.C., after the team's chief investigator. And in 1929, Congress awarded all the American volunteer scientists (including Dr. Jesse Lazear) one of the nation's highest honors, the Congressional Gold Medal, for their work on yellow fever.
- <sup>5</sup> But while people and governments were honoring past work on the illness, twentieth-century scientists were looking for new ways to fight the terrible disease. Until his death in 1907, Dr. James Carroll continued to search for the yellow fever germ. Although his efforts were unsuccessful, Carroll **ultimately** came to believe that the disease is caused by a microbe that is much smaller than bacteria. Dr. Aristides Agramonte, who taught bacteriology in both the United States and Cuba before his death in 1931, tended to agree. And by 1927 scientists knew that the disease was produced by a virus—an extremely tiny, extremely simple microorganism that is so much smaller than bacteria, it cannot be seen with an ordinary microscope.
- <sup>6</sup> Once scientists had identified the virus, the next step was to make a vaccine that would prevent people from getting the disease. That, however, proved difficult. Although researchers worked on the problem, progress was

**launched:** began  
**campaign:** set of organized actions  
**virtual:** almost  
**fumes:** gasses  
**receded:** shrunk  
**nominated:** suggested for a particular position or honor  
**appendicitis:** disease of the appendix  
**ultimately:** in the end

**pensions:** money paid for past work

**decreed:** ordered

**Register:** list or book with names

**fronts:** areas

**crucial:** very important

**host:** living thing in which something else lives

**originated in:** came from

slow until scientists discovered two facts that the Reed team had not known. In the late 1920s and early 1930s researchers learned that some types of monkeys could actually get yellow fever and that, under special conditions, the virus could sometimes be grown inside the bodies of ordinary white laboratory mice. Using animals made experimental work much easier; and, finally, in 1936, Dr. Max Theiler developed a vaccine that safely kept humans from getting the disease.

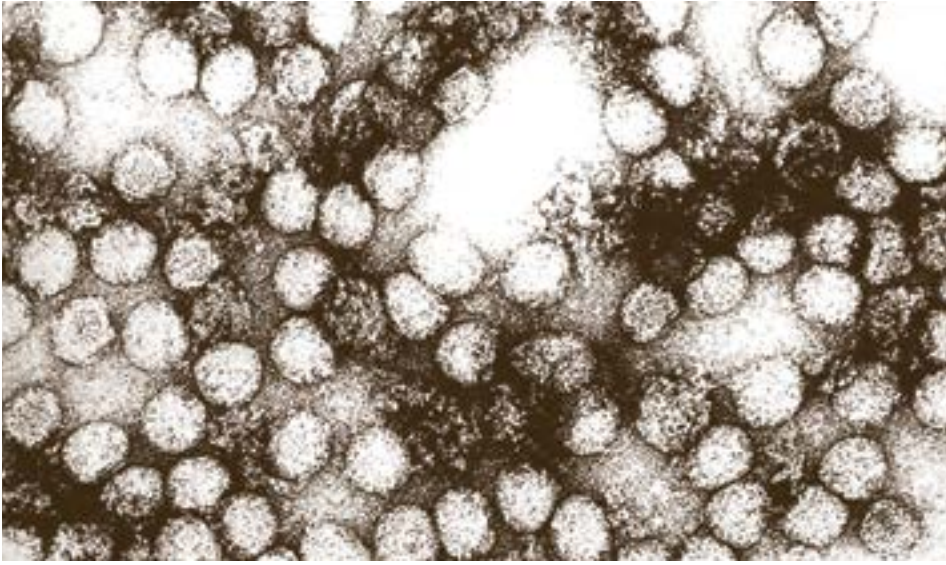
- 7 Research also continued on other **fronts**; and, during the twentieth century, scientists answered many of the questions about the cause and spread of yellow fever that had puzzled earlier investigators. Researchers learned that an infected female mosquito can pass the virus on to all her offspring through her eggs. They found that the yellow fever virus actually enters every cell of an infected mosquito's body. And they discovered that a female mosquito transmits the disease by dripping infected saliva into the wound while she is sucking blood.
- 8 Additional investigation uncovered more facts, and scientists soon realized that a mosquito must bite a yellow fever patient in the first three days of the illness in order to pick up the infection. They also learned that the virus may have to remain in the insect's body for as much as seventeen days before the bug can infect a person with the disease. To scientists, this information was particularly interesting because it explained why some of the Reed team's volunteers did not come down with yellow fever after being bitten. In some cases, it was clear that the team's mosquitoes weren't carrying the germ because they hadn't bitten yellow fever victims during the **crucial** three-day infectious period at the beginning of the illness. In other instances, volunteers did not get sick because the germ was not allowed to stay inside the **host** mosquito long enough.
- 9 Today, researchers believe that the yellow fever virus **originated in** West Africa and was brought to the Americas by slave ships carrying infected insects. They also know that the germ still lurks in the dense jungles of Africa and South America, where it infects monkeys and is carried by mosquitoes who transmit it to endless generations of offspring through their eggs.



The Congressional Gold Medal for the conquest of yellow fever. This medal was awarded to each of the American scientists and volunteers who took part in the experiments. In addition to the medal, Congress awarded **pensions** to participants and **decreed** that the names of all the yellow fever scientists and volunteers be published each year on a special roll of honor in the Army **Register**.



- <sup>10</sup> Vaccination programs and mosquito **extermination** programs have slowed the spread of yellow fever, but it is impossible to completely eliminate the virus. Many poor countries cannot afford to pay for the lifesaving vaccine, and some people now believe that insecticides should not be used to kill mosquitoes because these poisons may damage the environment.



Photograph of the yellow fever virus (the small circles) taken with an electron microscope. Viruses are so much smaller than bacteria that they can be seen only with an electron microscope capable of magnifying objects at least 190,000 times.

- <sup>11</sup> At this moment there is still no cure for yellow fever, and deadly outbreaks of the disease can still occur. In the early 1960s, 30,000 people died during a yellow fever epidemic in Ethiopia. The illness continues to plague people in parts of Africa and South America. Only three companies—in France, Brazil, and Senegal—now **rank** as approved yellow fever vaccine producers and demand is sometimes high. When the government of Paraguay failed to provide enough vaccine during a 2008 outbreak of the fever, desperate people **mobbed** clinics, yelling, “Vaccinations! Vaccinations!”
- <sup>12</sup> In the twenty-first century yellow fever is still one of the many diseases that threaten humans, and doctors are still trying to develop new ways to combat the illness. Some, but not all, **modern** research can be done with laboratory animals. For that reason, in countries around the world, many scientists and many ordinary people—like those who worked with Reed—are now knowingly risking possible illness, injury, or even death in order to voluntarily participate in experiments that test new vaccines, new treatments, new medical techniques, and new drugs that may one day benefit humanity.

**extermination:**  
killing

**rank:** stand

**mobbed:** crowded  
around

**modern:** of present  
or recent times

## Chapter Notes

### 11. Sorting It Out

- <sup>53</sup> “*terribly depressed*”: Truby, *Memoir of Walter Reed*, p. 116. Truby’s assessment of Reed’s feelings has weight because the two men were in contact during the period immediately following Lazear’s death.
- <sup>54</sup> *first two cases didn’t “prove”*: Letter from Walter Reed to James Carroll, Sept. 24, 1900; Reed’s italics.
- <sup>55</sup> “*My man*”: The quotations and the description of this interview are taken from Truby, *Memoir of Walter Reed*, p. 122. Truby knew Walter Reed and was **stationed** at Camp Columbia at the time of this incident.
- <sup>56</sup> *germs had to stay in the mosquito’s body*: Scientists now know that after the mosquito sucks in the yellow fever germ, a series of changes takes place in the insect’s cells over the course of seven to seventeen days that allow the germ to enter the mosquito’s salivary glands (the glands that produce saliva). When the mosquito bites again, it pumps this germ-laden saliva into its new victim. The germ can also enter the mosquito’s eggs during this period, and that allows the bug to pass on the infection to a new generation of insects.
- <sup>57</sup> “*General Wood*”: The description of this incident and all quotations come from Jefferson Kean’s account of the meeting with Wood, in Blossom Reed, p. 5.
- <sup>58</sup> *two hundred and fifty thousand dollars*: This calculation was done through E.H. Net Economic History Service.
- <sup>59</sup> “*From our study*”: Reed et al., “The Etiology of Yellow Fever: A Preliminary Note,” p. 53.
- <sup>60</sup> “*pure speculation*”: Bean, p. 143, quoting the *Philadelphia Medical Journal*.
- <sup>61</sup> “*Of all the silly*”: Anon., “The Mosquito Hypothesis.”

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### 15. More Bugs

- <sup>72</sup> *weather had somehow affected the mosquitoes*: Although cold may affect the amount of time the yellow fever germ has to stay inside a mosquito before that insect can infect another individual, Pierce and Writter have pointed out that some of the early experiments may not have worked because the mosquitoes were not properly-infected. Scientists now know, as the Reed team did not, that an insect must bite a yellow fever victim in the first three days of the illness in order to pick up the germ that causes the disease.

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**stationed:** sent for duty

**speculation:** unproven ideas

•

**band:** group**corpses:** dead bodies**collapsed:** fell down**century:** period of 100 years**produce:** make**conquer:** win against**peered:** looked closely**deliberately:** on purpose**contribution:** something given**attempted:** tried**infected:** carrying a disease**chief:** most in charge**come down with:** caught**live:** in person**stick:** follow**mild:** gentle**definitely:** for sure; certainly**leak:** let out liquid**vicious:** fiercely cruel**cot:** small lightweight bed**process:** steps**nectar:** sweet liquid (in plants)**test:** try out (through experimenting)**swiftly:** quickly**noted down:** wrote down**glanced:** looked quickly**support:** care for**previously:** earlier**convince:** make someone believe**series:** sets**rent:** pay to use**pests:** annoying or harmful animals**disgusting:** gross**illegal:** against the law**adjusted:** changed**fetch:** get**satisfied:** happy**short:** not having enough**effective:** successful**humanity:** all humans**wage:** payments for work**barred** against: blocked**logger:** lumberjack, someone who chops trees**snuff:** extinguish, stop**activists:** those who fight for a cause**recipient:** one who receives**conscience:** sense of what is right and wrong**violate:** break or act in disregard of**cases:** instances of infection

••

**relatively:** somewhat**documented:** recorded**contribution:** help**hovered:** hung in one position**babbled:** spoke without making sense**ghost towns:** towns without people left**tending:** looking after**humble:** lowly**plague:** widespread attack of a disease**huddled:** stayed close together**Surgeon General:** head of public health services in the United States**disinfectant:** substance that kills germs**vaccines:** substance used to prevent a specific disease**Frantic:** panicked**bled:** let out blood from**harbor:** place where boats can be sheltered**servicemen:** person serving in the military**officials:** people in charge**face-to-face:** in direct contact with**territory:** area under control**full-scale:** complete**roughly:** about**bacteria:** one-celled living things**branch:** section**current:** present-day

•• (continued)

**theories:** unproven ideas

**leading:** top

**sensible:** clear-thinking

**privately:** in secret

**wharves:** docks

**wreck:** destroyed ship

**docked:** stopped at a dock

**personnel:** workers

**Quarters:** rooms

**base:** structure housing those in military

**patio:** deck

**hungry:** desiring

**crisp:** neat and fresh

**blunt:** abrupt and honest; very/ unapologetically frank

**charmless:** unpleasant

**a wealth of:** plenty of

**darkly :** mysteriously

**ball:** fancy party

**colleagues:** workers in the same field

**honors:** high achieving

**former:** earlier

**outlined:** described generally

**samples:** small pieces

**harvested:** collected

**covered:** included

**gelatin:** a kind of colorless tasteless jelly

**coordinate:** manage

**immune:** not affected by the disease

**fever-stricken:** suffering from fever

**sterilizing:** cleaning items from germs

**flasks:** containers

**incubator:** warming device

**specimens:** samples for testing; examples

**platinum:** a valuable silver-white metal

**clusters:** bunches

**initially:** in the beginning

**frustrated:** annoyed

**tropical:** hot weather

**dull:** not lively

**veins:** blood vessels that carry blood without oxygen

**pulse rates:** heartbeat speed

**outbreak:** sudden attack

**telegraphed:** communicated using cables

**cell:** room in a jail

**eliminated:** got rid of

**bedding:** sheets, blankets, etc.

**strike:** harm

**herd** of cattle: group of cows

**microbe:** living thing that can only be seen through a microscope

**reasoned:** thought logically

**particularly:** in a special way

**willing:** ready

**consult:** seek the advice of

**carried:** passed along

**decades:** periods of ten years

**lunatic:** crazy; insane

**bespectacled:** glasses-wearing

**treated:** cared for

**remarks:** comments

**inject:** put in

**draw:** pull out

**carry** it out: complete it

**illustrate:** show

**batch:** group of things

**crop:** group

**exposed:** left open

**infection:** illness

**mature:** adult

**attendants:** assistants/helpers

**occasionally:** sometimes

**delicate:** needing care

**discouraging:** making one lose hope

**settled:** came to a rest

**inserted:** put in

**replaced:** put back

**due:** expected / supposed to arrive

**telegram:** message sent with electrical signals through system of wires

**breakthrough:** sudden, important discovery

**nuisance:** bother

**perk** up: energize

**feeble:** weak

**here and there:** from one place to another

**picked** up: caught

**jabbed:** poked



•• (continued)

**smear**: spread

**scan**: looked over

**bloodshot**: red

**flushed**: red

**conclusion**: judgment

**monitored**: watched over and checked on

**condition**: state of health

**combat**: fight against

**bulletins**: reports

**tragic**: very unfortunate

**distracted**: unable to stay focused

**source**: cause

**grim**: serious

**outlook**: chances

**recall**: remember

**weary**: tired

**track**: path

**admitted**: let in

**stretcher**: frame used for carrying the sick, hurt or dead

**optimistic**: hopeful

**scrawled**: scribbled

**pants**: heavy breaths

**draped**: covered

**dreadful**: terrible

**been in contact with**: touched or been around

**plunged**: started with great focus

**impressed**: thinking highly

**gradually**: slowly

**data**: information

**confirm**: prove

**hunches**: guesses

**onto something**: about to discover something

**insufficient**: not enough

**equivalent to**: equal to

**commitment**: promise

**indicated**: showed

**podium**: stand where speeches are made

**lecture**: speech

**scoffed**: rejected and made fun of (an idea)

**constructed**: built

**inhabited**: lived in

**isolated**: apart from everything

**conditions**: necessary things

**guarantee**: make sure

**chance**: accidental

**scouting**: searching

**drew up**: made

**plummeted**: dropped suddenly

**mess hall**: cafeteria

**immature**: not yet fully formed

**sick leave**: time off from work because of illness

**urine**: liquid bodily waste

**criminal**: wrong or wicked

**Syringes**: tubes used for sucking out or pushing in liquids

**immigrants**: people who move from a different country

**tempting**: attractive

**snap**: quick

**proposal**: suggestion or offer

**salute**: thank and honor

**gleam**: shine

**solely**: only

**slip-ups**: mistakes

**medics**: military medical workers

**undoubtedly**: surely

**regret**: be sorry or upset

**structure**: building

**stench**: bad smell

**anxiously**: nervously and excitedly

**affected**: influenced

**agony**: extreme pain

**Rejoice**: celebrate

**permitted**: allowed

**establish**: form

**suspense**: state of uncertainty

**spic and span**: completely clean

**figure**: number

**banquet**: formal dinner party

**local**: neighborhood

**festivities**: celebration

**statuette**: small statue or trophy

**final**: last

**passing**: end

**showered**: gave a lot to

**society**: group

**adopted**: took on

**fully informed**: made completely aware

•• (continued)

**microorganism:** one-celled living thing

**saliva:** spit

**infectious:** contagious

**dense:** thick

**generations:** group of living things born in the same period

**insecticides:** insect poison

**plague:** harm

**demand:** need

**threaten:** put in danger

**techniques:** ways of doing something

**conducted:** carried out

**vary:** are different

**unrecorded:** without being written down

**captive:** captured

**standstill:** stop

**subsequently:** afterwards

**spinal:** related to the spine

**financial:** money-related

**enlisting in:** joining

**sanitary:** related to keeping an area clean

**stamp out:** kill off

**intensive:** extreme

**cobblestones:** stones used to pave roads

**lurk:** creep/stay hidden

**address:** speak to

**fret:** worry

**dowry:** money from a bride's family to the groom's family

**cast:** thrown

**decently:** with care; respectfully

**winding sheets:** sheets for burial

**suburb:** neighborhood outside the city

**piled out:** got out clumsily

**megacities:** very large cities

**circling:** moving through

**fatality:** death

**slums:** rundown areas where very poor live

**catastrophe:** disaster

**Toting:** carrying

**basin:** deep eroded areas of Earth's surface

**daunting:** overwhelming

**transmission:** act of spreading

**lure:** something that attracts or draws

**sector:** area / section

**footing:** established position

**stockpile:** stored supply

**replenished:** refilled

**consideration:** careful thought (when deciding)

**ethnic:** related to race, culture, or nation

**intervene:** interfere

**FOSTER:** help to develop

**Nauseated:** sickened

**dead end:** situation leading nowhere

**mistaking:** understanding wrongly

...

**delirium:** confusion or madness

**spasms:** jerks

**spewing:** gushing

**clots:** solidified lumps

**humbled:** brought down

**took its toll:** caused destruction

**imperils:** puts into danger

**commerce:** trade; buying and selling of goods

**one-celled** microscopic organisms: living things made up of one cell

**raged:** spread wildly

**epidemics:** widespread attack of a disease

**alarmed:** very worried or disturbed

**deathtrap:** extremely dangerous place

**contracted:** caught

**lurched:** moved suddenly and unsteadily

**promptly:** immediately

**alleviate:** lessen

••• (continued)

**frontier:** wild or unexplored lands

**outposts:** distant military camps

**head:** lead

**preliminary:** early

**settling:** deciding

**authorities:** experts in power

**touched:** a little insane

**remedy:** treatment

**formally:** fancily

**bustling:** filled with noise and activity

**assessed:** judged

**dandy:** overly fancy-looking man

**rounding out:** completing

**prestigious:** famous and respected

**clinical:** medical

**intently:** with focus

**autopsies:** examinations of dead bodies

**bouillon:** seasoned broth

**full-blown:** completely developed

**streaked:** laid in a band

**cultures:** preparations for cells to grow in a lab

**spleens:** organ near the stomach

**kidneys:** organ that separates extra water and waste from blood

**Cork:** city in Ireland

**apparently:** as it was discovered

**bacillus:** disease-causing bacteria

**post:** place where soldiers carry out duties

**arteries:** blood vessels that carry blood with oxygen

**digestive tract:** system of the body that breaks down food

**scalpel:** special knife used in surgery

**ward:** part of hospital where patients stay

**telltale:** very clear; revealing

**statistics:** numerical information

**discredited:** caused doubt about

**managed:** succeeded

**considering:** thinking about

**transmit:** pass on

**mad:** crazy or foolish

**dignified:** respectable

**stutter:** problem getting words out

**devoted:** gave

**proboscis:** sharp nose-like part of the mosquito

**manufacture:** produce

**victims:** people who have been harmed

**typhoid:** type of disease

**passionate:** having strong feelings

**face:** deal with or handle

**nourishing:** healthy and beneficial

**severity:** level of harshness

**complications:** additional difficulties / medical problems

**pinned:** focused

**distinct:** separate and different

**in passing:** casually

**succinctly:** without wasted words

**diagnosis:** act of recognizing a disease

**afford:** be able to handle

**periodic:** repeating at a certain time

**poverty:** being poor

**hardships:** situations of need

**bout:** short attack

**bordering:** almost like

**enfeebled:** weakened

**inverted:** turned upside down

**critical:** dangerous

**compounds:** mixtures

**feverishly:** wildly and excitedly

**obligingly:** helpfully

**delirious:** restless and confused

**distress:** stress and trouble

**turn of affairs:** change in events

**severe:** harsh

**dashed off:** quickly wrote

**lightheaded:** dizzy

**manpower:** number of workers

**finishing touches:** final changes

**life insurance:** protection against loss; system that gives money to family after death

**policy:** agreed plan

••• (continued)

**heaved:** made motion to vomit

**hospital corpsman:** medical military professional

**full military honors:** special ceremony for military

**invalid:** sick, weak person

**remains:** dead bodies

**agenda:** organized plan

**stationed:** sent for duty

**exposed:** introduced to

**watertight:** without mistakes

**plowed:** rushed through

**painstaking:** extremely detailed

**governor-general:** official who governs

**stands in no causative relation to:** is not the cause of

**groundbreaking:** new and important

**speculation:** unproven ideas

**rigmarole:** long complicated statements

**engendered:** caused

**fluke:** thing that happens because of luck

**designed:** deliberately planned

**contamination:** contact with disease

**breed:** multiply

**Gale-force:** very strong

**feces:** solid bodily waste

**unsuspecting:** unaware

**consent:** permission

**obtain:** get

**undertake:** carry out

**hazards:** dangers

**recruiter:** person who works to get others to join something

**civilian** clerk: worker who is not in the military

**parade ground:** area where soldiers perform drills and marches

**memoirs:** book of a person's memories

**surpassed:** beaten by another

**annals:** historical records

**for the sake of:** for the purpose of

**erected:** built

**fetid:** bad smelling

**was riding on:** depended on

**logical:** making sense

**mature:** develop

**mercury:** chemical that measures temperature

**panel:** group brought together to discuss an issue

**distinguished:** great and well-known

**specialists:** experts

**hasten:** hurry

**tensely:** with nervousness

**contaminate:** introduce harmful materials

**immense:** huge

**guava:** kind of tropical fruit

**balmy:** warm

**isolate :** separate

**offspring:** young

**preventative:** stopping something bad before it happens

**buglers:** players of the bugle, a kind of trumpet

**sounded taps:** played a song used at sunset and military funerals

**launched:** began

**campaign:** set of organized actions

**virtual:** almost

**fumes:** gasses

**receded:** shrunk

**nominated:** suggested for a particular position or honor

**appendicitis:** disease of the appendix

**pensions:** money paid for past work

**decreed:** ordered

**Register:** list or book with names

**ultimately:** in the end

**fronts:** areas

**crucial:** very important

**host:** living thing in which something else lives

**originated in:** came from

**extermination:** killing

**rank:** stand

**mobbed:** crowded around

**modern:** of present or recent times

**scourge:** source of great suffering

••• (continued)

**inoculation:** act of making a person immune to a disease

**masons:** skilled bricklayers

**glaziers:** craftsmen using glass

**placid:** calm

**abates:** lessens

**trustees:** guardians of a property

**scullery:** small kitchen

**overshot:** woven

**Zika:** virus causing birth defects

**dengue:** deadly fever

**chikungunya:** viral fever

**corridors:** areas between habitats of similar wildlife

**indicator:** way to determine

**resurgent:** increasing after being inactive

**subsidiary:** supporting organization

**averted:** avoided

**compromised:** weakened

**communicable:** contagious

**autonomy:** independence in thinking and acting

**affiliation:** official attachment or connection

**accordance:** agreement

**flaky:** unreliable



Use the Vocab App to play mini games related to the words in this lesson.

## A Lesson 1: Meeting a Monster

**Discuss:** Students examine images of yellow fever and use details to explain their ideas about this disease.

- 10 min
- Direct students to page 162 of the Student Edition.
  - We will be reading a text that traces a medical investigation conducted by the U.S. Army while hunting for an invisible monster.
  - Review what detectives or scientists ask themselves on page 162 of the Student Edition.
  - Assign partners.
  - Partners complete Activities 1 and 2 on page 162.
  - Writing Journal:** Partners complete Activities 1–3 on page 14.
  - On-the-Fly:** Circulate among students to check that they can identify details.
  - Remind students to refer to the questions investigators ask themselves on page 162 of the Student Edition to help students think like a medical investigator.
  - Discuss responses.

## A Lesson 1—Meeting a Monster

### Hunting for an invisible monster

In an investigation, detectives or scientists begin by looking carefully for pieces of information that help them to put together a theory. Investigators ask themselves:

- What do I see or observe?
- What evidence stands out?
- What does this evidence tell me?

People have long feared yellow fever, a deadly disease. Sometimes the disease infects many people at once. This is called an outbreak.

1. With your partner, study the following images that were created during yellow fever outbreaks.
2. Choose one image that grabs your attention.

1



2



Courtesy of the Tennessee State Library and Archives

### Lesson 1 Materials

- Yellow Fever Images
- Writing Techniques Projection
- Yellow Fever Quote Projection
- “Meeting the Monster” Audio, paragraphs 1–4

A

3



Courtesy of the Wellcome Collection



Go to page 14 in your Writing Journal and complete Activities 1–3 about the image you selected.





**B Lesson 1** (continued)


Benchmark: ELA.6.R.2.2


**Analyze Writing Techniques:**


Students select details in the opening paragraphs, identify the author's technique, and explain the ideas conveyed.


 Direct students to pages 164–165 of the Student Edition.


 **Play:** Audio for “Meeting the Monster,” paragraphs 1–4.

 Direct students to follow along in the text with the audio.


 Students complete Activity 2 on page 164 of the Student Edition.


 Discuss responses.


 Authors use specific writing techniques to bring a topic to life and help readers understand the topic.


 Review the writing techniques listed on page 164 of the Student Edition.

 Assign partners.


 Partners complete Activities 4 and 5 in the Student Edition.

 Discuss responses.

 **Writing Journal:** Students complete Activities 1–3 on page 15.

 Ask students to share a quote. Model how to think about an author's craft:

- Why did this detail stand out to you?
- What writing technique does the author seem to be using?

 What ideas about yellow fever is the author bringing to life with these details?

**B****Lesson 1—Meeting a Monster** (continued)

1. Read along with the audio of paragraphs 1–4 of “Meeting the Monster” from *The Secret of the Yellow Death* on page 115. Listen for details that capture your attention.
2. Highlight two details that stood out to you and helped create a vivid picture of yellow fever.
3. Read the types of writing techniques listed below.

**Writing Techniques That Bring a Topic to Life**

- Descriptive and sensory details that create an image in the reader's mind
- A story that captures the reader's attention
- Specific words or phrases that shape the reader's thinking
- Facts and numbers that make a strong impression
- Quotations that make an impact

B

4. Read the following excerpts from “Meeting the Monster,” paragraphs 1–4.

**Excerpt 1:**

“George Clymer, who’d signed the Declaration of Independence, watched helplessly as the illness struck his wife and family.” (Meeting the Monster, 2)

**Excerpt 2:**

“First there was a chill: an icy, bone-freezing chill in the middle of a warm summer evening.” (Meeting the Monster, 1)

**Excerpt 3:**

“‘Yellow fever [is]...an enemy which imperils life and cripples commerce and industry,’ Surgeon General John Woodworth told the U.S. Congress in 1879.” (Meeting the Monster, 4)

**Excerpt 4:**

“In 1793, 4,044 people in Philadelphia died...” (Meeting the Monster, 3)

5. Share with your partner which type of technique is being used in each of these examples.











Go to page 15 in your Writing Journal and complete Activities 1–3.

## C Lesson 1 (continued)

Benchmark: ELA.6.R.2.2

**Connect:** Students analyze how the author introduces yellow fever and uses details to elaborate on and illustrate the nature of the disease.

10 min








-  Direct students to page 166 of the Student Edition.
-  We've discussed how authors use specific writing techniques to bring a topic to life for readers, so the readers keep reading and begin to understand the topic.
-  As you reread this passage, think about how the elaborated details increase your understanding. Notice whenever the author provides examples or anecdotes to illustrate the nature of the disease.
-  Read aloud the quote on page 166 of the Student Edition as students follow along.
-  Assign partners.
-  Partners complete Activities 1–3 on page 166 of the Student Edition.
-  Discuss responses.
-  Lead a class discussion with Activity 4 in the Student Edition.

## D Lesson 1 (continued)

Benchmarks: ELA.6.C.1.3, ELA.6.R.2.2

**Write & Share:** Students identify and describe two text details to develop their claim of why they would or would not investigate the cause of yellow fever.

17 min

-  Direct students to page 166 of the Student Edition.
-  **Warm-Up:** Use the digital lesson to make sure students have language to start writing.
-  **Writing Prompt:** Students respond to the Writing Prompt on page 16.
-  **Differentiation:** Digital PDF.
-  **On-the-Fly:** Circulate around the room to support students.
-  **Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.
-  **Exit Ticket:** Project.

End of Lesson 1

## Lesson 1—Meeting a Monster (continued)

Follow along as your teacher reads the following quote.

**“Yellow fever (is)...an enemy which imperils life and cripples commerce and industry...”**  
(Surgeon General John Woodworth, 1879, Chapter 1, 4)

1. Highlight two details that illustrate how yellow fever is presented to the reader in paragraphs 1–4 on page 115.
2. Describe to your partner the techniques the author uses to introduce yellow fever to the reader.
3. Share with your partner which detail in paragraphs 1–4 you think best illustrates the depiction of yellow fever as “an enemy which imperils life and cripples commerce and industry”?
4. Which type of detail most convinced you that yellow fever is an important enemy? Share your response in the class discussion.
  - Descriptive and sensory detail that creates an image in the reader’s mind
  - Anecdote (story) that captures the reader’s attention
  - Specific words or phrases that shape the reader’s thinking
  - Facts and numbers that make a strong impression
  - Quotations that make an impact

D

Review paragraphs 1–4 from “Meeting the Monster” in *The Secret of the Yellow Death*.

Would you volunteer to go to a place with yellow fever to investigate the cause of the disease?



Go to page 16 in your Writing Journal to explain your answer.

E

## Lesson 2—Monsters and Heroes: Introducing Dr. Walter Reed

Every scary story needs a monster and a hero. But does the “monster” yellow fever have a hero? Read to find out more about the monster and the hero.

1. Look at the monster matrix below and think of a scary monster (from a movie, book, video game, etc.). What made that monster scary?
2. What makes a monster scary? Choose one of the categories from the Monster Matrix to answer the question.

Share your responses in the class discussion.



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E

## Lesson 2: Monsters and Heroes: Introducing Dr. Walter Reed

Benchmark: ELA.6.R.2.2

**Read:** Students use details from Chapter 1 to analyze why yellow fever is compared to a monster.

- Direct students to page 167 of the Student Edition.
- Remind students that Suzanne Jurmain referred to yellow fever as a “monster.”
- Let’s consider why Jurmain compares yellow fever to a “monster” by examining the details in the text she uses to describe this disease.
- What makes a monster scary?
- Students complete Activities 1 and 2 in the Student Edition.
- Discuss students’ responses to Activity 2 using the Monster Matrix on page 167.
- Assign partners.
- Partners complete Activities 3–5 in the Student Edition.
- Discuss responses.
- Students may classify quotes differently. However, they should be able to *describe* the quote and *explain* how it shows yellow fever to be unpredictable, terrifying, etc.
- The writer is using a metaphor when she compares yellow fever to a monster.
- Lead a class discussion with question 6 on page 168 of the Student Edition.

10 min

### Lesson 2 Materials

- Monster Matrix Projection
- Metaphor Projection
- “Feeding the Fishes” Audio, paragraphs 1–4

**E** See previous page for directions in Step E.

**E**

## Lesson 2—Monsters and Heroes: Introducing Dr. Walter Reed (continued)

3. Review the following quotes from “Meeting the Monster” in *The Secret of the Yellow Death* that describe yellow fever and its impact.

### Quote 1

“His skin turned yellow. The whites of his eyes looked like lemons. Nauseated, he gagged and threw up again and again, spewing streams of vomit black with digested blood across the pillow.” (Meeting the Monster, 2)

### Quote 2

“For centuries the disease had swept through parts of the Americas and Africa, leaving behind a trail of loss and misery.” (Meeting the Monster, 3)

### Quote 3

“And every single year the illness took its toll. In 1793, 4,044 people in Philadelphia died during a plague of yellow fever. New Orleans counted 8,101 yellow fever deaths in 1853, And when the disease hit Memphis, Tennessee, in 1878, 17,000 citizens sickened in a single month.” (Meeting the Monster, 3)

4. With your partner, decide which Monster Matrix category best describes each quote. Choose from the following:
- unpredictable
  - disturbingly violent
  - beyond our control
  - terrifying in appearance
5. Look at Meeting the Monster, paragraph 3. With your partner, find a sentence that compares yellow fever to something dangerous. Share your sentence in the class discussion.

6. **Discussion Question:** Share your response in the class discussion.

On a scale of 1 to 4, how difficult do you think it will be to conquer the monster known as yellow fever?

Easy	Average	Challenging	Almost Impossible
1	2	3	4



### Differentiation: Step E

Ensure that students understand the four questions in the Monster Matrix before completing the activities.

If students are having difficulty understanding the text quotes, discuss their meaning as a class or allow students to discuss in pairs.

● *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

● *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.







F

1. Review “Meeting the Monster” from *The Secret of the Yellow Death* on pages 115–117.
2. Discuss briefly with your partner:
  - What qualities does a hero have?
  - What does heroism look like? Act like? Sound like?
  - What does it mean for someone to be “heroic”?
3. Which of the following traits would be most valuable to a disease detective to fight against yellow fever? Share your response in the class discussion.
  - Strength
  - Courage
  - Intelligence
  - Persistence
  - Other

Be prepared to explain your reasons for your choice, but feel free to change your mind based upon the reasoning of others in the class.

## F Lesson 2 (continued)

**Discuss:** Students connect Jurmain’s monster metaphor to the idea of a hero by analyzing the qualities needed to fight such a “monster.”

-  Direct students to page 169 of the Student Edition.
-  We know that the author is describing yellow fever as a monster. What qualities does a hero need to combat this monster?
-  Assign partners.
-  Partners complete Activities 1 and 2 on page 169 in the Student Edition.
-  Lead a class discussion using Activity 3 in the Student Edition.
-  Have students use evidence from chapter 1 to explain why they rated a particular trait as most important to “fighting” yellow fever.

10 min




### Differentiation: Step F


- *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.


## G Lesson 2 (continued)


Benchmark: ELA.6.R.2.2


**Select Text:** Students identify and interpret key details of Dr. Reed to establish a first impression of his character.


 Now, we will meet Dr. Walter Reed, the man the U.S. Army sent to discover the cause of yellow fever.

 Direct students to page 170 of the Student Edition.


 **Play:** Audio, “Feeding the Fishes,” paragraphs 1–4.


 Direct students to follow along in the text with the audio.


 Students complete Activities 2 and 3 on page 170 of the Student Edition.


 Discuss responses.


 Assign partners.


 Partners complete Activities 4–6 in the Student Edition.

 Discuss responses.

 Create a continuum on the board numbered 1 through 5 (unheroic to heroic). Select at least three students with differing views to stand in positions that indicate how they rate Dr. Reed’s heroism.

 Students should persuade each other to move by using textual evidence in their arguments.

 Discuss students’ reasoning and evidence for the position they took.

 Lead a class discussion using Activity 7 in the Student Edition.

G

## Lesson 2—Monsters and Heroes: Introducing Dr. Walter Reed (continued)

1. Read along as you listen to the description of Dr. Reed in paragraphs 1–4 of “Feeding the Fishes” on page 117.
2. Highlight details that describe Dr. Reed in paragraphs 1–4.
3. What is your first impression of Dr. Reed? Choose one of the following. Share your thoughts in the class discussion.

Unheroic	Somewhat Unheroic	Average	Somewhat Heroic	Heroic
----------	-------------------	---------	-----------------	--------

4. What gave you that impression? Choose two details about Dr. Reed that you highlighted in paragraphs 1–4 of “Feeding the Fishes” that gave you a clear impression.
5. What type of details did you highlight that describe Dr. Reed? Share your thoughts with a partner.


Descriptive and sensory detail	Story	Specific words or phrases	Facts and numbers	Quotations
--------------------------------	-------	---------------------------	-------------------	------------

6. Do either of your details portray Dr. Reed as a hero? Choose from the choices below. Share your thoughts with your partner.

Unheroic	Somewhat Unheroic	Average	Somewhat Heroic	Heroic
----------	-------------------	---------	-----------------	--------

7. After reviewing the textual evidence and your classmates’ reasoning, how would you describe Dr. Reed now? Choose one of the following. Share your thoughts in the class discussion.

Unheroic	Somewhat Unheroic	Average	Somewhat Heroic	Heroic
----------	-------------------	---------	-----------------	--------

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### Differentiation: Step G

If students are struggling with the text, pair students to identify the details in the text that describe Dr. Reed.



H

Review “Feeding the Fishes,” paragraphs 1–4 from *The Secret of the Yellow Death* on page 117.

Does Dr. Reed seem like a hero who is ready to defeat the “monster,” yellow fever?



Go to page 17 of your Writing Journal to explain your answer.

H

## Lesson 2 (continued)

Benchmarks: ELA.6.C.1.3, ELA.6.R.2.2

**Write & Share:** Students use text details to develop a claim about the author’s introduction of Dr. Reed.



Direct students to page 171 of the Student Edition.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students complete the Writing Prompt on page 17.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Exit Ticket:** Project.

End of Lesson 2



### Differentiation: Step H

● *ELL(Dev)*, ■ *Moderate*:

Alternate Writing Prompt provides sentence starters.


### Before You Begin Lesson 3:


We highly recommend students have access to the digital lesson in order to evaluate evidence and information in the Weigh the Evidence App in Steps J and K. Students will use the app in this lesson to collect and evaluate evidence. If using digital activities, manage print activities accordingly.


## I Lesson 3: Weigh the Evidence: Yellow Fever Origin Theories


Benchmark: ELA.K12.EE.4.1


**Review:** Students identify and articulate Dr. Reed's mission to establish the importance of reading to collect and weigh evidence.


 Direct students to page 172 of the Student Edition.

 Scientists often begin research by evaluating theories that exist for a disease they are studying.


 Humans knew of this disease for hundreds of years. No one knew its origin, but many theories already existed.


 Students complete Activities 1 and 2 in the Student Edition.


 **Writing Journal:** Students complete the chart on page 18.


 Discuss responses.

 Assign partners.


 Students complete Activity 3 in the Student Edition.

 **Writing Journal:** Partners complete Activities 1 and 2 on page 19.

 Discuss responses.

 As students connect their explanations to what Dr. Reed has been sent to do, they should note:

- Dr. Reed needs to test, prove, and disprove each theory based on facts.
- Scientific theories are proven by finding the best evidence.


 Review the explanation of a scientific theory in the Student Edition.

10 min

## J Lesson 3 (continued)

Benchmark: ELA.6.R.2.4

**Weigh the Evidence of Bacteria:** Students practice using the Evidence app to demonstrate how to evaluate a claim based upon the evidence that supports, or does not support, it.

 Students use the digital lesson to complete this step with the Evidence app if they have digital access.

10 min

## I Lesson 3—Weigh the Evidence: Yellow Fever Origin Theories

It's time to be a detective! Currently, doctors have several ideas about what causes yellow fever, but none of them have been proven. As an investigator on the yellow fever case, you'll learn how to weigh evidence to determine which theory is the most likely cause of yellow fever.

1. Turn to paragraphs 4–8 of "Feeding the Fishes" on pages 117–118.
2. Review and highlight the three most promising theories for the cause of yellow fever in 1900.



Go to page 18 of your Writing Journal and complete a chart on the theories.


3. Review paragraphs 8 and 9 from "Feeding the Fishes" on page 118.






Go to page 19 of your Writing Journal to complete Activities 1 and 2.

### Scientific Theory:

A scientific theory is an explanation for how things work or why things happen. Scientists develop theories based on their observations of the world around them. Theories are based on ideas and evidence that can be tested.

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### Lesson 3 Materials

-  Assessing Evidence
-  Types of Evidence
-  Evidence app

### Differentiation: Step I

- **ELL(Dev):** For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

L

## Lesson 5—Meeting the Team

A good teammate can make a team stronger.

1. With a partner, rate the following qualities of a good teammate from least important (4) to most important (1):
  - Skillful
  - Easy to work with
  - Hardworking
  - Trustworthy
2. Are there other qualities of a good teammate? Share your thoughts with your partner.


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K

## Lesson 3 (continued)

Benchmark: ELA.6.R.2.4

**Evaluate the Evidence: Remaining Theories:** Students work in pairs to identify and evaluate evidence for the remaining two theories for yellow fever transmission.

22 min  Students use the digital lesson to complete this step with the Evidence app if they have digital access.

 **Wrap-Up:** Project Poll 1.

 **Exit Ticket:** Project.

### End of Lesson 3


### Before You Begin Lesson 4:


Lesson 4 is a Flex Day. Select from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts. Please see instructions in the digital lesson.


L

## Lesson 5: Meeting the Team


**Discuss:** Students participate in a collaborative discussion to build ideas about the character traits that make a great team.


 What are important character traits for a teammate to have?

 If helpful, write the traits students provide on the board and ask them for definitions and examples.




 As you listen to your classmates speak, see if their ideas remind you of other character traits or examples you have noticed among good teams.

 Assign pairs.

 Partners complete Activities 1 and 2 in the Student Edition.

 Discuss responses.

### Lesson 5 Materials

-  Character Traits
-  Characterization Techniques Projection
-  "Feeding the Fishes" Audio, paragraph 3



### Differentiation: Step L

● *ELL(Dev):* For your ELL students, you may want to pre-teach or allow students to translate vocabulary for character traits, including the four terms used in the activity: "skillful," "easy to work with," "hardworking," and "trustworthy," and additional terms such as "responsible," "organized," and "patient."

## M Lesson 5 (continued)

Benchmark: ELA.6.R.2.1

**Select Text:** Students use text details to profile Dr. Reed's character and determine the author's point of view.

Pay attention to direct and indirect details that the author provides. What details give you a sense of Dr. Reed's character?

**Play:** Audio for "Feeding the Fishes," paragraph 3.

Students complete Activity 1 on page 174 of the Student Edition.

**Writing Journal:** Students complete the chart and Activity 2 on pages 20 and 21.

Authors use a technique called characterization to develop characters.

Sometimes an author explicitly tells us a character's traits. More often, the author shows you what the character is like, and you have to infer their traits.

Review the Characterization Techniques in the Student Edition.

Assign pairs.

Partners complete Activity 2 in the Student Edition.

Discuss responses.

Review the Questions for Identifying Character Traits in the Student Edition.

Students complete Activities 3–5 on page 175 of the Student Edition.

**Writing Journal:** Students record notes on Dr. Reed on page 22.

Discuss responses.

Partners complete Activities 6–8 on page 175 of the Student Edition.

**Writing Journal:** Students record traits of Dr. Reed on page 23.

Discuss responses.

Students complete Activity 9 on page 176 in the Student Edition.

Discuss responses.

Students complete Activity 10 in the Student Edition.

Lead a class discussion for Activity 10 in the Student Edition.

## Meeting the Team

M

## Lesson 5—Meeting the Team (continued)

1. Read along with the audio for "Feeding the Fishes," paragraph 3 on page 117.



Go to pages 20 and 21 of your Writing Journal to complete the chart in Activities 1 and 2.

### Characterization Techniques

- **Actions:** What do the actions of the character tell us about the character's traits?
- **Dialogue:** What do the character's words tell us about the character's traits?
- **Thoughts:** What do the character's thoughts tell us about the character's traits?
- **Appearance:** What does the character's appearance tell us about the character's traits?
- **Others' perceptions:** What do other people's words, thoughts, and actions about the character tell us about the character's traits?

2. With a partner, read the passages from the text below. For each detail:

- Identify whether it is showing or telling the reader something.
- Share what you learn about Reed's character from the detail.

#### Passage 1

"When the ship docked at around eleven, Reed was ready to move." (Feeding the Fishes, 3)

#### Passage 2

"After dropping his bags at the Officer's Headquarters, he was off again, dashing across the grounds to visit Major Kean in the camp's yellow fever hospital just outside of the base." (Feeding the Fishes, 3)

#### Passage 3

"Reed had read descriptions of yellow fever, but this was the first live case he'd ever seen. He was hungry for information." (Feeding the Fishes, 3)

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### Differentiation: Step M

- **ELL(Dev):** Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.
- **ELL(Dev):** For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

Model examples of how to identify character traits using the Questions for Identifying Character Traits.



M

**Questions for Identifying Character Traits**

- What is the detail from the text?
- Which character is the detail about?
- What type of characterization is it (action, dialogue, thought, appearance, others' perceptions)?
- What character trait does the detail describe? What kind of a person would do/say/behave in such a way?

3. Review paragraphs 1–5 from “Plans” on page 119.
4. Highlight five details in paragraphs 1–5 that describe Dr. Reed.
5. Write a note for each detail you highlighted to identify the character trait the detail describes. Ask yourself, “What does the detail reveal about who Dr. Reed is?”



Go to page 22 of your Writing Journal to record notes for the details you highlighted.

6. Share your highlights and notes with your partner. Did your partner find traits or evidence that you didn't?
7. Highlight the additional passages your partner found and record any additional character traits in your notes in the Writing Journal.
8. Together, come up with three key traits for Dr. Reed.




Go to page 23 in your Writing Journal to record the key traits for Dr. Reed.

**M** See page 96 for directions in Step M.


**N Lesson 5** (continued)


Benchmark: ELA.6.R.2.1


**Select Text:** Students use text details to develop a character profile for remaining members of the team and determine the author's point of view.


 Direct students to page 176 of the Student Edition.

 Divide students into groups.

 Each group member selects a different task force member to profile.

 Use the details about each task force member to decide what traits each member displays, and to predict if this team can work together on this challenge.

 Not all character traits are positive. If you find evidence of a negative character trait, add that as well.

 Students complete Activities 1–3 in the Student Edition.

Meeting the Team

**M**

**Lesson 5—Meeting the Team** (continued)

9. Complete the following with your partner.

- Review the details you highlighted that the author used to describe Dr. Reed.
- Review the key traits that you determined the author's description conveys.

10. Based on the way she presents and describes Dr. Reed, what do you think is the author's point of view (opinion) of Dr. Walter Reed? Share your thoughts in the class discussion.

- She presents him as a good choice to lead this investigation.
- She presents him as a poor choice to lead this investigation.
- Other

**N**

We have seen how the text shows us Dr. Reed's character traits. It's time to look at the new members of the task force:

- Dr. Carroll
- Dr. Lazear
- Dr. Agramonte

1. Choose one researcher to profile.

2. Highlight five details in paragraphs 6–15 of "Plans" on pages 119–120 that describe your assigned character.

3. Write a note in your Writing Journal for each detail you highlighted about your character.

- Identify the character trait the detail describes by asking yourself, "What does the detail reveal about who this person is?"

N



Go to page 24 of your Writing Journal and complete Activities 1 and 2 to record the notes about your character.

4. Share your highlights and notes with your group members.
5. Did your group members find traits or evidence that you didn't? Highlight the additional passages your group found and copy the character traits into a note in your Writing Journal.
6. Together, come up with three important traits for each character.



Go to page 25 of your Writing Journal and complete Activity 3 to record three traits for each character.

7. Based on the way the author presents and describes the character you chose, what is her point of view (opinion) of your research team member?
  - Dr. Carroll will be a strong member of the research team.
  - Dr. Carroll will not be a strong member of the research team.
  - Dr. Lazear will be a strong member of the research team.
  - Dr. Lazear will not be a strong member of the research team.
  - Dr. Agramonte will be a strong member of the research team.
  - Dr. Agramonte will not be a strong member of the research team.



**Writing Journal:** Students complete Activities 1 and 2 on page 24.



**On-the-Fly:** Circulate around the room to support students.



Students discuss responses in their groups.



Students work in groups to complete Activities 4–6 in the Student Edition.



**Writing Journal:** Students complete Activity 3 on page 25.



Discuss group responses.



When a non-fiction author such as Jurmain uses details to create a portrait of the individual that she is describing, she is doing three things:

- Giving the reader important factual information.
- Creating a mental portrait of them for her readers.
- Communicating her point of view of these people based upon her research and understanding.



Lead a class discussion using Activity 7 in the Student Edition.



Ask students to support their ideas with words and details the author includes in her description of each researcher.



**Exit Ticket:** Project.

15 min

### End of Lesson 5



### Differentiation: Step N

- **ELL(Dev):** For students having difficulty reading and ELL students who need additional support while identifying characterization details in the text, pair them with students who are assigned the same character.
- **ELL(Dev):** For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

### Before You Begin Lesson 6:

We highly recommend students have access to the digital lesson in order to evaluate evidence and information in the Evidence App in Steps P and R. Students will use the app in this lesson to collect and evaluate evidence. If using digital activities, manage print activities accordingly.



## O Lesson 6: Investigating Breakthroughs and Analyzing Evidence

**Read:** Students read to understand the findings of the bacteria experiments and put the key events in order.

Direct students to page 178 of the Student Edition.

**Play:** Audio for “Going Nowhere” and “The First Clue?”

Direct students to follow along with the audio in “Going Nowhere” and “The First Clue?”

**Writing Journal:** Students complete the statements on page 56.

Discuss responses.

## P Lesson 6 (continued)

Benchmark: ELA.6.R.2.4

**Read:** Students will uncover important details from the experiment and consider the findings.

Direct students to page 178 of the Student Edition.

We just read a complex section of text. As medical detectives, it is vital that we keep our ideas organized to understand how claims and/or arguments are supported. We will slow down, zoom in, and figure out what we know based on the facts.

Assign partners.

Partners complete Activity 1 in the Student Edition.

Discuss responses.

Partners complete Activity 2 in the Student Edition.

**Writing Journal:** Partners complete the chart in Activity 1 on page 27.

Discuss responses.

Ensure that all students understand the key steps and findings of the experiment.

Partners complete Activity 3 in the Student Edition.

**Writing Journal:** Partners answer question 2 on page 28.

## O Lesson 6—Investigating Breakthroughs and Analyzing Evidence

Have you ever felt like you're going nowhere? If you know this feeling, you should be able to empathize with Dr. Reed's team. Read on to learn more about their rough start.

Read “Going Nowhere” and “The First Clue?” on pages 121–124 as you listen to the audio.

Use information from the text to complete statements from “Going Nowhere” and “The First Clue?”.



In your Writing Journal, complete the sentences on the top of page 26.

P

1. What specific claim is being presented in the text? Highlight the sentence that explains the yellow fever theory that Dr. Reed's team is testing in “Going Nowhere” paragraph 3 on page 121.
2. How did the team investigate this theory? What did they learn? Use the information from the passage to trace how the resulting evidence supports or opposes the claim that *Bacillus icteroides* causes yellow fever. Complete the chart in the Writing Journal with this information.



Go to page 27 in your Writing Journal to complete the chart with your partner.

3. What does the evidence suggest about the different theories?



Go to page 28 in your Writing Journal and work with your partner to answer question 2.

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### Lesson 6 Materials

- Summarize Findings Projection
- Evidence app
- “Going Nowhere” and “The First Clue” Audio

### Differentiation: Step P

- *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.
- *ELL(Dev)*: For ELL students, you may want to review the verb tenses used in the if/then statements they'll encounter in two of the activities in this lesson.

P

**Summarize findings:**Hypothesis — **If** (restate theory), **then** (expected results).Results — (Statement of actual results); **therefore, the scientists will probably conclude** (restatement of the theory as true or false).

Use this format to help you explain how the resulting evidence supports or does not support the claim that *Bacillus icteroides* causes yellow fever in your responses in your Writing Journal.



Go to page 28 of your Writing Journal and complete Activities 3 and 4 with your partner.



Discuss responses.



What do you think is the most important thing that the team learned from these experiments?



Review the summarize findings information in the Student Edition.



You can use these sentence frames to explain how the evidence supports or does not support the claim that *Bacillus icteroides* causes yellow fever.



**Writing Journal:** Partners complete Activities 3 and 4 on page 28.



Students can add this information to the Evidence app if they have digital access.



Discuss responses.



Make sure students recognize that evidence from Pinar del Rio refutes the claim that yellow fever is passed by contact with contaminated clothing.
















How important were these findings? How does this change your scale?

12 min

**Q Lesson 6** (continued)

Benchmark: ELA.6.R.2.4

**Select Text:** Students will uncover important details found at Pinar del Rio and evaluate the new evidence.


-  Direct students to page 180 of the Student Edition.
-  Assign partners.
-  Partners complete Activities 1 and 2 in the Student Edition.
-  **Writing Journal:** Partners complete the chart on page 29.
-  Discuss responses.
-  Partners complete Activity 3 on page 180 of the Student Edition.
-  Discuss responses.
-  Partners complete Activity 4 on page 180 of the Student Edition.
-  **Writing Journal:** Partners answer question 2 on page 30.
-  Discuss responses.
-  **Writing Journal:** Students answer questions 3 and 4 on page 30.
-  Discuss responses.
-  Make sure students recognize that evidence from Pinar del Rio refutes the claim that yellow fever is passed by contact with contaminated clothing.

12 min

**R Lesson 6** (continued)

Benchmark: ELA.6.R.2.4

**Discuss:** Students will discuss the impact of their new evidence results.

-  Students complete this Step in the digital lesson with the Evidence app if they have digital access.

5 min

**Q****Lesson 6—Investigating Breakthroughs and Analyzing Evidence** (continued)

- Review paragraphs 6–15 from “The First Clue?” on pages 123–124.
- What observations do the scientists make about the prisoner who died of yellow fever at Pinar del Rio? What do they learn from this new evidence?



Go to page 29 of your Writing Journal to complete a chart of these observations with your partner.

- With your partner, decide if each of the following statements about the prisoner at Pinar del Rio is true or false.
  - Infected with yellow fever.
  - Died from yellow fever.
  - Recently near yellow fever patients.
  - Recently near infected bedding or clothing.



Go to page 30 in your Writing Journal and answer question 2 with your partner.

- Review the Summarize Findings information on page 179.



On page 30 of your Writing Journal, answer questions 3 and 4.

S

Here are the theories of yellow fever transmission:

- The bacteria *Bacillus icteroides* is the source of yellow fever transmission.
- Contaminated clothing is the source of yellow fever transmission.
- Mosquitoes are the source of yellow fever transmission.

After evaluating the team's current evidence, which theory of yellow fever transmission appears most supported by evidence?



Go to page 31 in your Writing Journal to explain two pieces of evidence in your response.

S

## Lesson 6 (continued)

Benchmarks: ELA.6.C.1.3, ELA.6.V.1.1,  
ELA.6.R.2.4

**Write & Share:** Students evaluate and explain which theory of transmission is most supported by the available evidence.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students complete the Writing Prompt on page 31.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Wrap-Up:** Project.



**Exit Ticket:** Project.

End of Lesson 6

## T Lesson 7: Rumors and Reality: Introducing Dr. Finlay

**Connect Text:** Students contrast 2 descriptions of Dr. Finlay's credibility to consider the influences of the author's choice of words.

Direct students to page 182 of the Student Edition.

Students complete Activities 1 and 2 on page 182 of the Student Edition.

Lead a discussion with Discussion Question 1.

Record a list of words and phrases on the board that students highlighted.

How important was Dr. Finlay's reputation in your assessment of his evidence for the mosquito theory?

Pay attention to the words the author uses to characterize Dr. Finlay in this next passage.

**Play:** Audio for "Bugs," paragraph 7.

Students complete Activities 3 and 4 in the Student Edition.

Share responses.

Write on the board words or phrases students highlighted next to the previous list created.

Lead a discussion with Discussion Question 2.

Was your sense of Dr. Finlay's credibility affected after reading both paragraphs?

How did opinions and rumors impact Finlay's credibility?

Students complete Activities 5 and 6 in the Student Edition.

**Writing Journal:** Students record notes on Dr. Finlay on page 32.

Students complete Activities 7 and 8 in the Student Edition.

Discuss responses.

## T Lesson 7—Rumors and Reality: Introducing Dr. Finlay

If someone called you crazy for doing something, would you still believe in what you were doing? What if lots of people called you crazy for 20 years? Join the U.S. team as they meet with Dr. Finlay and evaluate his mosquito theory for yellow fever.

1. Review "Feeding the Fishes," paragraph 7 on page 118 where Dr. Finlay and his theory are first described.
2. Highlight two words or phrases in paragraph 7 that give you a strong sense about the credibility of Dr. Carlos Finlay and his experiments.

**Discussion Question 1:** How credible does Dr. Carlos Finlay appear to be based upon this paragraph? Choose from the following:

- Not credible
- Somewhat credible
- Credible
- Very credible

3. Read along with the audio for "Bugs," paragraph 7 on page 125. Listen to the description of the team's first face-to-face meeting with Dr. Finlay.
4. Highlight two words or phrases in this paragraph that give you a strong sense about the character and credibility of Dr. Carlos Finlay.

**Discussion Question 2:** How credible does Dr. Carlos Finlay appear to be based upon this paragraph? Choose from the following:

- Not credible
- Somewhat credible
- Credible
- Very credible

5. Review "Bugs," paragraph 7 and highlight five details that describe Dr. Carlos Finlay.
6. Make notes on the details you highlighted. Identify the character trait each detail describes in your notes.



Go to page 32 in your Writing Journal to record notes on Dr. Carlos Finlay.

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### Lesson 7 Materials

"Bugs" Audio,  
paragraph 7

### Differentiation: Step T

- *ELL(Dev)*: Students having difficulty reading and ELL students may benefit from working in pairs for this highlighting activity.
- *ELL(Dev)*: If you choose to have students work in small groups for this activity, plan how you will assign the groups. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.

T


7. Read the quote below from “Feeding the Fishes,” paragraph 8.


“But, of course, what Reed thought didn’t matter. Science wasn’t about opinions or theories. It was about facts. And Reed’s job was clear. With the help of his team, he had to find the facts.”  
(Feeding the Fishes, 8)


8. How did others’ opinions impact your evaluation of Dr. Finlay’s credibility? Share your thoughts in the class discussion.


## U Lesson 7 (continued)


**Use Text as Referee:** Students slow down their reading to analyze and understand complex processes in informational texts.

 Direct students to page 184 of the Student Edition.


 With a clearer picture of who Dr. Finlay is, let's learn more about his mosquito theory.

 Students complete Activities 1 and 2 in the Student Edition.

 Discuss responses.

 **Writing Journal:** Students create a list in the activity on page 33.

 Assign partners.

 Partners complete Activity 4 in the Student Edition.

 Discuss responses.

## Rumors and Reality: Introducing Dr. Finlay

### U Lesson 7—Rumors and Reality: Introducing Dr. Finlay (continued)

1. Review the explanation of Dr. Finlay's mosquito theory in paragraphs 7–15 of “Bugs” on pages 125–126.
2. What is his theory? Share your answers in the class discussion.
3. Write a list to represent each stage of Finlay's theory of how a mosquito spreads yellow fever. Put the stages in order from first to last.



Go to page 33 in your Writing Journal to create this list.

4. Share your list with a partner. If there is a difference in your lists, use the text to determine which list represents the theory more accurately.



V

1. Review paragraph 16 of “Bugs” on page 126 to see how Lazear designs the experiment that will test Finlay’s mosquito theory.
2. Highlight the time-order words in yellow. Then, highlight each step of Lazear’s experiment in green.



Complete question 1 on page 34 of your Writing Journal.



Complete Activities 2–4 on pages 34–36 of your Writing Journal.

3. Create a comic strip showing the steps of Dr. Lazear’s experiment to test Dr. Finlay’s Mosquito Theory by matching captions to images.

V

## Lesson 7 (continued)

Benchmark: ELA.6.R.3.2

**Work Visually:** Students integrate information from the text and in a comic to develop a coherent understanding of the mosquito experiment.

S

Students complete Activities 1 and 2 on page 185 of the Student Edition.



**Writing Journal:** Students answer question 1 on page 34.



Discuss responses.



Sometimes the text provides details to understand a concept, but illustrations can also demonstrate a scene or idea that is difficult to put into words.

S

Students complete Activity 3 in the Student Edition.



**Writing Journal:** Students complete Activities 2–4 on pages 34–36.



Discuss responses.



**Wrap-Up:** Project.



**Exit Ticket:** Project.

12 min

8 min

End of Lesson 7


### Before You Begin Lesson 8:


Lesson 8 is a Flex Day. Select from a range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts. Please see instructions in the digital lesson.


## Lesson 9: The “Monster,” Mosquito, and Motivation


### The Monster and the Mosquito:


Students consider what it means to take a “soldier’s chance” as a volunteer and how this ties into character motivation.


 Direct students to page 186 of the Student Edition.


 **Play:** Audio for “Meeting the Monster,” paragraph 2 as students follow along in the text.


 It’s hard to imagine that something as common as a mosquito could be a source of this deadly disease.


 Students complete Activities 2 and 3 in the Student Edition.


 **Writing Journal:** Students answer question 1 on page 37.

 Discuss responses.

 Lead a discussion using Activity 4 in the Student Edition.

 Explain character motivation using the definition and examples in the Student Edition.

 Lead a discussion with the discussion questions on page 186 of the Student Edition.

 In these experiments some people are knowingly bitten by mosquitoes and others are using infected mosquitoes to bite others.

### The “Monster,” Mosquito, and Motivation

## W

## Lesson 9—The “Monster,” Mosquito, and Motivation

1. Read along with the audio in “Meeting the Monster,” paragraph 2 on page 115. Listen to the description of a patient with yellow fever.
2. Review the scientists’ thinking about being human volunteers in their own experiments in the following quote:  
“...if mosquitoes did carry the disease germs—a human volunteer bitten by an infected bug could get yellow fever and die of the disease. That was the risk. But all three doctors were prepared to face it. To fight the illness they were ready to take what Dr. Carroll later called ‘a soldier’s chances.’” (Bugs, 21)
3. What does Dr. Carroll mean by the phrase “a soldier’s chance”?



Go to page 37 in your Writing Journal and answer question 1.

### 4. Class Discussion Question:

Would you volunteer to let one of Lazear’s infected mosquitoes bite you?

Not a chance!	Probably not	Maybe	Absolutely!
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### What is motivation?

A character’s “motivation” is the reason behind their specific actions or decisions. A character does certain things based on their emotions, personality traits, and goals.

### Example:

What motivates Dr. Reed to go to Cuba to lead the yellow fever team?

- “Reed had dreamed of being able to do something big.” (Feeding the Fishes, 2)
- Something he “hoped” would alleviate human suffering. (Feeding the Fishes, 2)
- “Reed had hoped to make a major contribution while he did research...” (Feeding the Fishes, 2)

### Discussion Questions:

- What motivates someone to take a risk?
- What is important to Dr. Reed?
- What are Dr. Reed’s goals?



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## Lesson 9 Materials



Motivation projection



“Meeting the Monster”  
Audio, paragraph 2





## Lesson 9 (continued)

Benchmark: ELA.K12.EE.3.1

**Connect Text:** Students will identify and analyze details to explain their assigned doctor's motivation for allowing or placing the mosquito on Dr. Carroll's arm.



Direct students to page 187 of the Student Edition.



Assign students into two groups:

- Group 1: Dr. Lazear's motivation
- Group 2: Dr. Carroll's motivation



Assign partners within groups.



Partners complete Activities 1–4 for their assigned group on page 187 or page 188 of the Student Edition.



**Writing Journal:** Partners complete Activity 1 on the page corresponding to their group assignment (page 38 for Group 1 and page 40 for Group 2).



Partners complete Activity 5 in the Student Edition.



**Writing Journal:** Students complete the chart in Activity 2 on pages 38 and 39 or pages 40 and 41 as assigned.



**On-the-Fly:** Circulate around the room to support students.

24 min



Your teacher will assign you to one of the following groups:

**Group 1:** What motivates Lazear to let the mosquito bite Carroll?

**Group 2:** What motivates Carroll to let the mosquito bite him?

**Group 1 completes the following:** What motivates Lazear to let the mosquito bite Carroll?

Consider these questions:

- How strongly does Lazear believe in this theory?
- Does he believe the bite will lead to yellow fever?
- What other reasons might Lazear have for letting this happen? For example, are there personality traits or goals that influence Lazear's actions?

Work with a partner in your group to complete the following:

1. Review "I Have No Such Thing," paragraphs 1–12 on pages 127–128.
2. Select the detail from the text that introduces a reason why Dr. Lazear would choose to place an infected mosquito on Dr. Carroll's arm.
3. Find another detail from the book that illustrates why Lazear would let the mosquito bite Carroll.
4. Copy selected text from this passage into your Writing Journal, including the citation (example: Plans, 4).



Go to page 38 in your Writing Journal to record the pieces of the text you selected.

5. Work with a partner in your group to complete the chart with the evidence you have collected.



Go to pages 38–39 in your Writing Journal to complete your chart.



### Differentiation: Step X

Assign students to explore either Dr. Lazear's or Dr. Carroll's motivation for allowing the mosquito to bite Dr. Carroll. You may choose to allow students who are below grade level to select which person they want to explore.



### Differentiation: Step X

● *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.

**X** See previous page for directions in Step X.

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**X**

## Lesson 9—The “Monster,” Mosquito, and Motivation (continued)

**Group 2 completes the following:**

What motivates Carroll to let the mosquito bite him?

Consider these questions:

- How strongly does Carroll believe in this theory?
- Does he believe the bite will lead to yellow fever?
- What other reasons might Carroll have for letting this happen? For example, are there personality traits or goals that influence Carroll’s actions?

Work with a partner in your group to complete the following:

1. Review “I Have No Such Thing,” paragraphs 10–14 on page 128, and “Delirious,” paragraphs 1 and 2 on page 129.
2. Highlight the detail from the text that introduces a reason why Dr. Carroll would allow Dr. Lazear to place an infected mosquito on his arm.
3. Find another passage from the book that illustrates why Dr. Carroll would allow the mosquito to bite him.
4. Copy selected text from passage into your Writing Journal, including the citation (example: Plans, 4).



Go to page 40 in your Writing Journal to record the pieces of the text you selected.

5. Work with a partner in your group to complete the chart with the evidence you have collected.



Go to pages 40–41 in your Writing Journal to complete the chart.

Y

### Group 1 Discussion Question:

Based upon the evidence you collected, what is Dr. Lazear's key motivation for letting the mosquito bite Dr. Carroll?

### Group 2 Discussion Question:

Based on the evidence you collected, what is Dr. Carroll's key motivation for letting the mosquito bite him?

What is similar or different about Dr. Carroll's and Dr. Lazear's motivations?

Share your thoughts in the class discussion.

Z

Review "I Have No Such Thing," paragraphs 17–18 on page 128.

Choose one of the questions below to answer. Use evidence and details from the text to develop your claim:

**If he had known the results, would Dr. Lazear have allowed the mosquito to bite Dr. Carroll?**

**If he had known the results, would Dr. Carroll have let the mosquito bite him?**



Complete the Writing Prompt on page 42 of your Writing Journal.



### Differentiation: Step Z

● ELL(Dev), ■ Moderate:

Alternate Writing Prompt provides sentence starters.

Y

## Lesson 9 (continued)

**Discuss:** Lead a class discussion about what motivated Dr. Lazear's and Dr. Carroll's decisions.



Direct students to their responses for the last activity in the Writing Journal on pages 38–41.



Discuss both groups' findings.



Based upon the evidence you collected:

- what is Dr. Lazear's key motivation for letting the mosquito bite Dr. Carroll?
- what is Dr. Carroll's key motivation for letting the mosquito bite him?



What is similar or different about Dr. Carroll's and Dr. Lazear's motivations?

5 min

Z

## Lesson 9 (continued)

Benchmark: ELA.6.C.1.3

**Write & Share:** Students choose one prompt and develop a claim, citing textual evidence to support their analysis and inferences about the scientists' motivations behind their actions.



Direct students to page 189 of the Student Edition.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students respond to the Writing Prompt on page 42.



**Differentiation:** Digital PDF.




**On-the-Fly:** Circulate around the room to support students.




**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.


17 min


**Work Visually:** Students work in pairs to analyze how character traits for Dr. Lazear and Dr. Carroll are elaborated on in the text.


 Direct students to page 190 of the Student Edition.


 Assign partners.


 Partners complete Activity 1 in the Student Edition.


 Discuss responses.


 Lead a class discussion using Activity 2 in the Student Edition.

 Discuss the contrasting language used by each doctor in order to think about their motivations.

 Partners complete Activities 3 and 4 in the Student Edition.

 **Writing Journal:** Partners record notes in the chart on page 43.

 **Project:** Characterization Chart for students needing additional support to recall the types of characterization.

 Discuss responses.

 **Wrap-Up:** Project Poll 4.

 **Exit Ticket:** Project.

**End of Lesson 9**

## Lesson 9—The “Monster,” Mosquito, and Motivation (continued)

1. Dr. Lazear also allows a mosquito to bite another volunteer, Private William Dean. Do you think Dr. Lazear made the right choice in not telling Dean about the mosquito that had bitten Dr. Carroll before he became infected? Why or why not? Share your thoughts with a partner.

2. Share your thoughts to the following questions in the class discussion.

- What new information have we learned about these two doctors?
- How did their actions reveal new insights into their personalities?

3. Working with your partner, highlight any new details that you learned about Dr. Lazear and Dr. Carroll in “I Have No Such Thing,” paragraphs 1–18 on pages 127–129.

4. Write a note for each detail you highlighted and identify the character and character traits the detail describes with the chart in your Writing Journal.



Record your notes in the chart on page 43 of your Writing Journal.



B<sup>2</sup>

## Lesson 10—Heroic or Reckless?

A doctor's life is in danger! Read on to find out who it is and whether he will survive the monster known as yellow fever.

1. Follow along with the audio in Chapter 10 "Doctor, Are You Sick?," paragraphs 4–12 on pages 134–135.



Go to pages 44–45 in your Writing Journal and complete Activities 1–3.

2. Review the letter that Mabel Lazear wrote to Dr. Carroll on page 192.



Go to page 45 in your Writing Journal and complete Activities 4–6.

B<sup>2</sup>

## Lesson 10: Heroic or Reckless?

Benchmarks: ELA.6.R.2.3, ELA.6.R.3.3

**Read:** Students compare and contrast two authors' presentations of the infection and eventual death of Dr. Lazear to evaluate which presentation is more credible.



Direct students to page 191 of the Student Edition.



As we read about the mysterious circumstances surrounding Dr. Lazear's infection, notice the author's description of events and decide whether the infection was accidental or voluntary.



Students complete Activity 1 on page 191 of the Student Edition.



**Play:** Audio for "Doctor, Are You Sick?," paragraphs 4–12.



Direct students to follow along with the audio.



**Writing Journal:** Students complete Activities 1–3 on pages 44–45.



Discuss responses.



Students complete Activity 2 in the Student Edition.



**Writing Journal:** Students complete Activities 4–6 on page 45.



Students complete Activity 3 on page 193 of the Student Edition.



**Writing Journal:** Students complete the chart in Activity 7 on page 46.



Discuss responses.



Students complete Activity 4 in the Student Edition.



**Writing Journal:** Students complete Activities 8 and 9 on page 46.



Discuss responses.



Lead a class discussion for Activity 5 in the Student Edition.

15 min



### Lesson 10 Materials



Build the Case Projection



Build the Case Blank Projection



Quote from Text Projection



"Doctor, Are You Sick?" Audio, paragraphs 4–12



### Differentiation: Step B<sup>2</sup>

● *ELL(Dev)*: Ensure ELL students and students who are reading below grade level know the meaning of the words "accidental," "accidentally," "intentional," "intentionally," and any synonyms you may use to discuss these two concepts. Students will also need to understand the literal and figurative meanings of "guinea pig."

● *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.



## Lesson 10—Heroic or Reckless? (continued)

### Mabel Lazear's Letter to Dr. Carroll

My Dear Dr. Carroll,

Your kind letter and receipted bills received for which I write and thank you very much. I am so very anxious to know more about the circumstances as to how Dr. Lazear contracted yellow fever. In a note from General Wood yesterday he wrote that Dr. Lazear allowed a mosquito to bite his hand that had just bitten a yellow fever patient.

Is it possible Gen. Wood could be mistaken—much as I know Dr. Lazear loved his work, I can hardly think that he could have allowed his enthusiasm to carry him so far.

He had talked with me about his work, knowing that I took the greatest interest in it—I knew nothing about your having the fever or that it had again broken out so that the shock was more terrible than thing(sic) we could imagine. I suppose Dr. Lazear's idea of not telling me was to keep me from worrying. He was always so thoughtful where my comfort was concern (sic) that I cannot believe that he would have done anything so dangerous.

It will be the greatest favor if you will be so kind as to write to me and give me more particulars. Did he feel positive he would get well if he took the fever and did he know that he could not get well as soon as you did?

I wonder that I can ask such a favor of a stranger, but the people with whom Dr. Lazear worked seem very near. He had often spoken of you.

Please thank Mrs. Carroll for her kind message.

Hope I may know you better sometime. I feel I have not made myself very clear but it is almost impossible to write.

Again thanking you for the money order. Believe me. Very sincerely,

Mabel Lazear  
10th November



B<sup>2</sup>

3. Review paragraphs 1–23 of “Doctor, Are You Sick?” on pages 133–135.



Complete the chart in Activity 7 on page 46 in your Writing Journal to gather evidence as to whether Dr. Lazear was intentionally or accidentally infected.

4. Although Suzanne Jurmain and Mabel Lazear are both writing about Dr. Lazear’s infection and death, they present these events differently. Compare and contrast the way Suzanne Jurmain presents these events with the way Mabel Lazear presents them. What is similar and different about their writing?





Go to page 46 in your Writing Journal and complete Activities 8 and 9 to explain your comparison.


5. Do you believe that Dr. Lazear was infected with yellow fever accidentally? Share your thoughts in the class discussion.


## C<sup>2</sup> Lesson 10 (continued)


**Read:** Students review the author's suggestion that Dr. Lazear intentionally infected himself to consider: "Were Lazear's actions heroic or reckless?"

 Review the quote on page 194 of the Student Edition with students.


 Students complete Activity 1 in the Student Edition.


 **Writing Journal:** Students complete Activities 1–5 on page 47.


 Facilitate a four corners discussion.


 Direct students to choose a corner in the room that you have labeled with the 4 corresponding viewpoints below.

- Corner 1: "Accidental/Heroic"
- Corner 2: "Accidental/Reckless"
- Corner 3: "Intentional/Heroic"
- Corner 4: "Intentional/Reckless"

 Students complete Activities 2 and 3 in the Student Edition.

 **Project:** Visualization of "Build the Case: Heroic or Reckless" (blank version).

 A completed Build the Case projection is available for your reference in the digital lesson.

 Allow a spokesperson from each corner to explain their thinking and use details from the text to support their opinion.

## Heroic or Reckless?

### C<sup>2</sup> Lesson 10—Heroic or Reckless? (continued)

Read the following sentence from "Doctor, Are You Sick?"

"The whole thing was an accident, he said. And maybe that was true."

1. Review "Doctor, Are You Sick?," paragraphs 3–23 on page 134–135.

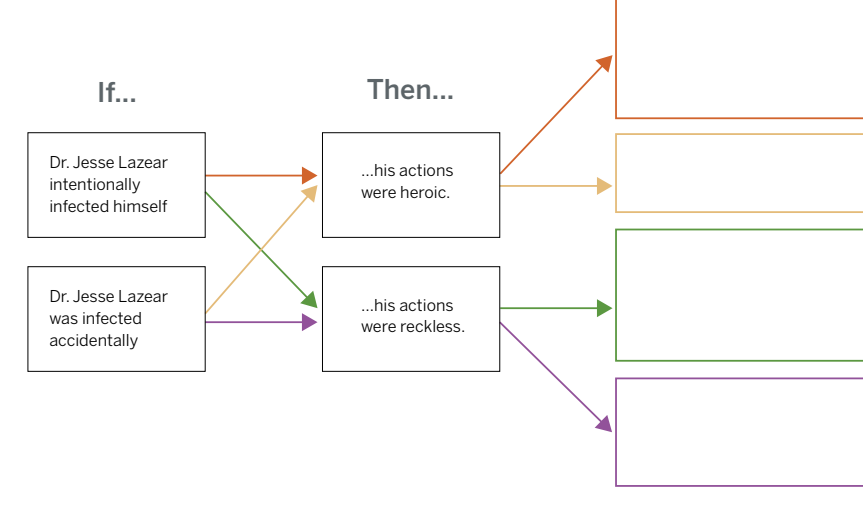


Go to page 47 of your Writing Journal and complete Activities 1–5.

2. Participate in the Four Corners Discussion by choosing a corner of the room that corresponds with your answers to the questions.
3. Share your evidence in the class discussion to assist your teacher in completing the following chart with the class.

### Build the Case

*Were Dr. Lazear's actions heroic or reckless?*



D<sup>2</sup>

1. Review "Doctor, Are You Sick?," paragraphs 27–30 on page 136.
2. Imagine you are Dr. Lazear in the hospital in 1900. Write a letter from his perspective to his wife, Mabel Lazear.



Go to page 48 of your Writing Journal to write the letter.

D<sup>2</sup>

## Lesson 10 (continued)

Benchmarks: ELA.K12.EE.6.1, ELA.6.C.1.2, ELA.6.R.2.3

**Write:** Students write a letter from Dr. Jesse Lazear to his wife, Mabel, using evidence they gathered to describe their understanding of events from Dr. Lazear's point of view.



Direct students to page 195 of the Student Edition.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students respond to the Writing Prompt on page 48.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Wrap-Up:** Project.



**Exit Ticket:** Project.

12 min

6 min

End of Lesson 10



### Differentiation: Step D<sup>2</sup>

● *ELL(Dev):* Alternate Writing Prompt provides step-by-step directions and sentence starters.

■ *Moderate:* Alternate Writing Prompt provides guiding questions and sentence starters.











### Before You Begin Lesson 11:

We recommend students have access to the digital lesson in order to to evaluate evidence and information in the Evidence App in Step E<sup>2</sup>. Students will use the app in this lesson to collect and evaluate evidence. If using digital activities, manage print activities accordingly.

## E<sup>2</sup> Lesson 11: Understanding the Risk

Benchmark: ELA.6.R.2.2

**Read:** Students will evaluate the evidence to identify the questions that remain unanswered and explain the need for further experiments.

- 12 min
-  Direct students to page 196 of the Student Edition.
  -  Students complete Activity 1 in the Student Edition.
  -  Assign partners.
  -  Students complete Activity 2 in the Student Edition.
  -  **Writing Journal:** Partners complete the chart on page 49.
  -  Discuss responses.
  -  Students complete Activity 3 in the Student Edition.
  -  **Writing Journal:** Students answer questions 2–4 on page 50.
  -  Students can add and evaluate evidence that supports or opposes the claim in the Evidence app if they have digital access.
  -  Lead a class discussion with Activity 4 in the Student Edition. Require students to use textual evidence in their responses.

### Understanding the Risk

E<sup>2</sup>

## Lesson 11—Understanding the Risk

Has yellow fever already tested your limits? Would you be willing to wear clothes and sleep in sheets that have the vomit, urine, and feces of yellow fever patients in order to prove what causes yellow fever? Read on to discover if anyone is willing to go this far to conquer yellow death.

Review the facts and remaining questions from the three yellow fever infections.

1. Read “Sorting it Out,” paragraphs 1–12 on pages 136–137.
2. With your partner, list the facts of the case and any remaining questions related to Dr. Carroll and Private William Dean in the chart in your Writing Journal.



Go to page 49 of your Writing Journal to complete the chart with your partner.

3. Why is Dr. Reed so eager to talk to Dean? Review “Sorting It Out,” paragraphs 3–12 on pages 136–137 to find out.






Answer questions 2–4 on page 50 of your Writing Journal.

4. **Discussion Question:** Work with a partner to answer this question

Based on Dr. Reed’s research and findings from the previous experiments, how do you predict he will adjust his experiments? Choose one of the following possibilities:

- Reed will include female test subjects since so far, all the subjects have been male.
- Reed will adjust the timing of the experiments.
- Reed will make sure that all test subjects stay in the experiment area.
- Reed will give each subject a ten-dollar gold coin for his trouble.

### Lesson 11 Materials

-  Chapter 13 (Photograph of consent form)
-  Risk Reward Projection
-  Quote Paraphrase Chart (located in Activity 4 of digital lesson)

F<sup>2</sup>

1. With a partner, review “Problems,” paragraphs 10–15 on pages 141–142. Be prepared to summarize the risks and rewards of volunteering for Dr. Reed’s experiments.
2. Reed proposes two experiments. Highlight the key details of these two experiments in paragraphs 10–15.
  - Testing the Mosquito Theory
  - Testing the Contaminated Clothing Theory
3. With your partner, brainstorm the risks and rewards of being a volunteer in the mosquito and clothing experiments. Think about:
  - How the volunteer’s health and life might be affected if they got sick
  - What the volunteer would receive or feel if they participated.



Go to page 51 of your Writing Journal to summarize your ideas in the chart.

F<sup>2</sup>

## Lesson 11 (continued)

Benchmark: ELA.6.R.2.2

**Read:** Students will consider and chart the risks and rewards of becoming a volunteer for Dr. Reed’s mosquito experiments.

- 12 min
- Direct students to page 197 of the Student Edition.
  - Assign partners.
  - Partners complete Activities 1–3 in the Student Edition.
  - Writing Journal:** Partners complete the chart on page 51.
  - Discuss responses.
  - Draw the chart on the board or other display area.
  - Record students’ answers in the chart and discuss the risks and rewards.



### Differentiation: Step E<sup>2</sup>

- *ELL(Dev)*: ELL students may benefit from a review of the modal verb “might,” as used in “Sorting it Out,” paragraph 2. Here the verb is used to cause doubt or to question, which will be useful knowledge for students as they chart questions in this activity.
- *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.
- *ELL(Dev)*: If struggling students and ELLs have had difficulty with the reading load, have them concentrate on the information in “Sorting It Out,” paragraphs 1 and 2 for this activity.



















### Differentiation: Step F<sup>2</sup>

Ensure that students understand the meaning of “risks” and “rewards” before beginning the activity.

- *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

**Read:** Students use supporting details to determine a central idea in Dr. Reed's consent form and decide if they would participate in the experiments.

-  Direct students to page 198 of the Student Edition.
-  You will take on the viewpoint of a volunteer for Dr. Reed's experiments. Before any volunteer could participate, each one was asked to sign a consent form.
-  The volunteers had to read the consent form carefully to understand the central ideas of the consent form and what they were signing up for.
-  Assign partners.
-  Partners complete Activity 1 in the Student Edition.
-  What does the consent form say is the goal of the experiments?
-  How much money does a volunteer receive to participate in the experiment? What if he contracts yellow fever?
-  What other condition does the volunteer agree to in the consent form?
-  Partners complete Activity 2 in the Student Edition.
-  **Writing Journal:** Students complete the chart and answer question 2 on pages 52–53.
-  **Project:** Quote Paraphrase Chart and write students' agreed upon paraphrases in the chart.
-  Lead a class discussion for Activities 3 and 4 in the Student Edition.
-  Students complete Activity 5 in the Student Edition.
-  **Writing Journal:** Students answer question 3 on page 53.
-  Discuss responses.
-  **Exit Ticket:** Project.

End of Lesson 11

## Lesson 11—Understanding the Risk (continued)

What do the volunteers consent to?

- Read the following passage below from Dr. Reed's Medical Volunteer Consent form from "We Are Doing It for Medical Science," page 64.

"The undersigned understands perfectly well that in case of the development of yellow fever in him, that he endangers his life to a certain extent but it being entirely impossible for him to avoid the infection during his stay in this island, he prefers to take the chance of contracting it intentionally in the belief that he will receive from the same Commission the greatest care and the most skillful medical service." (We Are Doing It for Medical Science, Consent Form, p. 64)

- With a partner, complete the following steps to paraphrase the passage above and explain what the volunteers consent to.

**Step 1:** Read the passage. Discuss the meaning of any vocabulary words you do not know with your partner.

**Step 2:** Individually, paraphrase each phrase of the passage in the chart in your Writing Journal. When you paraphrase, you rewrite the text in your own words. (Hint: Think about the key words you need to capture and what they mean.)

**Step 3:** What is the central idea of the consent form? Share your paraphrase with your partner to determine if you both captured the meaning of the quote. If the paraphrase doesn't make sense, revise it.



Go to pages 52–53 in your Writing Journal to paraphrase the passage in a chart and answer question 2.



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### Differentiation: Step G<sup>2</sup>

● *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.



3. What is the central idea of the consent form? Share your thoughts in the class discussion.
4. Would you sign Dr. Reed's consent form and join the medical volunteers?
  - Yes
  - No
5. Write an explanation of your answer to this question and include one detail from the consent form that supports your answer.



Go to page 53 in your Writing Journal to answer this question in Activity 3.

### Before You Begin Lesson 12:

Lesson 12 is a Flex Day. Select from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts. Please see instructions in the digital lesson.

### Before You Begin Lesson 13:

We highly recommend students have access to the digital lesson in order to evaluate evidence and information in Evidence App in Steps I<sup>2</sup> and J<sup>2</sup>. Students will use the app in this lesson to collect and evaluate evidence. If using digital activities, manage print activities accordingly.

## H<sup>2</sup> Lesson 13: Do You Consent? The Volunteers of Camp Lazear

**Discuss:** Students read about the men who volunteered to participate in the research at Camp Lazear, then sign fictional consent waivers to join Dr. Reed's experiments.

Direct students to page 200 of the Student Edition.

Ask students to look at the photograph and imagine what it would be like to take part in such a historic experiment. Review the text above the photograph with the class.

Read aloud "We Are Doing It for Medical Science," paragraphs 12–14 on page 142.

**Writing Journal:** Students answer question 1 on page 54.

Students complete Activity 2 on page 201 of the Student Edition.

**Writing Journal:** Students sign the consent form on page 54.

Create groups of 4 or 5 students.

Assign each group to work on either:

**Building 1 Volunteer Group:**  
Clothing Experiment

**Building 2 Volunteer Group:**  
Contaminated Air Experiment

Each group will closely read a passage, summarize the passage, and explain the results of the experiment conducted in their building.

### Do You Consent? The Volunteers of Camp Lazear

H<sup>2</sup>

## Lesson 13—Do You Consent? The Volunteers of Camp Lazear

Dr. Reed said a volunteer needed courage. Do you have this courage? What if you knew volunteering meant being closed up in a hot shack full of clothes and bedding stained with the vomit and feces of yellow fever victims for *three weeks*? The smell is so strong that the first volunteers run from the house, throwing up or gagging. Read on to discover the fate of the volunteers and the experiments.



1. Follow along as your teacher reads paragraphs 12–14 from "We Are Doing It for Medical Science" on page 145.



Answer question 1 on page 54 of your Writing Journal.

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### Lesson 13 Materials

- Summarize Findings Projection from Lesson 6
- Evidence app



### Differentiation: Step H<sup>2</sup>

Ensure students understand that "the major" (in paragraph 12) refers to Dr. Walter Reed, a major in the U.S. Army.

- *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.



## Lesson 13 (continued)

Benchmarks: ELA.6.R.2.2, ELA.6.C.1.4,  
ELA.6.V.1.1

**Write:** Students in each Volunteer Group explain the steps of the experiment using key terms and evaluate the results.



Allow students a few minutes to “create” their building and “begin” the experiment.



Students complete Activities 1 and 2 on page 201 of the Student Edition.



### Writing Journal:

Group 1 completes Activities 1 and 2 on page 55.  
Group 2 completes Activities 1 and 2 on page 57.



Discuss responses.



Lead a class discussion using Activity 3 on page 202 in the Student Edition.



### Writing Journal:

Group 1 completes Activities 3 and 4 on page 55.  
Group 2 completes Activities 3 and 4 on page 57.



### Project: Summarize Findings.

This projection is useful for both groups, although they will have different responses.



Students complete Activity 4 in the Student Edition.



When you are determining what the team learned, make sure your summary relies only on the particular details of the experiment and does not include personal opinions or judgements.



### Writing Journal:

Group 1 completes Activities 5 and 6 on page 56.  
Group 2 completes Activities 5 and 6 on page 58.



Discuss responses.



Students can use the Evidence app to record and evaluate their findings to support or oppose claims if they have digital access.

25 min

- Imagine you are signing up for this experiment. Dr. Reed asked every volunteer to sign a consent form before participating in the experiments.



Go to page 54 in your Writing Journal and sign the consent form.

Your teacher will assign you to one of the following groups:

**Building 1 Volunteer Group:** Clothing Experiment

**Building 2 Volunteer Group:** Contaminated Air Experiment

Your assigned group will work together to closely read a passage, summarize the passage, and explain the results of the experiment conducted in your building.



- Read the following text passages assigned to your group:

**Building 1 Volunteer Group:** Read “Testing Times,” paragraphs 1–8 on pages 145–146.

**Building 2 Volunteer Group:** Read “More Bugs,” paragraphs 17–24 on pages 148–149.

- What is the theory being tested for each group? How does the experiment test the theory? Complete Activities 1 and 2 to explain your theory.



Complete Activities 1 and 2 on page 55 in your Writing Journal to answer the questions.

Group  
1



Complete Activities 1 and 2 on page 57 in your Writing Journal to answer the questions.

Group  
2



### Differentiation: Step I²

● **ELL(Dev):** Plan how you will assign groups for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.

Group 1: If students have struggled with the reading load, have them concentrate on paragraphs 4–7 in this activity.

**I<sup>2</sup>** See previous page for directions in Step I<sup>2</sup>.

**I<sup>2</sup>**

## Lesson 13—Do You Consent? The Volunteers of Camp Lazear (continued)

3. Discuss your responses to the following questions in the class discussion:
- Did any volunteer become infected with yellow fever during this experiment?
  - According to the results of this experiment, is yellow fever passed by your theory?



Complete Activities 3 and 4 on page 55 in your Writing Journal to answer the questions.

Group  
1



Complete Activities 3 and 4 on page 57 in your Writing Journal to answer the questions.

Group  
2

4. Work together as a group to come up with a summary of the findings that the team learned throughout this experiment. You need to come to a consensus, or an agreement, on what the team learned. Make sure your summary relies only on the particular details of the experiment and does not include personal opinions or judgements.



Complete Activities 5 and 6 on page 56 in your Writing Journal to answer the questions.

Group  
1



Complete Activities 5 and 6 on page 58 in your Writing Journal to answer the questions.

Group  
2

J<sup>2</sup>

Your teacher will assign you a partner from the other group.

1. Using the summary and statements you created in your group in the last activity, you and your partner will conduct a medical survey about the volunteer experience.
2. Ask your partner to summarize their experiment and explain the role of the medical volunteers in their group's experiments at Camp Lazear.
3. Add the results of your partner's experiments to the medical survey in your Writing Journal.




Complete the medical survey with your partner's summary and explanation on page 59 of your Writing Journal.


J<sup>2</sup>


## Lesson 13 (continued)


Benchmark: ELA.6.R.2.2


**Discuss:** Students work in pairs to evaluate the contribution of the group of medical volunteers to discovering the cause of yellow fever.


 Direct students to page 203 of the Student Edition.


 Assign members from Group 1 a partner to pair up with from Group 2.

 Partners complete Activities 1–3 in the Student Edition.

 **Writing Journal:** Partners complete the medical survey on page 59.

 **Writing Journal:** Students record their partner's findings on page 60.

 Student can also use the Evidence app to add the results of their partner's experiment to their notes if they have digital access.

 **Wrap-Up:** Project Poll 1.

 **Exit Ticket:** Project.

**End of Lesson 13**

# The Physician's Pledge

- 1 AS A MEMBER OF THE MEDICAL PROFESSION:
- 2 I SOLEMNLY PLEDGE to dedicate my life to the service of humanity;
- 3 THE HEALTH AND WELL-BEING OF MY PATIENT will be my first consideration;
- 4 I WILL RESPECT the **autonomy** and dignity of my patient;
- 5 I WILL MAINTAIN the utmost respect for human life;
- 6 I WILL NOT PERMIT considerations of age, disease or disability, creed, ethnic origin, gender, nationality, political **affiliation**, race, sexual orientation, social standing, or any other factor to intervene between my duty and my patient;
- 7 I WILL RESPECT the secrets that are confided in me, even after the patient has died;
- 8 I WILL PRACTISE my profession with conscience and dignity and in **accordance** with good medical practice;
- 9 I WILL FOSTER the honour and noble traditions of the medical profession;
- 10 I WILL GIVE to my teachers, colleagues, and students the respect and gratitude that is their due;
- 11 I WILL SHARE my medical knowledge for the benefit of the patient and the advancement of healthcare;
- 12 I WILL ATTEND TO my own health, well-being, and abilities in order to provide care of the highest standard;
- 13 I WILL NOT USE my medical knowledge to violate human rights and civil liberties, even under threat;
- 14 I MAKE THESE PROMISES solemnly, freely, and upon my honour.

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**autonomy:**  
independence in  
thinking and acting

**affiliation:** official  
attachment or  
connection

**accordance:**  
agreement



•

**conscience:** sense of what is right and wrong

**violate:** break or act in disregard of

••

**consideration:** careful thought (when deciding)

**ethnic:** related to race, culture, or nation

**intervene:** interfere

**FOSTER:** help to develop

•••

**autonomy:** independence in thinking and acting

**affiliation:** official attachment or connection

**accordance:** agreement





Use the Vocab App to play mini games related to the words in this lesson.





**Lesson 14:****Did Dr. Reed Violate the Hippocratic Oath?**


**Read:** Students identify key information to complete comic strips that accurately show facts of transmission.


 Direct students to page 206 of the Student Edition.


 We will need to add one more element to your comic strip to ensure that your explanation of yellow fever transmissions by mosquitoes is complete.


 **Writing Journal:** Direct students to the comic strip they created in Lesson 7 on page 35.


 Read aloud “More Bugs,” paragraphs 2–6 on pages 146 and 147 in the Student Edition.


 Students complete Activities 1 and 2 on page 206.


 Discuss responses.


 Students complete Activities 3–5 in the Student Edition.


 Discuss responses.

 Students complete Activity 6 in the Student Edition.

 **Writing Journal:** Students update their comic strips on page 35.

 Students complete Activity 7 in the Student Edition.

 Assign partners. Students share their comic strip revisions with a partner.

 Updated comic strips should explain that a mosquito must bite a yellow fever victim within the first three days of the illness to carry the disease.

**Lesson 14—Did Dr. Reed Violate the Hippocratic Oath?**


Dr. Reed’s team has proven that yellow fever is caused by infected mosquitoes. But how sweet is this victory? His discovery will save thousands of lives, but at what cost? By the end of this lesson you will decide if it was all worth it or not.

1. Follow along in Chapter 15, paragraphs 2–6 on pages 146 and 147 as your teacher reads aloud.
2. After examining the data, what do Reed, Carroll, and Agramonte suggest has affected the length of time for yellow fever transmission? Share your thoughts in the class discussion.
3. Read paragraphs 56 and 72 in the Chapter Notes on page 154 in the Student Edition to determine how the timing of the infected mosquito bite would impact yellow fever transmission.
4. Read the table below:

Experiment	Date patient officially contracts yellow fever	Date Reed has mosquito bite patient	Date that mosquito bites healthy volunteer
Exp. No. 1	December 1, 1900	December 2, 1900	December 10, 1900
Exp. No. 2	December 2, 1900	December 6, 1900	December 17, 1900
Exp. No. 3	December 3, 1900	December 6, 1900	December 26, 1900
Exp. No. 4	December 4, 1900	December 15, 1900	December 19, 1900

5. Based on the information from the Chapter Notes, which experiment is most likely to result in a patient transmitting yellow fever to a volunteer? Discuss your thoughts in the class discussion.

**Lesson 14 Materials**

 Hippocratic Oath Charts

**Differentiation: Step K<sup>2</sup>**

- *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.
- *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

K<sup>2</sup>


6. Based on the information in the Chapter Notes and in the table provided, update your Mosquito Transmission comic strip to accurately reflect the number of days required to successfully transmit yellow fever from patient to mosquito to volunteer.





Go to page 35 in your Writing Journal and update the comic strip you created in Lesson 7.


7. When you are finished, share your work with your partner to confirm that you both understand and are representing the accurate timing for the transmission of yellow fever in your comic strips.


**Paraphrase:** Students will read and paraphrase the Hippocratic oath to understand its meaning in their own words.


 We are going evaluate the methods that Dr. Reed used during his experiments.


 Read aloud the Hippocratic Oath on page 204 of the Student Edition.


 Students complete Activities 1–3 on page 208 of the Student Edition.


 Lead a class discussion for Activity 3 in the Student Edition.


 Assign pairs or groups of three.


 Assign each group two sections of the oath to paraphrase. Sections are listed on page 208 of the Student Edition.


 Students complete Activity 4 in the Student Edition.


 **Writing Journal:** Students complete two sections of the chart on pages 61 and 62.

 Students complete Activity 5 in the Student Edition.

 **Project:** Hippocratic Oath Chart.

 Fill in the projected chart with paraphrases shared by groups.

 Discuss which paraphrase comes closest to the meaning of the original text.

 Students should complete their entire paraphrase chart during the discussion.

## Lesson 14—Did Dr. Reed Violate the Hippocratic Oath? (continued)

The Hippocratic oath is an ancient and very important document. The modern Hippocratic oath is a pledge that medical students make when they graduate from medical school and become doctors.

1. Follow along on page 204 as your teacher reads aloud the pledge.
2. Highlight any words or phrases that you do not understand.
3. What is the Hippocratic oath? Share your thoughts in the class discussion.

Your teacher will assign you to a group or partner. Your group will be assigned two of the following sections to paraphrase:

- 1 and 2
  - 3 and 4
  - 5 and 6
  - 7 and 8
  - 9 and 10
  - 11 and 12
4. With your group or partner, paraphrase the two sections of the Hippocratic oath that you were assigned.



Go to pages 61 and 62 of your Writing Journal to paraphrase your section with your group or partner.

5. Share your paraphrases with the class.

During the class discussion, add paraphrases for the other sections of the oath to your chart.



### Differentiation: Step L<sup>2</sup>

Ensure that students understand the terms “oath” and “pledge” at the beginning of the activity.

- *ELL(Dev)*: Plan how to assign groups for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.

M<sup>2</sup>

### Main Points of the Hippocratic Oath

Help the World Medical Community

- Doctors show respect to those who have passed on medical knowledge, and share their medical knowledge with the next generation.

Respect the Individual Patient

- Respect is given to the patients.

Do No Harm

- Doctors treat patients to the best of their abilities to prevent unnecessary pain and suffering.

1. **Discussion Question:** Based upon your understanding of the Hippocratic oath, do you believe that Dr. Reed kept his promise during his experiments to discover the cause of yellow fever?
  - Completely
  - Mostly, with a few exceptions
  - Not really
  - Not at all

Work with a partner to complete the following:

2. Review paragraphs 1–12 from “More Bugs” on pages 146–147 that describe Dr. Reed’s experiment and his assembly of volunteers.
3. Highlight two pieces of evidence in paragraphs 1–12 that show to what extent Dr. Reed followed the Hippocratic oath.



Go to pages 63–64 of your Writing Journal to complete Activities 1–7 with your partner.

4. Do you think Reed did or did not uphold the Hippocratic oath? If you were in a debate, what would your strongest argument be for your claim?



On page 64 of your Writing Journal, complete Activity 8 to explain your strongest argument.

M<sup>2</sup>

## Lesson 14 (continued)

Benchmarks: ELA.K12.EE.4.1, ELA.6.R.2.4

**Connect Text:** Students evaluate Dr. Reed’s experiments to determine whether there is evidence that he met the Hippocratic oath or not.

- Direct students to page 209 of the Student Edition.
- Review the 3 main points of the Hippocratic oath.
- Lead a discussion using question 1 in of the Student Edition.
- Work with the text to find evidence to confirm your answer.
- Assign partners.
- Partners complete Activities 2 and 3 in the Student Edition.
- Writing Journal:** Partners complete Activities 1–7 on pages 63–64.
- On-the-Fly:** Circulate around the room to support students.
- Discuss responses.
- Students complete Activity 4 on page 209 of the Student Edition.
- Writing Journal:** Students complete Activity 8 on page 64.
- Discuss responses.
- Wrap-Up:** Project Poll 1.
- Exit Ticket:** Project.

15 min

8 min

End of Lesson 14



### Differentiation: Step M<sup>2</sup>

- **ELL(Dev):** Ensure that struggling students and ELL students understand the vocabulary and meaning of each of the three main points of the Hippocratic oath.
- **ELL (Dev):** Plan how to assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.

# Yellow Fever Circles Brazil's Huge Cities

<sup>1</sup> By Shasta Darlington and Donald G. McNeil Jr.

<sup>2</sup> March 5, 2018

<sup>3</sup> SÃO PAULO — “Good morning!” a loudspeaker blared recently in the working class São Paulo suburb called Jardim Monte Alegre. “We’ve got your yellow fever vaccine, and today we’re going house to house! You better wake up because mosquitoes never sleep!”

<sup>4</sup> Twenty health workers piled out of cars. Though they laughed and chatted with locals, their mission was deadly serious.

<sup>5</sup> Brazil is suffering its worst outbreak of yellow fever in decades. The virus, which kills 3 percent to 8 percent of those who are infected, is now circling the megacities of Rio de Janeiro and São Paulo, threatening to become this country’s first-blown urban epidemic since 1942.

<sup>6</sup> Although there have been only 237 deaths since the hot season began, the fatality rate will explode if the virus reaches the slums and the clouds of *Aedes aegypti* mosquitoes swarming there.

<sup>7</sup> *A. aegypti*—known for centuries as the fearsome “yellow fever mosquito”—is also the chief spreader of **Zika**, **dengue** and **chikungunya**. It breeds in drinking water barrels and street garbage puddles, hides in the dark corners of houses and often bites several humans before laying eggs.

<sup>8</sup> To head off a catastrophe, health officials are struggling to vaccinate 23 million people. But the effort has been slowed by what critics call a series of government missteps and the spread of false rumors about the vaccine.

<sup>9</sup> “When they stopped coming to us, we started going to them,” said Nancy Marçal Bastos, health and sanitation director for northern São Paulo. “People have a lot of excuses for why they haven’t gotten the vaccine yet, but when we show up, it’s usually easy to convince them.”

<sup>10</sup> Toting coolers full of vaccines, health workers stop in the corner bar and the local gym, demanding: “Who hasn’t been vaccinated yet? Line up!” The workers jab extended arms and fill out forms with surprising speed, then start moving house to house.

<sup>11</sup> The challenges are daunting.

<sup>12</sup> In early 2016, the yellow fever virus broke out of its usual pattern: limited spread by forest mosquito species from monkeys to loggers, hunters, farmers and other residents of the Amazon basin. Instead, the virus began moving south and east, following forest **corridors** inhabited by monkeys toward the

**Zika:** virus causing birth defects

**dengue:** deadly fever

**chikungunya:** viral fever

**corridors:** areas between habitats of similar wildlife

big coastal cities and triggering a public health emergency...

- <sup>13</sup> Last year, it did not quite reach the cities—cases faded out by July as cooler weather set in. Global health authorities sighed with relief, hoping intense vaccination efforts would snuff the outbreak.
- <sup>14</sup> But that didn't happen, said Dr. Sylvain Aldighieri, chief of epidemic response for the Pan American Health Organization.
- <sup>15</sup> "There was lab-confirmed transmission during the winter," he said. "So the amount of virus around at the beginning of the summer was already huge."
- <sup>16</sup> The **resurgent** virus is now lunging forward more than a mile a day, he said, and efforts to stop an epidemic have become a race between the virus and the vaccinators.
- <sup>17</sup> This year's caseload is 26 percent higher than at this time last year, and with more hot, rainy months ahead, the figure is destined to increase...
- <sup>18</sup> Brazil makes its own vaccine through a **subsidiary** of its Oswaldo Cruz Foundation, and much of this year's chaos could have been **averted** if the government had acted faster, critics said...
- <sup>19</sup> "Brazil's public health response was very delayed," said Dr. Karin A. Nielsen, an infectious disease expert at the University of California, Los Angeles, who does research in Brazil...
- <sup>20</sup> Dr. Jessé Reis Alves, a travel medicine specialist here, said the vaccination campaign should have been launched "in a calm moment between outbreaks." Instead, he said, "they waited for a new outbreak."
- <sup>21</sup> In September, vaccinations were given to people living around forests near São Paulo where dead monkeys were found; the suburbs were targeted only in November.
- <sup>22</sup> Initially, long lines formed at clinics, and 85,000 shots were given in one weekend. Then, on Facebook, YouTube and other social media platforms, anti-vaccine activists—who previously found little footing in Brazil—began spreading terrifying rumors.
- <sup>23</sup> "Some people began trashing the vaccine, saying, 'It's going to kill you,'" said Dr. Ernesto T.A. Marques Jr., an expert in mosquito-borne diseases at the University of Pittsburgh. "It was picked up in the media."
- <sup>24</sup> The vaccine, invented in the 1930s, is highly effective—one dose normally provides lifetime protection. But it is not harmless. It cannot be given to newborns or anyone with a **compromised** immune system. It is given to people older than 60, pregnant women, or children younger than 8 months only when the risk of infection is high.
- <sup>25</sup> About one recipient in 100,000 suffers a dangerous reaction like jaundice, hepatitis or encephalitis, Dr. Marques said, and about one in a million dies. "If

**resurgent:**  
increasing after  
being inactive

**subsidiary:**  
supporting  
organization

**averted:** avoided

**compromised:**  
weakened

you vaccinate 30 million people, you'll get about 30 deaths," he said.

<sup>26</sup> But if yellow fever infected 30 million people, two million could die.

<sup>27</sup> So, with the disease moving rapidly forward, health authorities announced that they hoped to inoculate 95 percent of the population in 77 cities and towns in the virus's path—a total of 23 million people, including 12 million in this city alone.

<sup>28</sup> But "they didn't have 12 million shots to give us," said Dr. Wilson M. Pollara, São Paulo's health secretary. "So we're doing it in phases—two million at a time."

<sup>29</sup> The global vaccine stockpile, overseen by the World Health Organization, normally contains only six million doses, made by only four manufacturers, including the Cruz foundation.

<sup>30</sup> But Brazil has scaled up its production to about 5 million doses per month and will soon be able to double that, said Dr. William Perea, the W.H.O.'s epidemic control coordinator...

<sup>31</sup> Meanwhile, to stretch the vaccine it initially had on hand, Brazil gave out one-fifth doses. That provides protection for at least a year and can be used in emergencies, the W.H.O. says...

<sup>32</sup> "I don't think there were mistakes or delays," said Dr. Renato Vieira Alves, the ministry's **communicable** disease coordinator. "You can't launch new vaccination campaigns in an instant."

<sup>33</sup> While the caseload is higher than last year's, it is only a fraction of the population at risk, he argued.

<sup>34</sup> "Most of these new cases are occurring in areas where, until now, we didn't recommend immunization," he said.

<sup>35</sup> To overcome suspicion of the vaccine and frustration with long lines at clinics, vaccinators have begun going door-to-door or using tents shifted from one neighborhood to another. There, they hope face-to-face chats will succeed where other efforts have failed.

<sup>36</sup> Lucia Elena de Paula, 36, explained her fears to a nurse, saying, "I saw a video on WhatsApp with a girl who said she was paralyzed after taking the vaccine."

<sup>37</sup> But after a few soothing words from a staff member, she agreed to get the shot.

<sup>38</sup> After dragging her 10-year-old grandson into a gym where the vaccines sat on an exercise bench, Aparecida Caldeira, 61, explained why she had hesitated.

<sup>39</sup> "When we went to the clinic in January, the lines were just too long," she said. "I'm so grateful they came here. But that's just typical in Brazil—waiting to do everything at the last minute."

Shasta Darlington reported from São Paulo, and Donald G. McNeil Jr. from New York.

**communicable:**  
contagious

•

**logger:** lumberjack, someone who chops trees

**cases:** instances of infection

**snuff:** extinguish, stop

**activists:** those who fight for a cause

**recipient:** one who receives

••

**suburb:** neighborhood outside the city

**piled out:** got out clumsily

**megacities:** very large cities

**circling:** moving through

**fatality:** death

**slums:** rundown areas where very poor live

**catastrophe:** disaster

**Toting:** carrying

**basin:** deep eroded areas of Earth's surface

**daunting:** overwhelming

**transmission:** act of spreading

**lure:** something that attracts or draws

**sector:** area / section

**footing:** established position

**stockpile:** stored supply

**replenished:** refilled

•••

**Zika:** virus causing birth defects

**dengue:** deadly fever

**chikungunya:** viral fever

**corridors:** areas between habitats of similar wildlife

**indicator:** way to determine

**resurgent:** increasing after being inactive

**subsidiary:** supporting organization

**averted:** avoided

**compromised:** weakened

**communicable:** contagious



Use the Vocab App to play mini games related to the words in this lesson.



## N<sup>2</sup> Lesson 15: The Yellow Fever Challenge Today

**Introduce:** Students use non-fiction text characteristics and features to preview the article and prepare to analyze the key ideas.

We are going to use a newspaper article to investigate a current issue happening with yellow fever. Let's review some of the source information about the article before we read it.

Direct students to the article "Yellow Fever Circles Brazil's Huge Cities" on page 210 of the Student Edition.

Students complete Activities 1–3 on page 214 of the Student Edition.

Lead a class discussion using Activity 3 in the Student Edition.

Use a map if needed to help students understand the location of the article.

Students complete Activity 4 in the Student Edition.

**Writing Journal:** Students answer the question on page 65.

Discuss responses.

## O<sup>2</sup> Lesson 15 (continued)

Benchmark: ELA.6.R.2.1

**Connect Text:** Students analyze how the structure and features of the opening paragraphs identify the main idea and establish the mood.

Newspaper reporters quickly draw their readers into their writing and present the key idea they will develop in the article.

Read aloud the first five paragraphs of the article on page 210 of the Student Edition.

Students complete Activities 1 and 2 on page 214 of the Student Edition.

Discuss responses.

Students complete Activities 3 and 4 in the Student Edition.

Lead a class discussion using Activity 4 in the Student Edition.

## The Yellow Fever Challenge Today

N<sup>2</sup>

## Lesson 15—The Yellow Fever Challenge Today

Yellow fever continues to occur in countries around the world in spite of scientific breakthroughs. As more people move into large cities, the potential for an outbreak is as real as ever. What are some key causes of these new outbreaks, and what can be done to avoid a deadly outcome?

1. Turn to the article "Yellow Fever Circles Brazil's Huge Cities" on page 210.
2. Review the article's source information.
3. Class Discussion:
  - What is the headline of the article?
  - Where was the newspaper article written from (its dateline)?
  - When was this article published?
  - What is the source of the article?
  - Is the source credible?
4. What do you predict the article is about?



Go to page 65 of your Writing Journal to write your prediction.

O<sup>2</sup>

1. Follow along as your teacher reads paragraphs 1–5 of "Yellow Fever Circles Brazil's Huge Cities" on page 210.
2. Which paragraph do you think contains the central idea of the article? Share your thoughts in the class discussion.
3. Highlight three verbs in paragraphs 1–5 that the writer uses to describe the outbreak of yellow fever.
4. Based on just these verbs, how serious does the threat of yellow fever feel to the reader? Share your thoughts in the class discussion.

1	2	3	4	5	6
Easily defeated					Deadly serious



214 Mysteries & Investigations • Lesson 15

## Lesson 15 Materials

No materials.









## Differentiation: Step O<sup>2</sup>

• **ELL(Dev):** For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.



**P<sup>2</sup>** Lesson 15 (continued)

**Connect Text:** Students identify the 3 causes the article presents for the yellow fever threat in Brazil.

-  Direct students to page 215 of Student Edition.
-  Read aloud paragraphs 6–10 from the article “Yellow Fever Circles Brazil’s Huge Cities” on page 210.
-  Students complete Activities 1 and 2 in the Student Edition.
-  Lead a class discussion using Activity 3 in the Student Edition.
-  Students complete Activities 4 and 5 in the Student Edition.
-  Discuss responses.

8 min

1. Follow along in paragraphs 6–10 on page 210 as your teacher reads aloud.
2. Look at the following quote from the article:  
“To head off a catastrophe, health officials are struggling to vaccinate 23 million people.” (6)
3. Based on the image below of yellow fever that was presented in the article, what do you think “catastrophe” means? Share your thoughts in the class discussion.
4. Highlight the three main causes of the current threat of a yellow fever outbreak in Brazil, according to the article.
5. Based on the information in paragraph 10, which image below best illustrates the “unusual” movement of the yellow fever virus in 2016? Share your response in the class discussion.



### Differentiation Step P<sup>2</sup>

- *ELL(Dev)*: For your *ELL(Dev)* students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text
- *ELL(Dev)*: Plan how you will assign pairs for this activity. *ELL* students should be assigned to work with non-*ELL* students or *ELL* students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.



## Lesson 15 (continued)

Benchmark: ELA.6.R.2.1

**Introduce:** Students analyze how particular features of a newspaper article fit into the overall structure of the text and contribute to the development of ideas.

Read aloud Writing Techniques That Bring a Topic to Life in the Student Edition.

Direct students to follow along as you read.

Let's focus on some of the quotations the writer uses to make an impact.

Assign pairs.

Partners complete Activity 1 in the Student Edition.

**Writing Journal:** Partners answer question 1–3 on page 66.

Discuss responses.

Partners complete Activity 2 in the Student Edition.

**Writing Journal:** Partners answer questions 4–6 on page 67.

Discuss responses.

## The Yellow Fever Challenge Today



## Lesson 15—The Yellow Fever Challenge Today (continued)

### Writing Techniques That Bring a Topic to Life

- Descriptive and sensory details that create an image in the reader's mind
- A story that captures the reader's attention
- Specific words or phrases that shape the reader's thinking
- Facts and numbers that make a strong impression
- Quotations that make an impact

One technique that writers use to bring a topic to life is including quotations that make an impact.

1. Read the following passage to analyze how the writer uses a quote to develop and refine the story of the yellow fever outbreak in Brazil.

### Passage One:

SÃO PAULO — “Good morning!” a loudspeaker blared recently in the working class São Paulo suburb called Jardim Monte Alegre. “We’ve got your yellow fever vaccine, and today we’re going house to house! You better wake up because mosquitoes never sleep!” (3)

Twenty health workers piled out of cars. Though they laughed and chatted with locals, their mission was deadly serious. (4)



Go to page 66 in your Writing Journal and answer questions 1–3 with your partner.

2. Read the following passage to analyze how the writer uses quotes to develop and refine the story of the yellow fever outbreak in Brazil.

### Passage Two:

“I don’t think there were mistakes or delays,” said Dr. Renato Vieira Alves, the ministry’s communicable disease coordinator. “You can’t launch new vaccination campaigns in an instant.” (32)

While the caseload is higher than last year’s, it is only a fraction of the population at risk, he argued. (33)

“Most of these new cases are occurring in areas where, until now, we didn’t recommend immunization,” he said. (34)



Go to page 67 in your Writing Journal and answer questions 4–6 with your partner.



R<sup>2</sup>

1. Follow along in paragraphs 10–37 of the article on pages 210–212 as your teacher reads aloud.

Newspaper articles often use quotes to communicate information or illustrate ideas.

2. Read the following quote: “Most of these new cases are occurring in areas where, until now, we didn’t recommend immunization...” (32)

Imagine you are a group of World Health Organization workers. It is your job to understand and prevent the spread of deadly diseases.



Go to page 68 of your Writing Journal and answer question 1.

3. With your group, discuss the three causes of the current threat of a yellow fever outbreak in Brazil cited in the article.
4. As a group, select one of the following causes to focus on:
  - Government missteps
  - False rumors
  - The changing pattern of the virus
5. Use the information in the article to complete the chart on page 69 of your Writing Journal with your group.



Go to page 69 in your Writing Journal. With your group, complete the chart in Activity 2 and answer question 3 on page 70.

6. Collaborate with your group to propose one possible solution for the cause you researched. Be prepared to share your possible solution in the class discussion.

The Secret of the Yellow Death 217



### Differentiation: Step R<sup>2</sup>

● *ELL(Dev)*: For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

R<sup>2</sup>

## Lesson 15 (continued)

Benchmark: ELA.6.R.2.1

**Read:** Students will select and investigate one cause in the article to summarize the information presented and propose a solution.

Read aloud paragraphs 10–37 of the article on pages 210–212 of the Student Edition.

Let’s look at how quotes can be used to add information or illustrate ideas.

Students complete Activities 1 and 2 on page 217 of the Student Edition.

**Writing Journal:** Students answer question 1 on page 68.

Discuss responses.

Assign students into groups of 3 or 4.

Students complete Activity 3 in the Student Edition.

You will work in groups. Choose one of the three causes of yellow fever outbreak described in the article to learn about and summarize.

Review the choices students can selected from in Activity 4 in the Student Edition.

Use the article as your source of information. Think about how quotes in the article provide information for each cause.

Students complete Activities 4 and 5 in the Student Edition in groups.

**Writing Journal:** Students complete Activities 2 and 3 on pages 69–70.

Students complete Activity 6 in the Student Edition with their group.

Ask each group to share their explanation of the cause they researched. Other groups with the same cause can share whether they found the same information.

Ask students to present their solutions and explain how their solution will prevent the spread of the disease.

**Wrap-Up:** Project.

**Exit Ticket:** Project.

End of Lesson 15

# “The Speckled Band”



*by Sir Arthur Conan Doyle*

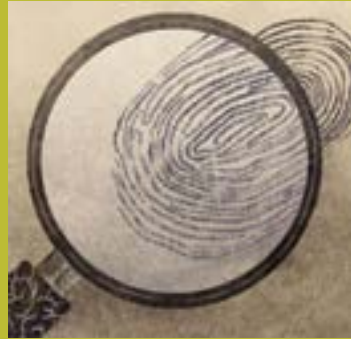
In “The Speckled Band” (1892), students will meet Sherlock Holmes, an adult who never outgrew a childish love of adventure and delight in showing off. Sherlock Holmes’s popularity with readers has not diminished since he first appeared, as countless TV and movie adaptations—and continuing book sales—demonstrate.

## Sub-Unit 3



### Lesson 1:

“...there are  
widespread  
rumours...”



### Lesson 2:

“I am all attention,  
madam.”



### Lesson 3:

“We shall see if the  
inside throws any  
light...”



### Lesson 4:

What Does the  
Furniture Say?



### Lesson 5:






Which Clues Does  
Holmes Use?



### Lesson 6:

Flex Day 4

# Sub-Unit 3 at a Glance

Lesson Objective	Reading
<p><b>Lesson 1: “...there are widespread rumours...”</b></p> <p><b>Reading:</b> Students will analyze lines of text as clues to what the story is about. Students will work together to combine their clues with other clues to predict what might happen in the plot of the story.</p> <p><b>Audio:</b></p> <ul style="list-style-type: none"> <li> Making a Prediction: The Speckled Band</li> <li> Introducing Sherlock Holmes</li> </ul>	<ul style="list-style-type: none"> <li>• “The Speckled Band” (1–94)</li> <li>• <b>Solo:</b> “The Speckled Band” (1–94)</li> </ul>
<p><b>Lesson 2: “I am all attention, madam.”</b></p> <p><b>Reading:</b> Students will identify details of Sherlock’s behavior, dialogue, or actions that show he is suspicious of something. Students will then make a list of those details that aroused his suspicion.</p> <p><b>Writing:</b> Students will make a claim about the details Holmes finds suspicious and develop textual evidence to support their claim.</p>	<ul style="list-style-type: none"> <li>• “The Speckled Band” (1–194)</li> <li>• <b>Solo:</b> “The Speckled Band” (95–194)</li> </ul>
<p><b>Lesson 3: “We shall see if the inside throws any light...”</b></p> <p><b>Reading:</b> Students will read closely to accurately map details about the setting highlighted in Doyle’s description, then use textual evidence to identify which of these details will be key to solving the mystery.</p> <p><b>App:</b></p> <ul style="list-style-type: none"> <li> Scene of the Crime: Sherlock Holmes app</li> </ul> <p>We highly recommend that students have access to the digital lesson in order to use the Scene of the Crime: Sherlock Holmes app.</p> <p>This lesson is digital only and does not appear in print. However, please make sure that students complete the Lesson 3 Solo before moving on to Lesson 4.</p>	<ul style="list-style-type: none"> <li>• “The Speckled Band” (95–251)</li> <li>• <b>Solo:</b> “The Speckled Band” (195–251)</li> </ul>
<p><b>Lesson 4: What Does the Furniture Say?</b></p> <p><b>Reading:</b> Students will closely read the end of the story to identify which setting details Holmes used to solve the crime, then revise their “maps” to accurately match Holmes’s description of the clues to the crime setting.</p> <p><b>Speaking &amp; Listening:</b> Students will share and compare their room layouts in pairs to discuss and defend their layout and quote choices.</p> <p><b>Audio:</b></p> <ul style="list-style-type: none"> <li> The Adventure of the Speckled Band - The Ending</li> </ul> <p><b>App:</b></p> <ul style="list-style-type: none"> <li> Scene of the Crime: Sherlock Holmes app</li> </ul> <p>We highly recommend that students have access to the digital lesson in order to use the Scene of the Crime: Sherlock Holmes app.</p>	<ul style="list-style-type: none"> <li>• “The Speckled Band”</li> <li>• <b>Solo:</b> “The Speckled Band” (33–55)</li> </ul>

## Writing Prompt

## Benchmark Stack

No analytical writing prompt.

**ELA.6.R.1.1**

ELA.K12.EE.2.1

ELA.K12.EE.4.1

ELA.6.R.3.2

ELA.6.C.1.3

ELA.6.V.1.3

What details about Helen and her story does Holmes think might be suspicious? How do you know he finds them suspicious? Use your notes from the previous activity and textual evidence to support your answer.

**ELA.6.R.1.1**

**ELA.6.C.1.4**

ELA.K12.EE.1.1

ELA.K12.EE.3.1

ELA.6.V.1.3

No analytical writing prompt.

**ELA.K12.EE.3.1**

ELA.K12.EE.4.1

ELA.6.R.1.1

ELA.6.R.1.2

ELA.6.V.1.1

ELA.6.V.1.3

No analytical writing prompt.

**ELA.K12.EE.1.1**

ELA.K12.EE.4.1

ELA.6.R.1.1



Lesson Objective	Reading
<p><b>Lesson 5: Which Clues Does Holmes Use?</b></p> <p><b>Reading:</b> Students will reread the text and identify the clues Holmes uses to solve the case.</p> <p><b>Writing:</b> Students will identify and explain how a text detail was developed as a key clue in the story and then identify and explain how a detail from the story misled them.</p>	<ul style="list-style-type: none"><li>• “The Speckled Band”</li></ul>
<p><b>Lesson 6: Flex Day 4</b></p> <p>The teacher selects from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts.</p>	

## Writing Prompt

## Benchmark Stack

Write about two details:

1. Pick one detail and describe how it turned out to be a useful clue for Sherlock Holmes.
2. Pick another detail that you or someone else once thought might be important, but turned out not to be. Then, explain your response.

**Extra:** Challenge Writing available in the digital lesson.

**ELA.K12.EE.2.1**

**ELA.6.C.1.4**

ELA.6.R.1.2

ELA.6.R.3.2

Each Flex Day activity provides practice with particular skills and benchmarks. Consult the Flex Day Activities Guide to see what is targeted by each activity.

# Sub-Unit 3 Preparation Checklist

## Lesson 1

- ❑ Print and cut the Speckled Band Clues located in Materials section. Print enough clues for every student to choose one. If you have any struggling readers, you may want to assign them to the two clues that are read out loud in the first activity.
- ❑ For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

*Note that lesson Solos can be completed in the digital curriculum, through the Amplify Mobile Solos app, or in print. Solo Activities PDFs can be found in the Materials section of the digital Unit Guide, along with a Solo Answer Key.*

A B  
C D

Pages 176–178

## Lesson 2

- ❑ For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.

E F  
G

Pages 179–181

## Lesson 3

*We highly recommend students have access to the digital lesson in order to create a storyboard with the Scene of the Crime: Sherlock Holmes app in which students analyze the setting and explain objects and furniture they find suspicious.*

- ❑ The Inspecting Stoke Moran PDF provides a list of the quotes that detail the furniture and objects in Helen Stoner's and Dr. Roylott's rooms, as well as the questions Holmes asks and comments he makes as he inspects the rooms. You can use the PDF as an outline for your own use, to support students as they complete these activities and as a review before students read or discuss the next passage.

## Lesson 4

- ❑ Plan to put students in pairs for part of this lesson.
- ❑ The review notes in the Materials section are provided to help you quickly review when different clues are revealed and discussed and trace particular clues over the course of the story to establish their importance. You can use the PDF as an outline for your own use and to support students as they complete these activities.

H I  
J K

Pages 182–183

## Lesson 5

*No additional prep.*

L M  
N

Pages 184–185

## Lesson 6: Flex Day

- ❑ Review each lesson activity to identify which one(s) will best support your students' skill progress.
- ❑ Each activity requires distinct preparation. Review the Instructional Guide for each activity you will assign.
- ❑ Prepare any texts, materials, or directions you may need to project or distribute.

**Note:** There may be activities in these lessons that students will revise or refer to in a subsequent lesson. By keeping track of lessons that students complete in a print format, you can have students refer to their print work when they reach these activities. In addition, your students will need to copy any Writing Prompts completed in a print lesson into the corresponding digital writing space if you want that writing to be included in Productivity and other reports.

# “The Speckled Band”

Sir Arthur Conan Doyle

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## Overview

Do you see what Holmes sees? Probably not—because Sherlock Holmes is the superhero of detectives. Read along as he finds clues that no one else notices and untangles mysteries that no one else can solve. Don't worry if you can't keep up with him. Neither can his best friend and crime-fighting partner, the loyal Dr. Watson!

## Suggested Reading

### The Further Adventures Of Sherlock Holmes

Sir Arthur Conan Doyle wrote four novels and 56 short stories about Holmes. Some popular short stories are “The Adventure of the Blue Carbuncle,” “The Adventure of the Engineer's Thumb,” and “Silver Blaze.” One of the best Doyle novels to start with is probably *The Hound of the Baskervilles* (1902).

## App in this Sub-Unit



Scene of the Crime:  
Sherlock Holmes

This app will help you solve the mystery of the speckled band by picturing the rooms exactly as Sir Arthur Conan Doyle describes them. You'll read a description of a room, then arrange the items in the room to match the description, achieving a greater understanding of the clues to help you crack the case!



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# “The Speckled Band”

*Sir Arthur Conan Doyle*

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# “The Speckled Band”

by Sir Arthur Conan Doyle

- <sup>1</sup> On glancing over my notes of the seventy odd cases in which I have during the last eight years studied the methods of my friend Sherlock Holmes, I find many tragic, some comic, a large number merely strange, but none commonplace; for, working as he did rather for the love of his art than for the acquirement of wealth, he refused to associate himself with any investigation which did not tend towards the unusual, and even the fantastic. Of all these varied cases, however, I cannot recall any which presented more singular features than that which was associated with the well-known Surrey family of the Roylotts of Stoke Moran. The events in question occurred in the early days of my association with Holmes, when we were sharing rooms as bachelors in Baker Street. It is possible that I might have placed them upon record before, but a promise of secrecy was made at the time, from which I have only been freed during the last month by the untimely death of the lady to whom the pledge was given. It is perhaps as well that the facts should now come to light, for I have reasons to know that there are widespread rumours as to the death of Dr. Grimesby Roylott which tend to make the matter even more terrible than the truth.
- <sup>2</sup> It was early in April in the year '83 that I woke one morning to find Sherlock Holmes standing, fully dressed, by the side of my bed. He was a late riser, as a rule, and as the clock on the mantelpiece showed me that it was only a quarter-past seven, I blinked up at him in some surprise, and perhaps just a little resentment, for I was myself regular in my habits.
- <sup>3</sup> “Very sorry to **knock** you up, Watson,” said he, “but it’s the common lot this morning. Mrs. Hudson has been knocked up, she **retorted** upon me, and I on you.”
- <sup>4</sup> “What is it, then—a fire?”
- <sup>5</sup> “No; a client. It seems that a young lady has arrived in a considerable state of excitement, who insists upon seeing me. She is waiting now in the sitting-room. Now, when young ladies wander about the **metropolis** at this hour of the morning, and knock sleepy people up out of their beds, I presume that it is something very pressing which they have to communicate. Should it prove to be an interesting case, you would, I am sure, wish to follow it from the outset. I thought, at any rate, that I should call you and give you the chance.”

**knock:** wake  
**retorted:** repaid  
the deed  
**metropolis:** city

- 6 “My dear fellow, I would not miss it for anything.”
- 7 I had no keener pleasure than in following Holmes in his professional investigations, and in admiring the rapid **deductions**, as swift as intuitions, and yet always founded on a logical basis with which he unravelled the problems which were submitted to him. I rapidly threw on my clothes and was ready in a few minutes to accompany my friend down to the sitting-room. A lady dressed in black and heavily veiled, who had been sitting in the window, rose as we entered.
- 8 “Good-morning, madam,” said Holmes cheerily. “My name is Sherlock Holmes. This is my intimate friend and associate, Dr. Watson, before whom you can speak as freely as before myself. Ha! I am glad to see that Mrs. Hudson has had the good sense to light the fire. Pray draw up to it, and I shall order you a cup of hot coffee, for I observe that you are shivering.”
- 9 “It is not cold which makes me shiver,” said the woman in a low voice, changing her seat as requested.
- 10 “What, then?”
- 11 “It is fear, Mr. Holmes. It is terror.” She raised her veil as she spoke, and we could see that she was indeed in a **pitiable** state of **agitation**, her face all drawn and grey, with restless frightened eyes, like those of some hunted animal. Her features and figure were those of a woman of thirty, but her hair was shot with **premature** grey, and her expression was weary and **haggard**. Sherlock Holmes ran her over with one of his quick, all-comprehensive glances.
- 12 “You must not fear,” said he soothingly, bending forward and patting her forearm. “We shall soon set matters right, I have no doubt. You have come in by train this morning, I see.”
- 13 “You know me, then?”
- 14 “No, but I observe the second half of a return ticket in the palm of your left glove. You must have started early, and yet you had a good drive in a dog-cart, along heavy roads, before you reached the station.”
- 15 The lady gave a violent start and stared in bewilderment at my companion.
- 16 “There is no mystery, my dear madam,” said he, smiling. “The left arm of your jacket is spattered with mud in no less than seven places. The marks are perfectly fresh. There is no vehicle save a dog-cart which throws up mud in that way, and then only when you sit on the left-hand side of the driver.”
- 17 “Whatever your reasons may be, you are perfectly correct,” said she. “I started from home before six, reached Leatherhead at twenty past, and came in by the first train to Waterloo. Sir, I can stand this strain no longer; I shall go mad if it continues. I have no one to turn to—none, save only one, who cares for me, and he, poor fellow, can be of little aid. I have heard of you, Mr. Holmes; I have heard of you from Mrs. Farintosh, whom you helped in the hour of her

**deductions:** acts of problem-solving

**pitiable:** sad

**agitation:** being upset

**premature:** early

**haggard:** tired-looking



sore need. It was from her that I had your address. Oh, sir, do you not think that you could help me, too, and at least throw a little light through the dense darkness which surrounds me? At present it is out of my power to reward you for your services, but in a month or six weeks I shall be married, with the control of my own income, and then at least you shall not find me ungrateful."

<sup>18</sup> Holmes turned to his desk and, unlocking it, drew out a small case-book, which he consulted.

<sup>19</sup> "Farintosh," said he. "Ah yes, I recall the case; it was concerned with an opal tiara. I think it was before your time, Watson. I can only say, madam, that I shall be happy to devote the same care to your case as I did to that of your friend. As to reward, my profession is its own reward; but you are at liberty to **defray** whatever expenses I may be put to, at the time which suits you best. And now I beg that you will lay before us everything that may help us in forming an opinion upon the matter."

<sup>20</sup> "Alas!" replied our visitor, "the very horror of my situation lies in the fact that my fears are so vague, and my suspicions depend so entirely upon small points, which might seem trivial to another, that even he to whom of all others I have a right to look for help and advice looks upon all that I tell him about it as the fancies of a nervous woman. He does not say so, but I can read it from his soothing answers and averted eyes. But I have heard, Mr. Holmes, that you can see deeply into the **manifold** wickedness of the human heart. You may advise me how to walk amid the dangers which encompass me."

<sup>21</sup> "I am all attention, madam."

<sup>22</sup> "My name is Helen Stoner, and I am living with my stepfather, who is the last survivor of one of the oldest Saxon families in England, the Royslotts of Stoke Moran, on the western border of Surrey."

<sup>23</sup> Holmes nodded his head. "The name is familiar to me," said he.

<sup>24</sup> "The family was at one time among the richest in England, and the estates extended over the borders into Berkshire in the north, and Hampshire in the west. In the last century, however, four successive heirs were of a **dissolute** and wasteful disposition, and the family ruin was eventually completed by a gambler in the days of the Regency. Nothing was left save a few acres of ground, and the two-hundred-year-old house, which is itself crushed under a heavy mortgage. The last **squire** dragged out his existence there, living the horrible life of an aristocratic **pauper**; but his only son, my stepfather, seeing that he must adapt himself to the new conditions, obtained an advance from a relative, which enabled him to take a medical degree and went out to Calcutta, where, by his professional skill and his force of character, he established a large practice. In a fit of anger, however, caused by some robberies which had been perpetrated in the house, he beat his native butler to death and

**defray:** pay some amount of the cost

**manifold:** many and different kinds of

**dissolute:** wild and without concern for right or wrong

**squire:** upper-class landowner

**pauper:** poor person

narrowly escaped a capital sentence. As it was, he suffered a long term of imprisonment and afterwards returned to England a **morose** and disappointed man.

<sup>25</sup> “When Dr. Roylott was in India he married my mother, Mrs. Stoner, the young widow of Major-General Stoner, of the Bengal Artillery. My sister Julia and I were twins, and we were only two years old at the time of my mother’s re-marriage. She had a considerable sum of money—not less than £1000 a year—and this she **bequeathed** to Dr. Roylott entirely while we resided with him, with a provision that a certain annual sum should be allowed to each of us in the event of our marriage. Shortly after our return to England my mother died—she was killed eight years ago in a railway accident near Crewe. Dr. Roylott then abandoned his attempts to establish himself in practice in London and took us to live with him in the old ancestral house at Stoke Moran. The money which my mother had left was enough for all our wants, and there seemed to be no obstacle to our happiness.

<sup>26</sup> “But a terrible change came over our stepfather about this time. Instead of making friends and exchanging visits with our neighbours, who had at first been overjoyed to see a Roylott of Stoke Moran back in the old family seat, he shut himself up in his house and seldom came out save to indulge in ferocious **quarrels** with whoever might cross his path. Violence of temper approaching to mania has been hereditary in the men of the family, and in my stepfather’s case it had, I believe, been intensified by his long residence in the tropics. A series of disgraceful **brawls** took place, two of which ended in the police-court, until at last he became the terror of the village, and the folks would fly at his approach, for he is a man of immense strength, and absolutely uncontrollable in his anger.

<sup>27</sup> “Last week he hurled the local blacksmith over a **parapet** into a stream, and it was only by paying over all the money which I could gather together that I was able to **avert** another public exposure. He had no friends at all save the wandering gipsies, and he would give these **vagabonds** leave to encamp upon the few acres of bramble-covered land which represent the family estate, and would accept in return the hospitality of their tents, wandering away with them sometimes for weeks on end. He has a passion also for Indian animals, which are sent over to him by a **correspondent**, and he has at this moment a cheetah and a baboon, which wander freely over his grounds and are feared by the villagers almost as much as their master.

<sup>28</sup> “You can imagine from what I say that my poor sister Julia and I had no great pleasure in our lives. No servant would stay with us, and for a long time we did all the work of the house. She was but thirty at the time of her death, and yet her hair had already begun to whiten, even as mine has.”

<sup>29</sup> “Your sister is dead, then?”

**morose:** sad

**bequeathed:** left, in case of her death  
**quarrels:** fights

**brawls:** fights

**parapet:** low wall on the edge of a roof, bridge, or balcony

**avert:** prevent

**vagabonds:** homeless wanderers

**correspondent:** person who writes letters

- 30 “She died just two years ago, and it is of her death that I wish to speak to you. You can understand that, living the life which I have described, we were little likely to see anyone of our own age and position. We had, however, an aunt, my mother’s maiden sister, Miss Honoria Westphail, who lives near Harrow, and we were occasionally allowed to pay short visits at this lady’s house. Julia went there at Christmas two years ago, and met there a half-pay major of marines, to whom she became engaged. My stepfather learned of the engagement when my sister returned and offered no objection to the marriage; but within a **fortnight** of the day which had been fixed for the wedding, the terrible event occurred which has deprived me of my only companion.”
- 31 Sherlock Holmes had been leaning back in his chair with his eyes closed and his head sunk in a cushion, but he half opened his lids now and glanced across at his visitor.
- 32 “Pray be precise as to details,” said he.
- 33 “It is easy for me to be so, for every event of that dreadful time is seared into my memory. The manor-house is, as I have already said, very old, and only one wing is now inhabited. The bedrooms in this wing are on the ground floor, the sitting-rooms being in the central block of the buildings. Of these bedrooms the first is Dr. Roylott’s, the second my sister’s, and the third my own. There is no communication between them, but they all open out into the same corridor. Do I make myself plain?”
- 34 “Perfectly so.”
- 35 “The windows of the three rooms open out upon the lawn. That fatal night Dr. Roylott had gone to his room early, though we knew that he had not retired to rest, for my sister was troubled by the smell of the strong Indian cigars which it was his custom to smoke. She left her room, therefore, and came into mine, where she sat for some time, chatting about her approaching wedding. At eleven o’clock she rose to leave me, but she paused at the door and looked back.
- 36 “‘Tell me, Helen,’ said she, ‘have you ever heard anyone whistle in the dead of the night?’
- 37 “‘Never,’ said I.
- 38 “‘I suppose that you could not possibly whistle, yourself, in your sleep?’
- 39 “‘Certainly not. But why?’
- 40 “‘Because during the last few nights I have always, about three in the morning, heard a low, clear whistle. I am a light sleeper, and it has awakened me. I cannot tell where it came from—perhaps from the next room, perhaps from the lawn. I thought that I would just ask you whether you had heard it.’
- 41 “‘No, I have not. It must be those wretched gipsies in the plantation.’
- 42 “‘Very likely. And yet if it were on the lawn, I wonder that you did not hear it also.’

**fortnight:** time of  
two weeks

- 43 “Ah, but I sleep more heavily than you.’
- 44 “‘Well, it is of no great consequence, at any rate.’ She smiled back at me, closed my door, and a few moments later I heard her key turn in the lock.”
- 45 “Indeed,” said Holmes. “Was it your custom always to lock yourselves in at night?”
- 46 “Always.”
- 47 “And why?”
- 48 “I think that I mentioned to you that the doctor kept a cheetah and a baboon. We had no feeling of security unless our doors were locked.”
- 49 “Quite so. Pray proceed with your statement.”
- 50 “I could not sleep that night. A vague feeling of **impending** misfortune **impressed** me. My sister and I, you will recollect, were twins, and you know how subtle are the links which bind two souls which are so closely allied. It was a wild night. The wind was howling outside, and the rain was beating and splashing against the windows. Suddenly, amid all the hubbub of the gale, there burst forth the wild scream of a terrified woman. I knew that it was my sister’s voice. I sprang from my bed, wrapped a shawl round me, and rushed into the corridor. As I opened my door I seemed to hear a low whistle, such as my sister described, and a few moments later a clanging sound, as if a mass of metal had fallen. As I ran down the passage, my sister’s door was unlocked, and revolved slowly upon its hinges. I stared at it horror-stricken, not knowing what was about to issue from it. By the light of the corridor-lamp I saw my sister appear at the opening, her face **blanched** with terror, her hands groping for help, her whole figure swaying to and fro like that of a drunkard. I ran to her and threw my arms round her, but at that moment her knees seemed to give way and she fell to the ground. She writhed as one who is in terrible pain, and her limbs were dreadfully **convulsed**. At first I thought that she had not recognised me, but as I bent over her she suddenly shrieked out in a voice which I shall never forget, ‘Oh, my God! Helen! It was the band! The speckled band!’ There was something else which she would **fain** have said, and she stabbed with her finger into the air in the direction of the doctor’s room, but a fresh **convulsion** seized her and choked her words. I rushed out, calling loudly for my stepfather, and I met him hastening from his room in his dressing-gown. When he reached my sister’s side she was unconscious, and though he poured brandy down her throat and sent for medical aid from the village, all efforts were in vain, for she slowly sank and died without having recovered her consciousness. Such was the dreadful end of my beloved sister.”
- 51 “One moment,” said Holmes, “are you sure about this whistle and metallic sound? Could you swear to it?”

**impending:**  
oncoming

**impressed:** made  
itself felt by

**blanched:** turned  
white

**convulsed:**  
suffered from  
spasms

**fain:** willingly

**convulsion:** spasm

- 52 “That was what the county coroner asked me at the inquiry. It is my strong impression that I heard it, and yet, among the crash of the gale and the creaking of an old house, I may possibly have been deceived.”
- 53 “Was your sister dressed?”
- 54 “No, she was in her night-dress. In her right hand was found the charred stump of a match, and in her left a match-box.”
- 55 “Showing that she had struck a light and looked about her when the alarm took place. That is important. And what conclusions did the coroner come to?”
- 56 “He investigated the case with great care, for Dr. Roylott’s conduct had long been notorious in the county, but he was unable to find any satisfactory cause of death. My evidence showed that the door had been fastened upon the inner side, and the windows were blocked by old-fashioned shutters with broad iron bars, which were secured every night. The walls were carefully sounded, and were shown to be quite solid all round, and the flooring was also thoroughly examined, with the same result. The chimney is wide, but is barred up by four large staples. It is certain, therefore, that my sister was quite alone when she met her end. Besides, there were no marks of any violence upon her.”
- 57 “How about poison?”
- 58 “The doctors examined her for it, but without success.”
- 59 “What do you think that this unfortunate lady died of, then?”
- 60 “It is my belief that she died of pure fear and nervous shock, though what it was that frightened her I cannot imagine.”
- 61 “Were there gipsies in the plantation at the time?”
- 62 “Yes, there are nearly always some there.”
- 63 “Ah, and what did you gather from this **allusion** to a band—a speckled band?”
- 64 “Sometimes I have thought that it was merely the wild talk of **delirium**, sometimes that it may have referred to some band of people, perhaps to these very gipsies in the plantation. I do not know whether the spotted handkerchiefs which so many of them wear over their heads might have suggested the strange adjective which she used.”
- 65 Holmes shook his head like a man who is far from being satisfied.
- 66 “These are very deep waters,” said he; “pray go on with your narrative.”
- 67 “Two years have passed since then, and my life has been until lately lonelier than ever. A month ago, however, a dear friend, whom I have known for many years, has done me the honour to ask my hand in marriage. His name is Armitage—Percy Armitage—the second son of Mr. Armitage, of Crane Water, near Reading. My stepfather has offered no opposition to the match, and we are to be married in the course of the spring. Two days ago some repairs were started in the west wing of the building, and my bedroom wall has been pierced, so that I have had

**allusion:** mention  
**delirium:** state of  
insanity

to move into the chamber in which my sister died, and to sleep in the very bed in which she slept. Imagine, then, my thrill of terror when last night, as I lay awake, thinking over her terrible fate, I suddenly heard in the silence of the night the low whistle which had been the herald of her own death. I sprang up and lit the lamp, but nothing was to be seen in the room. I was too shaken to go to bed again, however, so I dressed, and as soon as it was daylight I slipped down, got a dog-cart at the Crown Inn, which is opposite, and drove to Leatherhead, from whence I have come on this morning with the one object of seeing you and asking your advice."

68 "You have done wisely," said my friend. "But have you told me all?"

69 "Yes, all."

70 "Miss Roylott, you have not. You are screening your stepfather."

71 "Why, what do you mean?"

72 For answer Holmes pushed back the frill of black lace which fringed the hand that lay upon our visitor's knee. Five little livid spots, the marks of four fingers and a thumb, were printed upon the white wrist.

73 "You have been cruelly used," said Holmes.

74 The lady coloured deeply and covered over her injured wrist. "He is a hard man," she said, "and perhaps he hardly knows his own strength."

75 There was a long silence, during which Holmes leaned his chin upon his hands and stared into the crackling fire.

76 "This is a very deep business," he said at last. "There are a thousand details which I should desire to know before I decide upon our course of action. Yet we have not a moment to lose. If we were to come to Stoke Moran to-day, would it be possible for us to see over these rooms without the knowledge of your stepfather?"

77 "As it happens, he spoke of coming into town to-day upon some most important business. It is probable that he will be away all day, and that there would be nothing to disturb you. We have a housekeeper now, but she is old and foolish, and I could easily get her out of the way."

78 "Excellent. You are not averse to this trip, Watson?"

79 "By no means."

80 "Then we shall both come. What are you going to do yourself?"





- 81 "I have one or two things which I would wish to do now that I am in town. But I shall return by the twelve o'clock train, so as to be there in time for your coming."
- 82 "And you may expect us early in the afternoon. I have myself some small business matters to attend to. Will you not wait and breakfast?"
- 83 "No, I must go. My heart is lightened already since I have confided my trouble to you. I shall look forward to seeing you again this afternoon." She dropped her thick black veil over her face and glided from the room.
- 84 "And what do you think of it all, Watson?" asked Sherlock Holmes, leaning back in his chair.
- 85 "It seems to me to be a most dark and sinister business."
- 86 "Dark enough and sinister enough."
- 87 "Yet if the lady is correct in saying that the flooring and walls are sound, and that the door, window, and chimney are impassable, then her sister must have been undoubtedly alone when she met her mysterious end."
- 88 "What becomes, then, of these **nocturnal** whistles, and what of the very peculiar words of the dying woman?"
- 89 "I cannot think."
- 90 "When you combine the ideas of whistles at night, the presence of a band of gipsies who are on intimate terms with this old doctor, the fact that we have every reason to believe that the doctor has an interest in preventing his stepdaughter's marriage, the dying allusion to a band, and, finally, the fact that Miss Helen Stoner heard a metallic clang, which might have been caused by one of those metal bars that secured the shutters falling back into its place, I think that there is good ground to think that the mystery may be cleared along those lines."
- 91 "But what, then, did the gipsies do?"
- 92 "I cannot imagine."
- 93 "I see many objections to any such theory."
- 94 "And so do I. It is precisely for that reason that we are going to Stoke Moran this day. I want to see whether the objections are fatal, or if they may be explained away. But what in the name of the devil!"
- 95 The **ejaculation** had been drawn from my companion by the fact that our door had been suddenly dashed open, and that a huge man had framed himself in the **aperture**. His costume was a peculiar mixture of the professional and of the agricultural, having a black top-hat, a long frock-coat, and a pair of high gaiters, with a hunting-crop swinging in his hand. So tall was he that his hat actually brushed the cross bar of the doorway, and his

**nocturnal:** night time

**ejaculation:** excited shouting

**aperture:** opening

breadth seemed to span it across from side to side. A large face, seared with a thousand wrinkles, burned yellow with the sun, and marked with every evil passion, was turned from one to the other of us, while his deep-set, bile-shot eyes, and his high, thin, fleshless nose, gave him somewhat the resemblance to a fierce old bird of prey.

- 96 "Which of you is Holmes?" asked this **apparition**.
- 97 "My name, sir; but you have the advantage of me," said my companion quietly.
- 98 "I am Dr. Grimesby Roylott, of Stoke Moran."
- 99 "Indeed, Doctor," said Holmes blandly. "Pray take a seat."
- 100 "I will do nothing of the kind. My stepdaughter has been here. I have traced her. What has she been saying to you?"
- 101 "It is a little cold for the time of the year," said Holmes.
- 102 "What has she been saying to you?" screamed the old man furiously.
- 103 "But I have heard that the crocuses promise well," continued my companion imperturbably.
- 104 "Ha! You put me off, do you?" said our new visitor, taking a step forward and shaking his hunting-crop. "I know you, you scoundrel! I have heard of you before. You are Holmes, the meddler."
- 105 My friend smiled.
- 106 "Holmes, the busybody!"
- 107 His smile broadened.
- 108 "Holmes, the Scotland Yard Jack-in-office!"
- 109 Holmes chuckled heartily. "Your conversation is most entertaining," said he. "When you go out close the door, for there is a decided draught."
- 110 "I will go when I have said my say. Don't you dare to meddle with my affairs. I know that Miss Stoner has been here. I traced her! I am a dangerous man to fall foul of! See here." He stepped swiftly forward, seized the poker, and bent it into a curve with his huge brown hands.
- 111 "See that you keep yourself out of my grip," he snarled, and hurling the twisted poker into the fireplace he strode out of the room.
- 112 "He seems a very **amiable** person," said Holmes, laughing. "I am not quite so bulky, but if he had remained I might have shown him that my grip was not much more feeble than his own." As he spoke he picked up the steel poker and, with a sudden effort, straightened it out again.
- 113 "Fancy his having the insolence to confound me with the official detective force! This incident gives zest to our investigation, however, and I only trust that our little friend will not suffer from her imprudence in allowing

**apparition:** ghost

**amiable:** friendly



this brute to trace her. And now, Watson, we shall order breakfast, and afterwards I shall walk down to Doctors' Commons, where I hope to get some data which may help us in this matter."

<sup>114</sup> It was nearly one o'clock when Sherlock Holmes returned from his excursion. He held in his hand a sheet of blue paper, scrawled over with notes and figures.

<sup>115</sup> "I have seen the will of the deceased wife," said he. "To determine its exact meaning I have been obliged to work out the present prices of the investments with which it is concerned. The total income, which at the time of the wife's death was little short of £1100, is now, through the fall in agricultural prices, not more than £750. Each daughter can claim an income of £250, in case of marriage. It is evident, therefore, that if both girls had married, this beauty would have had a mere pittance, while even one of them would cripple him to a very serious extent. My morning's work has not been wasted, since it has proved that he has the very strongest motives for standing in the way of anything of the sort. And now, Watson, this is too serious for dawdling, especially as the old man is aware that we are interesting ourselves in his affairs; so if you are ready, we shall call a cab and drive to Waterloo. I should be very much obliged if you would slip your revolver into your pocket. An Eley's No. 2 is an excellent argument with gentlemen who can twist steel pokers into knots. That and a tooth-brush are, I think, all that we need."

<sup>116</sup> At Waterloo we were fortunate in catching a train for Leatherhead, where we hired a trap at the station inn and drove for four or five miles through the lovely Surrey lanes. It was a perfect day, with a bright sun and a few fleecy clouds in the heavens. The trees and wayside hedges were just throwing out their first green shoots, and the air was full of the pleasant smell of the moist earth. To me at least there was a strange contrast between the sweet promise of the spring and this sinister quest upon which we were engaged. My companion sat in the front of the trap, his arms folded, his hat pulled down over his eyes, and his chin sunk upon his breast, buried in the deepest thought. Suddenly, however, he started, tapped me on the shoulder, and pointed over the meadows.

<sup>117</sup> "Look there!" said he.

<sup>118</sup> A heavily timbered park stretched up in a gentle slope, thickening into a grove at the highest point. From amid the branches there jutted out the grey gables and high roof-tree of a very old mansion.

<sup>119</sup> "Stoke Moran?" said he.

<sup>120</sup> "Yes, sir, that be the house of Dr. Grimesby Roylott," remarked the driver.

<sup>121</sup> "There is some building going on there," said Holmes; "that is where we are going."

<sup>122</sup> "There's the village," said the driver, pointing to a cluster of roofs some

distance to the left; "but if you want to get to the house, you'll find it shorter to get over this stile, and so by the foot-path over the fields. There it is, where the lady is walking."

123 "And the lady, I fancy, is Miss Stoner," observed Holmes, shading his eyes.  
"Yes, I think we had better do as you suggest."

124 We got off, paid our fare, and the trap rattled back on its way to Leatherhead.

125 "I thought it as well," said Holmes as we climbed the stile, "that this fellow should think we had come here as architects, or on some definite business. It may stop his gossip. Good-afternoon, Miss Stoner. You see that we have been as good as our word."

126 Our client of the morning had hurried forward to meet us with a face which spoke her joy. "I have been waiting so eagerly for you," she cried, shaking hands with us warmly. "All has turned out splendidly. Dr. Roylott has gone to town, and it is unlikely that he will be back before evening."

127 "We have had the pleasure of making the doctor's acquaintance," said Holmes, and in a few words he sketched out what had occurred. Miss Stoner turned white to the lips as she listened.

128 "Good heavens!" she cried, "he has followed me, then."

129 "So it appears."

130 "He is so cunning that I never know when I am safe from him. What will he say when he returns?"

131 "He must guard himself, for he may find that there is someone more cunning than himself upon his track. You must lock yourself up from him to-night. If he is violent, we shall take you away to your aunt's at Harrow. Now, we must make the best use of our time, so kindly take us at once to the rooms which we are to examine."

132 The building was of grey, lichen-blotched stone, with a high central portion and two curving wings, like the claws of a crab, thrown out on each side. In one of these wings the windows were broken and blocked with wooden boards, while the roof was partly caved in, a picture of ruin. The central portion was in little better repair, but the right-hand block was comparatively modern, and the blinds in the windows, with the blue smoke curling up from the chimneys, showed that this was where the family resided. Some scaffolding had been erected against the end wall, and the stone-work had been broken into, but there were no signs of any workmen at the moment of our visit. Holmes walked slowly up and down the ill-trimmed lawn and examined with deep attention the outsides of the windows.

133 "This, I take it, belongs to the room in which you used to sleep, the centre one to your sister's, and the one next to the main building to Dr. Roylott's chamber?"

perplexity:  
confusion

 232

134 “Exactly so. But I am now sleeping in the middle one.”

135 “Pending the alterations, as I understand. By the way, there does not seem to be any very pressing need for repairs at that end wall.”

136 “There were none. I believe that it was an excuse to move me from my room.”

137 “Ah! that is suggestive. Now, on the other side of this narrow wing runs the corridor from which these three rooms open. There are windows in it, of course?”

138 “Yes, but very small ones. Too narrow for anyone to pass through.”

139 “As you both locked your doors at night, your rooms were unapproachable from that side. Now, would you have the kindness to go into your room and bar your shutters?”

140 Miss Stoner did so, and Holmes, after a careful examination through the open window, endeavoured in every way to force the shutter open, but without success. There was no slit through which a knife could be passed to raise the bar. Then with his lens he tested the hinges, but they were of solid iron, built firmly into the massive masonry. “Hum!” said he, scratching his chin in some **perplexity**, “my theory certainly presents some difficulties. No one could pass these shutters if they were bolted. Well, we shall see if the inside throws any light upon the matter.”

141 A small side door led into the whitewashed corridor from which the three bedrooms opened. Holmes refused to examine the third chamber, so we passed at once to the second, that in which Miss Stoner was now sleeping, and in which her sister had met with her fate. It was a homely little room, with a low ceiling and a gaping fireplace, after the fashion of old country-houses. A brown chest of drawers stood in one corner, a narrow white-counterpaned bed in another, and a dressing-table on the left-hand side of the window. These articles, with two small wicker-work chairs, made up all the furniture in the room save for a square of Wilton carpet in the centre. The boards round and the panelling of the walls were of brown, worm-eaten oak, so old and discoloured that it may have dated from the original building of the house. Holmes drew one of the chairs into a corner and sat silent, while his eyes travelled round and round and up and down, taking in every detail of the apartment.

142 “Where does that bell communicate with?” he asked at last, pointing to a thick bell-rope which hung down beside the bed, the tassel actually lying upon the pillow.

143 “It goes to the housekeeper’s room.”

144 “It looks newer than the other things?”

145 “Yes, it was only put there a couple of years ago.”

146 “Your sister asked for it, I suppose?”

- 147 “No, I never heard of her using it. We used always to get what we wanted for ourselves.”
- 148 “Indeed, it seemed unnecessary to put so nice a bell-pull there. You will excuse me for a few minutes while I satisfy myself as to this floor.” He threw himself down upon his face with his lens in his hand and crawled swiftly backward and forward, examining minutely the cracks between the boards. Then he did the same with the wood-work with which the chamber was panelled. Finally he walked over to the bed and spent some time in staring at it and in running his eye up and down the wall. Finally he took the bell-rope in his hand and gave it a brisk tug.
- 149 “Why, it’s a dummy,” said he.
- 150 “Won’t it ring?”
- 151 “No, it is not even attached to a wire. This is very interesting. You can see now that it is fastened to a hook just above where the little opening for the **ventilator** is.”
- 152 “How very absurd! I never noticed that before.”
- 153 “Very strange!” muttered Holmes, pulling at the rope. “There are one or two very singular points about this room. For example, what a fool a builder must be to open a ventilator into another room, when, with the same trouble, he might have communicated with the outside air!”
- 154 “That is also quite modern,” said the lady.
- 155 “Done about the same time as the bell-rope?” remarked Holmes.
- 156 “Yes, there were several little changes carried out about that time.”
- 157 “They seem to have been of a most interesting character—dummy bell-ropes, and ventilators which do not **ventilate**. With your permission, Miss Stoner, we shall now carry our researches into the inner apartment.”
- 158 Dr. Grimesby Roylott’s chamber was larger than that of his stepdaughter, but was as plainly furnished. A camp-bed, a small wooden shelf full of books, mostly of a technical character, an armchair beside the bed, a plain wooden chair against the wall, a round table, and a large iron safe were the principal things which met the eye. Holmes walked slowly round and examined each and all of them with the keenest interest.
- 159 “What’s in here?” he asked, tapping the safe.
- 160 “My stepfather’s business papers.”
- 161 “Oh! you have seen inside, then?”
- 162 “Only once, some years ago. I remember that it was full of papers.”
- 163 “There isn’t a cat in it, for example?”
- 164 “No. What a strange idea!”

**ventilator:** opening in the wall that lets air in and out

**ventilate:** let in and let out air

**reverie:** dream-like state  
**pretence:** made-up reason

- 165 “Well, look at this!” He took up a small saucer of milk which stood on the top of it.
- 166 “No; we don’t keep a cat. But there is a cheetah and a baboon.”
- 167 “Ah, yes, of course! Well, a cheetah is just a big cat, and yet a saucer of milk does not go very far in satisfying its wants, I daresay. There is one point which I should wish to determine.” He squatted down in front of the wooden chair and examined the seat of it with the greatest attention.
- 168 “Thank you. That is quite settled,” said he, rising and putting his lens in his pocket. “Hullo! Here is something interesting!”
- 169 The object which had caught his eye was a small dog lash hung on one corner of the bed. The lash, however, was curled upon itself and tied so as to make a loop of whipcord.
- 170 “What do you make of that, Watson?”
- 171 “It’s a common enough lash. But I don’t know why it should be tied.”
- 172 “That is not quite so common, is it? Ah, me! it’s a wicked world, and when a clever man turns his brains to crime it is the worst of all. I think that I have seen enough now, Miss Stoner, and with your permission we shall walk out upon the lawn.”
- 173 I had never seen my friend’s face so grim or his brow so dark as it was when we turned from the scene of this investigation. We had walked several times up and down the lawn, neither Miss Stoner nor myself liking to break in upon his thoughts before he roused himself from his **reverie**.
- 174 “It is very essential, Miss Stoner,” said he, “that you should absolutely follow my advice in every respect.”
- 175 “I shall most certainly do so.”
- 176 “The matter is too serious for any hesitation. Your life may depend upon your compliance.”
- 177 “I assure you that I am in your hands.”
- 178 “In the first place, both my friend and I must spend the night in your room.”
- 179 Both Miss Stoner and I gazed at him in astonishment.
- 180 “Yes, it must be so. Let me explain. I believe that that is the village inn over there?”
- 181 “Yes, that is the Crown.”
- 182 “Very good. Your windows would be visible from there?”
- 183 “Certainly.”
- 184 “You must confine yourself to your room, on **pretence** of a headache, when your stepfather comes back. Then when you hear him retire for the night, you must open the shutters of your window, undo the **hasp**, put your lamp there

as a signal to us, and then withdraw quietly with everything which you are likely to want into the room which you used to occupy. I have no doubt that, in spite of the repairs, you could manage there for one night."

185 "Oh, yes, easily."

186 "The rest you will leave in our hands."

187 "But what will you do?"

188 "We shall spend the night in your room, and we shall investigate the cause of this noise which has disturbed you."

189 "I believe, Mr. Holmes, that you have already made up your mind," said Miss Stoner, laying her hand upon my companion's sleeve.

190 "Perhaps I have."

191 "Then, for pity's sake, tell me what was the cause of my sister's death."

192 "I should prefer to have clearer proofs before I speak."

193 "You can at least tell me whether my own thought is correct, and if she died from some sudden fright."

194 "No, I do not think so. I think that there was probably some more tangible cause. And now, Miss Stoner, we must leave you, for if Dr. Roylott returned and saw us our journey would be in vain. Good-bye, and be brave, for if you will do what I have told you, you may rest assured that we shall soon drive away the dangers that threaten you."

195 Sherlock Holmes and I had no difficulty in engaging a bedroom and sitting-room at the Crown Inn. They were on the upper floor, and from our window we could command a view of the avenue gate, and of the inhabited wing of Stoke Moran Manor House. At dusk we saw Dr. Grimesby Roylott drive past, his huge form looming up beside the little figure of the lad who drove him. The boy had some slight difficulty in undoing the heavy iron gates, and we heard the hoarse roar of the doctor's voice and saw the fury with which he shook his clinched fists at him. The trap drove on, and a few minutes later we saw a sudden light spring up among the trees as the lamp was lit in one of the sitting rooms.

196 "Do you know, Watson," said Holmes as we sat together in the gathering darkness, "I have really some **scruples** as to taking you to-night. There is a distinct element of danger."

197 "Can I be of assistance?"

198 "Your presence might be invaluable."

199 "Then I shall certainly come."

200 "It is very kind of you."

**hasp:** lock

**scruples:** problems  
of the conscience

- 201 “You speak of danger. You have evidently seen more in these rooms than was visible to me.”
- 202 “No, but I fancy that I may have deduced a little more. I imagine that you saw all that I did.”
- 203 “I saw nothing remarkable save the bell-rope, and what purpose that could answer I confess is more than I can imagine.”
- 204 “You saw the ventilator, too?”
- 205 “Yes, but I do not think that it is such a very unusual thing to have a small opening between two rooms. It was so small that a rat could hardly pass through.”
- 206 “I knew that we should find a ventilator before ever we came to Stoke Moran.”
- 207 “My dear Holmes!”
- 208 “Oh, yes, I did. You remember in her statement she said that her sister could smell Dr. Roylott’s cigar. Now, of course that suggested at once that there must be a communication between the two rooms. It could only be a small one, or it would have been remarked upon at the coroner’s inquiry. I deduced a ventilator.”
- 209 “But what harm can there be in that?”
- 210 “Well, there is at least a curious coincidence of dates. A ventilator is made, a cord is hung, and a lady who sleeps in the bed dies. Does not that strike you?”
- 211 “I cannot as yet see any connection.”
- 212 “Did you observe anything very peculiar about that bed?”
- 213 “No.”
- 214 “It was clamped to the floor. Did you ever see a bed fastened like that before?”
- 215 “I cannot say that I have.”
- 216 “The lady could not move her bed. It must always be in the same relative position to the ventilator and to the rope—or so we may call it, since it was clearly never meant for a bell-pull.”
- 217 “Holmes,” I cried, “I seem to see dimly what you are hinting at. We are only just in time to prevent some subtle and horrible crime.”
- 218 “Subtle enough and horrible enough. When a doctor does go wrong he is the first of criminals. He has nerve and he has knowledge. Palmer and Pritchard were among the heads of their profession. This man strikes even deeper, but I think, Watson, that we shall be able to strike deeper still. But we shall have horrors enough before the night is over; for goodness’ sake let us have a quiet pipe and turn our minds for a few hours to something more cheerful.”
- 219 About nine o’clock the light among the trees was extinguished, and all was dark in the direction of the Manor House. Two hours passed slowly away, and



then, suddenly, just at the stroke of eleven, a single bright light shone out right in front of us.

220 “That is our signal,” said Holmes, springing to his feet; “it comes from the middle window.”

221 As we passed out he exchanged a few words with the landlord, explaining that we were going on a late visit to an acquaintance, and that it was possible that we might spend the night there. A moment later we were out on the dark road, a chill wind blowing in our faces, and one yellow light twinkling in front of us through the gloom to guide us on our sombre errand.

222 There was little difficulty in entering the grounds, for unrepaired breaches gaped in the old park wall. Making our way among the trees, we reached the lawn, crossed it, and were about to enter through the window when out from a clump of laurel bushes there darted what seemed to be a hideous and distorted child, who threw itself upon the grass with writhing limbs and then ran swiftly across the lawn into the darkness.

223 “My God!” I whispered; “did you see it?”

224 Holmes was for the moment as startled as I. His hand closed like a vice upon my wrist in his agitation. Then he broke into a low laugh and put his lips to my ear.

225 “It is a nice household,” he murmured. “That is the baboon.”

226 I had forgotten the strange pets which the doctor affected. There was a cheetah, too; perhaps we might find it upon our shoulders at any moment. I confess that I felt easier in my mind when, after following Holmes’s example and slipping off my shoes, I found myself inside the bedroom. My companion noiselessly closed the shutters, moved the lamp onto the table, and cast his eyes round the room. All was as we had seen it in the daytime. Then creeping up to me and making a trumpet of his hand, he whispered into my ear again so gently that it was all that I could do to distinguish the words:

227 “The least sound would be fatal to our plans.”

228 I nodded to show that I had heard.

229 “We must sit without light. He would see it through the ventilator.”

230 I nodded again.

231 “Do not go asleep; your very life may depend upon it. Have your pistol ready in case we should need it. I will sit on the side of the bed, and you in that chair.”

232 I took out my revolver and laid it on the corner of the table.

233 Holmes had brought up a long thin cane, and this he placed upon the bed beside him. By it he laid the box of matches and the stump of a candle. Then he turned down the lamp, and we were left in darkness.



- <sup>234</sup> How shall I ever forget that dreadful vigil? I could not hear a sound, not even the drawing of a breath, and yet I knew that my companion sat open-eyed, within a few feet of me, in the same state of nervous tension in which I was myself. The shutters cut off the least ray of light, and we waited in absolute darkness.
- <sup>235</sup> From outside came the occasional cry of a night-bird, and once at our very window a long drawn catlike whine, which told us that the cheetah was indeed at liberty. Far away we could hear the deep tones of the parish clock, which boomed out every quarter of an hour. How long they seemed, those quarters! Twelve struck, and one and two and three, and still we sat waiting silently for whatever might befall.
- <sup>236</sup> Suddenly there was the momentary gleam of a light up in the direction of the ventilator, which vanished immediately, but was succeeded by a strong smell of burning oil and heated metal. Someone in the next room had lit a dark-lantern. I heard a gentle sound of movement, and then all was silent once more, though the smell grew stronger. For half an hour I sat with straining ears. Then suddenly another sound became audible—a very gentle, soothing sound, like that of a small jet of steam escaping continually from a kettle. The instant that we heard it, Holmes sprang from the bed, struck a match, and lashed furiously with his cane at the bell-pull.
- <sup>237</sup> “You see it, Watson?” he yelled. “You see it?”
- <sup>238</sup> But I saw nothing. At the moment when Holmes struck the light I heard a low, clear whistle, but the sudden glare flashing into my weary eyes made it impossible for me to tell what it was at which my friend lashed so savagely. I could, however, see that his face was deadly pale and filled with horror and loathing. He had ceased to strike and was gazing up at the ventilator when suddenly there broke from the silence of the night the most horrible cry to which I have ever listened. It swelled up louder and louder, a hoarse yell of pain and fear and anger all mingled in the one dreadful shriek. They say that away down in the village, and even in the distant **parsonage**, that cry raised the sleepers from their beds. It struck cold to our hearts, and I stood gazing at Holmes, and he at me, until the last echoes of it had died away into the silence from which it rose.
- <sup>239</sup> “What can it mean?” I gasped.
- <sup>240</sup> “It means that it is all over,” Holmes answered. “And perhaps, after all, it is for the best. Take your pistol, and we will enter Dr. Roylott’s room.”
- <sup>241</sup> With a grave face he lit the lamp and led the way down the corridor. Twice he struck at the chamber door without any reply from within. Then he turned the handle and entered, I at his heels, with the cocked pistol in my hand.
- <sup>242</sup> It was a singular sight which met our eyes. On the table stood a dark-lantern with the shutter half open, throwing a brilliant beam of light upon the iron safe, the door of which was ajar. Beside this table, on the wooden chair, sat

**parsonage:** church house

Dr. Grimesby Roylott clad in a long grey dressing-gown, his bare ankles **protruding** beneath, and his feet thrust into red heelless Turkish slippers. Across his lap lay the short stock with the long lash which we had noticed during the day. His chin was cocked upward and his eyes were fixed in a dreadful, rigid stare at the corner of the ceiling. Round his brow he had a peculiar yellow band, with brownish speckles, which seemed to be bound tightly round his head. As we entered he made neither sound nor motion.

243 “The band! the speckled band!” whispered Holmes.

244 I took a step forward. In an instant his strange headgear began to move, and there reared itself from among his hair the squat diamond-shaped head and puffed neck of a loathsome serpent.

245 “It is a swamp adder!” cried Holmes; “the deadliest snake in India. He has died within ten seconds of being bitten. Violence does, in truth, recoil upon the violent, and the schemer falls into the pit which he digs for another. Let us thrust this creature back into its den, and we can then remove Miss Stoner to some place of shelter and let the county police know what has happened.”

246 As he spoke he drew the dog-whip swiftly from the dead man’s lap, and throwing the noose round the reptile’s neck he drew it from its horrid perch and, carrying it at arm’s length, threw it into the iron safe, which he closed upon it.

247 Such are the true facts of the death of Dr. Grimesby Roylott, of Stoke Moran. It is not necessary that I should prolong a narrative which has already run to too great a length by telling how we broke the sad news to the terrified girl, how we conveyed her by the morning train to the care of her good aunt at Harrow, of how the slow process of official inquiry came to the conclusion that the doctor met his fate while indiscreetly playing with a dangerous pet. The little which I had yet to learn of the case was told me by Sherlock Holmes as we travelled back next day.

248 “I had,” said he, “come to an entirely erroneous conclusion which shows, my dear Watson, how dangerous it always is to reason from insufficient data. The presence of the gipsies, and the use of the word ‘band,’ which was used by the poor girl, no doubt, to explain the appearance which she had caught a hurried glimpse of by the light of her match, were sufficient to put me upon an entirely wrong scent. I can only claim the merit that I instantly reconsidered my position when, however, it became clear to me that whatever danger threatened an occupant of the room could not come either from the window or the door. My attention was speedily drawn, as I have already remarked to you, to this ventilator, and to the bell-rope which hung down to the bed. The discovery that this was a dummy, and that the

**protruding:**  
sticking out

bed was clamped to the floor, instantly gave rise to the suspicion that the rope was there as a bridge for something passing through the hole and coming to the bed. The idea of a snake instantly occurred to me, and when I coupled it with my knowledge that the doctor was furnished with a supply of creatures from India, I felt that I was probably on the right track. The idea of using a form of poison which could not possibly be discovered by any chemical test was just such a one as would occur to a clever and ruthless man who had had an Eastern training. The rapidity with which such a poison would take effect would also, from his point of view, be an advantage. It would be a sharp-eyed coroner, indeed, who could distinguish the two little dark punctures which would show where the poison fangs had done their work. Then I thought of the whistle. Of course he must recall the snake before the morning light revealed it to the victim. He had trained it, probably by the use of the milk which we saw, to return to him when summoned. He would put it through this ventilator at the hour that he thought best, with the certainty that it would crawl down the rope and land on the bed. It might or might not bite the occupant, perhaps she might escape every night for a week, but sooner or later she must fall a victim.

<sup>249</sup> “I had come to these conclusions before ever I had entered his room. An inspection of his chair showed me that he had been in the habit of standing on it, which of course would be necessary in order that he should reach the ventilator. The sight of the safe, the saucer of milk, and the loop of whipcord were enough to finally dispel any doubts which may have remained. The metallic clang heard by Miss Stoner was obviously caused by her stepfather hastily closing the door of his safe upon its terrible occupant. Having once made up my mind, you know the steps which I took in order to put the matter to the proof. I heard the creature hiss as I have no doubt that you did also, and I instantly lit the light and attacked it.”

<sup>250</sup> “With the result of driving it through the ventilator.”

<sup>251</sup> “And also with the result of causing it to turn upon its master at the other side. Some of the blows of my cane came home and roused its snakish temper, so that it flew upon the first person it saw. In this way I am no doubt indirectly responsible for Dr. Grimesby Roylott’s death, and I cannot say that it is likely to weigh very heavily upon my conscience.”



•

**tragic:** extremely sad and unfortunate

**comic:** funny

**lot:** fortune

**client:** customer

**submitted:** offered for consideration

**accompany:** go with

**veiled:** covered at the face by a thin cloth

**cheerily:** joyfully

**observe:** see

**requested:** asked

**forearm:** area of the arm from the elbow to the wrist

**replied:** answered

**wickedness:** evil

**extended:** stretched

**immense:** great

**hurled:** threw

**encamp:** camp

**precise:** accurate

**dreadful:** horrible

**custom:** habit

**bind:** tie together

**hubbub:** noise

**corridor:** hallway

**mass:** pile

**revolved:** turned

**hinges:** movable part that fixes a door to the wall

**groping:** feeling

**busybody:** annoying, interfering person

**hoarse:** rough

**absolute:** complete

**momentary:** brief and temporary

**ceased:** stopped

**conclusion:** decided idea

**glimpse:** quick look

**conscience:** sense of right and wrong

••

**commonplace:** ordinary

**acquirement:** gaining

**associate:** connect

**tend:** lean

**varied:** different

**singular:** one of a kind

**bachelors:** unmarried men

**untimely:** unexpected

**pledge:** promise

**mantelpiece:** shelf above a fireplace

**resentment:** hatred

**considerable:** great

**presume:** believe

**pressing:** urgent

**outset:** beginning

**keener:** sharper

**intuitions:** instincts

**founded:** based

**logical:** reasoned

**unravelling:** solved

**intimate:** close

**draw:** pull

**drawn:** tense

**figure:** body shape

**comprehensive:** complete

**soothingly:** comfortably

**strain:** pressure

**mad:** insane

**sore:** desperate

**dense:** thick

**income:** source of money

**consulted:** turned to for information

**recall:** remember

**opal:** multi-colored stone

**devote:** give

**expenses:** costs

**Alas:** How sad and upsetting!

**vague:** unclear

**trivial:** unimportant

**fancies:** wishes

**soothing:** comforting

**averted:** turned away

**amid:** in the middle of

•• (continued)

**encompass:** surround

**estates:** property

**successive:** following in a row

**disposition:** character

**Regency:** rule of George IV from 1811 to 1820

**mortgage:** debt caused from borrowing money worth up to the value of an owned home

**advance:** loan

**fit:** uncontrollable outburst

**perpetrated:** carried out

**native:** locally born

**capital:** death

**Artillery:** army group formed by the East India Company in charge of firing heavy weapons such as cannons

**resided:** lived

**provision:** added rule

**attempts:** tries

**ancestral:** family

**indulge:** take part in

**mania:** craziness

**hereditary:** a family trait

**intensified:** made stronger

**residence:** time living

**fly:** run away

**exposure:** open showing of private details

**gipsies (gypsies):** race of traveling people

**bramble:** thorn

**estate:** land

**hospitality:** warmth and friendliness

**objection:** disapproval

**deprived:** robbed

**start:** sudden movement of surprise

**companion:** partner

**seared:** burned

**wing:** section

**inhabited:** lived in

**communication:** connection

**fatal:** deadly

**retired:** gone to bed

**wretched:** horrible

**plantation:** farm land

**consequence:** importance

**recollect:** remember

**subtle:** hard to detect

**allied:** joined in a partnership

**gale:** wind

**clanging:** crashing

**issue:** come out

**drunkard:** drunk person

**writhed:** twisted

**speckled:** spotted

**hastening:** rushing

**gown:** robe

**vain:** a useless effort

**coroner:** person who investigates suspicious deaths

**inquiry:** official investigation

**deceived:** tricked

**charred:** burned

**conduct:** behavior

**notorious:** famous for bad behavior

**satisfactory:** acceptable

**secured:** locked

**barred:** blocked

**marks:** signs

**adjective:** describing word

**satisfied:** pleased

**narrative:** story

**opposition:** disapproval

**course:** period of time during

**pierced:** broken through

**thrill:** excitement

**herald:** announcer

**opposite:** across the way

**whence:** that place

**object:** purpose

**screening:** protecting

**frill:** ruffled pattern

**fringed:** lined the edge of

**livid:** bluish gray

**coloured:** blushed

**crackling:** noisy, cracking

**desire:** wish

**averse:** opposed

**confided:** trustingly told

**glided:** moved as if floating

**sinister:** evil

**undoubtedly:** definitely

**peculiar:** strange

•• (continued)

**presence:** closeness

**objections:** protests

**dashed:** forcefully pushed

**costume:** outfit

**agricultural:** farmer's quality

**gaiters:** coverings designed to protect the shoes and lower legs

**crop:** whip

**breadth:** width

**span:** stretch

**bile:** yellow

**fleshless:** meat-less

**fierce:** forceful

**blandly:** without enthusiasm

**traced:** followed

**furiously:** wildly and angrily

**crocuses:** flowering plants

**imperturbably:** without being bothered

**scoundrel:** dishonest person

**meddler:** annoying, interfering person

**broadened:** widened

**heartily:** deeply

**draught:** breeze

**meddle:** interfere

**swiftly:** quickly

**poker:** long instrument used on a fireplace

**snarled:** growled

**hurling:** throwing

**strode:** walked

**bulky:** big

**feeble:** weak

**insolence:** rude behavior

**confound:** confuse

**zest:** enthusiastic excitement

**imprudence:** carelessness

**brute:** strong, stupid person

**data:** information

**excursion:** trip

**deceased:** dead

**obliged:** required

**investments:** money placed into a project for the purposes of future profit

**evident:** clear

**pittance:** small amount

**cripple:** permanently injure and disable

**motives:** reasons

**dawdling:** wasting time

**fortunate:** lucky

**trap:** carriage

**fleecy:** wooly

**hedges:** rows of bushes

**shoots:** branches

**moist:** wet

**contrast:** comparison

**quest:** search

**started:** became startled

**timbered:** tree-filled

**grove:** small group of trees

**jutted:** stuck

**gables:** triangular portions of the roof-covered walls

**remarked:** said

**cluster:** group

**stile:** step

**observed:** commented

**fare:** bill

**rattled:** moved noisily

**architects:** building designers

**splendidly:** wonderfully

**acquaintance:** social connection

**cunning:** sneakily smart

**lichen:** crusty, leafy material

**blotched:** spotted

**comparatively:** by comparison

**scaffolding:** temporary frame

**erected:** built

**Pending:** waiting for

**suggestive:** a hint of something

**bar:** lock

**endeavoured:** tried

**slit:** narrow opening

**lens:** magnifying glass

**masonry:** stonework

**whitewashed:** lime-and-water cleaned

**chamber:** room

**homely:** plain and simple

**gaping:** widely open

**counterpaned:** quilted

**articles:** items

•• (continued)

**tassel:** a decorative object made up of a bundle of thick dangling thread

**pull:** rope

**minutely:** in small detail

**brisk:** quick, short

**communicated:** connected

**furnished:** decorated

**character:** quality

**principal:** important

**keenest:** sharpest

**satisfying:** fulfilling

**lash:** whip

**whipcord:** tight twisted whip end

**wicked:** evil

**clever:** smart

**grim:** dark and serious

**brow:** forehead

**roused:** woke

**essential:** necessary

**respect:** way

**hesitation:** pause

**compliance:** obedience

**gazed:** stared

**astonishment:** amazement

**confine:** limit

**tangible:** solid

**engaging:** paying for the use of

**command:** have

**dusk:** sunset

**looming:** appearing large and threatening

**undoing:** opening

**fury:** wild and violent anger

**clinched:** tightly balled

**element:** quality

**assistance:** help

**invaluable:** extremely valuable

**evidently:** obviously

**deduced:** figured out

**confess:** admit as true

**extinguished:** put out

**acquaintance:** person who is not a stranger but also not a friend

**sombre:** dark and unhappy

**breaches:** openings

**clump:** tight group

**darted:** moved quickly

**distorted:** twisted-looking

**writhing:** twisted

**startled:** surprised

**vice:** tight gripping tool

**murmured:** said softly and unclearly

**affected:** liked

**distinguish:** clearly make out

**vigil:** night of watching

**drawing:** intake

**tension:** stress

**ray:** beam

**tones:** sounds

**parish:** church town

**befall:** happen

**succeeded:** followed

**audible:** clear enough to hear

**lashed:** whipped

**savagely:** wildly

**loathing:** hatred

**mingled:** mixed together

**grave:** serious

**cocked:** readied

**ajar:** slightly open

**clad:** dressed

**stock:** handle

**speckles:** spots

**bound:** wrapped

**headgear:** decoration on the head

**loathsome:** hated

**recoil:** move away

**schemer:** sneaky planner

**horrid:** horrible

**perch:** stand

**conveyed:** brought

**indiscreetly:** carelessly

**erroneous:** wrong

**insufficient:** not enough

**sufficient:** enough

**merit:** reward for good work

**occupant:** person taking up space in an area

**ruthless:** cruel

**rapidity:** quickness

**punctures:** holes

**revealed:** showed

**inspection:** close study

**saucer:** plate

**hastily:** quickly and carelessly

**temper:** nature



...

**knock:** wake**retorted:** repaid the deed**metropolis:** city**deductions:** acts of problem-solving**pitiable:** sad**agitation:** being upset**premature:** early**haggard:** tired-looking**defray:** pay some amount of the cost**manifold:** many and different kinds of**dissolute:** wild and without concern for right or wrong**squire:** upper-class landowner**pauper:** poor person**morose:** sad**bequeathed:** left, in case of her death**quarrels:** fights**brawls:** fights**parapet:** low wall on the edge of a roof, bridge, or balcony**avert:** prevent**vagabonds:** homeless wanderers**correspondent:** person who writes letters**fortnight:** time of two weeks**impending:** oncoming**impressed:** made itself felt by**blanched:** turned white**convulsed:** suffered from spasms**fain:** willingly**convulsion:** spasm**allusion:** mention**delirium:** state of insanity**nocturnal:** night time**ejaculation:** excited shouting**aperture:** opening**apparition:** ghost**amiable:** friendly**perplexity:** confusion**ventilator:** opening in the wall that lets air in and out**ventilate:** let in and let out air**reverie:** dream-like state**pretence:** made-up reason**hasp:** lock**scruples:** problems of the conscience**parsonage:** church house**protruding:** sticking out

Use the Vocab App to play mini games related to the words in this lesson.



## A Lesson 1: "...there are widespread rumours..."

**Work Out Loud:** Students hear 2 clues to kick off the prediction activity.

Listen carefully to this audio because it provides a clue to what the next story is about.

**Play:** Making a Prediction: The Speckled Band.

The audio is very short. Each clue is only about 20 seconds, so it is helpful to have the speakers turned up and the room quiet.

## B Lesson 1 (continued)

**Class Poll:** Students respond to a poll to indicate the elements of the case they have predicted.

Students will repeat this poll during this lesson. Their predictions should get stronger as they learn more information. It is okay if students struggle to make a prediction at this point.

**Poll 1:** Ask students to indicate their response to Poll 1 on page 246 of the Student Edition. Note student responses to compare them to Poll 2.

Discuss responses.

Correct answer: All answers are correct.

Did you predict any of these items after reading the first two clues?

## A Lesson 1—"...there are widespread rumours..."

Listen for the clues as the audio from "The Speckled Band" is played.

B





### Poll 1:

You have received two clues about this story. Which of the following do you think you can predict now?

- I know what the crime is.
- I know who is involved in the crime.
- I know where the crime happened.
- I know who gets hurt.
- None of the above.

Share your thoughts in the class discussion.

### Lesson 1 Materials

-  Speckled Band Clues
-  Making a Prediction: The Speckled Band
-  Introducing Sherlock Holmes
-  Speckled Band Clues Notes

### Differentiation: Step A

● *ELL(Dev):* If you have a class with several ELL students or students having difficulty reading, you may choose to have a discussion before you begin reading the text about common elements in a mystery (a problem is introduced, suspects are interviewed, clues are uncovered, and the case is solved).

The 2 clues that are played aloud are 2 of the 14 clues that students will use for the prediction activities that follow. If students are reading below grade level and will benefit from hearing the clues read aloud, you may want to give these 2 clues to students to use in this activity.

C

Watch as your teacher models how to analyze the two passages below for clues.

**Clue 1:** "...I suddenly heard in the silence of the night the low whistle which had been the herald of her own death."

**Clue 2:** "...as I bent over her she suddenly shrieked out in a voice which I shall never forget, 'Oh, my God! Helen! It was the band! The speckled band!'"

Now it's your turn to look for clues!

1. Read the clue on the strip of paper your teacher gave you.
2. When your teacher instructs you, walk around the classroom and listen to students as they read their clues to you. Take notes about each clue on your Speckled Band Clues Notes page. Think about how the new clues add information to your clue.
3. When your teacher instructs you, partner with someone who has a clue similar to yours.
4. Look at both clues with your partner and discuss what the case might be about.
5. Explain what the case could be about.

You and your partner can have the same theories, but each of you should write your own explanation in the Writing Journal.



Go to page 74 in your Writing Journal and complete the writing activity to write an explanation of what you think this case will be about.

## Poll 2:

Which of the following do you think you can predict now? Share your thoughts in the class discussion.

- I know what the crime is.
- I know who is involved in the crime.
- I know where the crime happened.
- I know who gets hurt.
- None of the above.

"The Speckled Band" • Lesson 1 **247**



## Differentiation: Step C

- **ELL(Dev):** For your ELL(Dev) students, refer to the digital lesson for a list of terms that you can explain to support understanding of the text.
- **ELL(Dev):** If you choose to have students work in small groups or pairs for this activity, plan how you will assign the groups. ELL students should be assigned to work with non-ELL students or ELL students at a different level.



## Lesson 1 (continued)

**Use the Text as Referee:** Students use information from clues to make predictions and share their predictions with each other.



Direct students to page 247 of the Student Edition.



Hand out one Speckled Band Clue and a blank Speckled Band Clues Notes page to each student. (These are located in the Digital Materials section.)



Explain that each clue is a line from the story like the 2 clues they just heard read aloud.



Use these lines of text as clues to predict what "The Speckled Band" might be about, like a detective would use clues when solving a case.



You will walk around and read other students' clues and think about how their clues add information to your own clue. Then take notes on your clues in your Writing Journal on page 74.



Model the activity with the 2 clues that you just heard read aloud on page 247 of the Student Edition.



Write down your notes on these clues on the board for students.



What can you tell about the story from the first clue? What can you tell from the second clue?



Students complete Activities 1–5 on page 247 of the Student Edition.



**Writing Journal:** Students complete the writing activity on page 74.



Discuss responses.



Ask students to indicate their response to Poll 2 in the Student Edition.



Compare the results to Poll 1. Discuss if and how the number of predictions for each statement has changed.




**Correct Answer:** All answers are correct. Students may select up to 4 answers.


20 min


## D Lesson 1 (continued)

Benchmark: ELA.6.R.1.1


**Work Out Loud:** Students analyze how Doyle uses the first paragraph of “The Speckled Band” to introduce and begin developing the character of Sherlock Holmes.


 Direct students to follow along with the audio in paragraph 1 on page 220 of the Student Edition.


 Look for the moments in which the author gives us important character traits about Holmes.


 Students complete Activity 2 in the Student Edition.


 Discuss responses.


 **Play:** Audio for Introducing Sherlock Holmes.


 **Writing Journal:** Students answer questions 1–3 on page 75.


 Remind students to use evidence from the text in their answers.


 Discuss responses.


 By digging deeper, we can see how the author includes details about Holmes’s history as an investigator so that we can make an inference about why he decides to take on Helen Stoner’s case.

 Students complete Activity 3 in the Student Edition.

 **Writing Journal:** Students complete Activities 4 and 5 on page 76.

 Discuss responses.

 **Wrap-Up:** Project Poll 3.

 **Exit Ticket:** Project.

End of Lesson 1

“...there are widespread rumours...”

## D Lesson 1—“...there are widespread rumours...” (continued)

1. Carefully read the first paragraph of the story which introduces the character of Sherlock Holmes. Follow along with the audio in paragraph 1 of “The Speckled Band” on page 220.
2. Highlight the moments in which the author gives us important character traits about Holmes in paragraph 1 on page 220.




Answer questions 1–3 on page 75 of your Writing Journal.

3. Highlight any words in paragraph 1 on page 220 that describe the cases that Holmes and Watson have worked on together over the years.



Answer questions 4 and 5 on page 76 of your Writing Journal.

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### Differentiation: Step D

● *ELL(Dev):* You may choose to play this audio more than once to support students reading below grade level with comprehension and ELL students with language acquisition.

E

## Lesson 2—"I am all attention, madam."

1. Review paragraphs 22–76 from "The Speckled Band" on pages 222–227.
2. Reflect on what you know about each character.



List what you learned about Helen Stoner and Dr. Roylott on page 77 of your Writing Journal.

3. With a partner, place the following events in the order that they happened, from first to last.

### Order

### Event

- |       |   |
|-------|---|
| _____ | Julia tells her sister that she heard a whistle.                          |
| _____ | Dr. Roylott tries to help Julia, but she dies.                            |
| _____ | Helen thinks she hears the whistle sound and then a metal clanging noise. |
| _____ | Julia yells, "It was the band! The speckled band!"                        |
| _____ | Helen hears a scream.   |
| _____ | Helen blames a group of gypsies outside for the whistling sound.          |

4. Turn and talk with your partner about paragraphs 22–76 on pages 222–227. Use these discussion questions to help frame your conversation.

### Discussion Questions

- Why has Helen Stoner visited Holmes?
- What seems important from Helen Stoner's story about her sister's death?
- How does Helen think her sister died?
- How does Holmes react to hearing this story from Helen?
- What action does he take as a result of his reaction?

"The Speckled Band" • Lesson 2 **249**

E

## Lesson 2: "I am all attention, madam."

Benchmark: ELA.6.R.1.1

**Use the Text as Referee:** Students review the text in the previous Solo to clarify any confusion and explain the important details of the passage.



Direct students to page 249 of the Student Edition.



We are discovering the evidence in the case along with Holmes. This first reading reveals a number of important clues.



Students complete Activities 1 and 2 in the Student Edition.



**Writing Journal:** Students list what they learn about the characters on page 77.



Discuss responses.



Assign pairs.



Students complete Activity 3 in the Student Edition.



Discuss responses.



Students complete Activity 4 in the Student Edition, using the discussion questions.



Discuss responses.



Make sure students use evidence from the text to support their answers.

12 min



### Lesson 2 Materials



"The Speckled Band,"  
paragraphs 29–76




### Differentiation: Step E


- *ELL(Dev)*: You may want to read aloud the section in which Helen tells her story. This will be particularly useful for ELL students and students reading below grade level.
- *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level. Students who are reading below grade level should be paired with students who are reading on or above grade level.


## F Lesson 2 (continued)


Benchmark: ELA.6.R.1.1


**Select Text:** Students make a list of details that Holmes finds suspicious to use in the prompt that follows.


 Read aloud paragraphs 12–17 from “The Speckled Band” on page 221 of the Student Edition.

 Direct students to follow along.


 Students complete Activities 1–3 on page 250 of the Student Edition.

 Discuss responses.


 What does Holmes do here? What are his “methods”?


 Holmes is not doing anything that is magical or superhuman. Which part seems extraordinary?


 **Project:** Paragraphs 29–76 of “The Speckled Band.”


 **Model:** Highlight the following in the projected passage:


*“She smiled back at me, closed my door, and a few moments later I heard her key turn in the lock. ‘Indeed,’ said Holmes. ‘Was it your custom always to lock yourselves in at night?’” (44–45)*

 You can tell Holmes is suspicious of her sister locking the door behind her because he asks a question about this part of the story.

 He is digging deeper to get more information and possibly a clue to help solve the mystery.

 **Writing Journal:** Students make a list of suspicious details on page 77.

 **On-the-Fly:** Circulate around the room to support students.

 Discuss responses.

F

## Lesson 2—“I am all attention, madam.” (continued)

1. Follow along as your teacher reads aloud paragraphs 12–17 from “The Speckled Band” on page 221.
2. Highlight in paragraphs 12–17 the clues Holmes uses to find out about the woman's journey to London.
3. How does Holmes discover these clues? Share your response in the class discussion.
4. Review paragraphs 29–76 and highlight any text that shows that Holmes is suspicious about something.
5. Make a list of details that Holmes finds suspicious.



Go to page 77 in your Writing Journal to make your list.

"I am all attention,  
madam."

G

Think about the details that Holmes finds suspicious about Helen and her story.



On page 78 of your Writing Journal, explain his suspicions.

G

## Lesson 2 (continued)

Benchmarks: ELA.6.R.1.1, ELA.6.C.1.4

**Write & Share:** Students write about the details that Holmes finds suspicious and how the reader knows they are suspicious.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students complete the Writing Prompt on page 78.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Exit Ticket:** Project.

End of Lesson 2



### Differentiation: Step G

● *ELL(Dev):* Alternate Writing Prompt provides guiding questions and sentence starters.

■ *Moderate:* Alternate Writing Prompt provides sentence starters.

### Before You Begin Lesson 3:

We highly recommend students have access to the digital lesson in order to use the Scene of the Crime: Sherlock Holmes app to create a storyboard in which students analyze the setting and explain objects and furniture they find suspicious.

If using digital activities, manage print activities accordingly.


### Before You Begin Lesson 4:

We highly recommend students have access to the digital lesson in order to use the Scene of the Crime: Sherlock Holmes app in Steps J and K to arrange the furniture and objects in the rooms according to how they are described in a passage. If using digital activities, manage print activities accordingly.


## H Lesson 4: What Does the Furniture Say?


Benchmark: ELA.K12.EE.1.1


**Use the Text as Referee:** Students review the story's ending and discuss the conclusions that Holmes draws from the evidence.

 Direct students to page 252 of the Student Edition.


 **Play:** The Adventure of the Speckled Band - The Ending.


 Students follow along with the audio.

 Lead a discussion for Activity 2 in the Student Edition.

 Holmes puts together a series of observations to reach a specific conclusion.

 Assign partners.

 Partners complete Activity 3 in the Student Edition.

 After partners complete Activity 3, collect responses to create the correct order of events together on the board.

What Does the Furniture Say?

## H Lesson 4—What Does the Furniture Say?

1. Follow along with the audio in paragraphs 196–251 on pages 235–240.

2. **Discussion Questions:**

Share your thoughts in the class discussion.

- What does Holmes discover in Helen's sister's room?
- How does Holmes draw a conclusion about the ventilator before he even sees the room?
- What does Holmes find suspicious about the bed?
- Do Holmes and Watson see the same things when they visit Stoke Moran? Why do you think Holmes has more to say about some of the things they see?

3. With a partner, place the following events in the order that they happened, from first to last.

Order	Event
_____	They find Dr. Roylott dead in his room.
_____	They hear a horrible cry.
_____	Holmes lights a lantern.
_____	Watson hears a whistle.
_____	Holmes hits something on the bell-pull with his cane.
_____	They hear a hissing sound.
_____	They see, wrapped around Dr. Roylott's head, a snake that looks like a speckled band.

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### Lesson 4 Materials


 Mixed-up Room: Roylott


 Correct Room: Roylott


 Mixed-up Room: Helen


 Correct Room: Helen


 Answer Key for Mixed-up Rooms

 Reasoning by Holmes After Visiting Stoke Moran PDF

 The Night at Stoke Moran PDF

 Review by Holmes After the Case PDF

 The Adventure of the Speckled Band - The Ending

 Scene of the Crime: Sherlock Holmes app

### Differentiation: Step H

If students are having difficulty understanding what happens in this text, you may choose to provide a review of the end of the story and how Holmes solves the mystery.

I

1. Review paragraphs 248–251 on pages 239–240.
2. Highlight where Holmes figures out the significance of the furniture and objects in the rooms in paragraphs 248–251 on pages 239–240.






K

1. Work with a partner to share and compare your room layouts and the quotes you used to label the objects in the Scene of the Crime: Sherlock Holmes app.
2. Discuss the following with your partner:
  - Do you have your objects in the same location?
  - Why did you place \_\_\_\_\_ in \_\_\_\_\_?
  - What quotes did you use to label the objects?
  - How does Holmes use the location of a specific object to solve the case?

I

## Lesson 4 (continued)


**Select Text:** Students review passages to focus on which pieces of furniture and objects were significant clues and why.

-  Direct students to page 253 of the Student Edition.
-  Students complete Activities 1 and 2 in the Student Edition.
-  Discuss responses.
-  Direct students to add in any highlights that they missed during this discussion.
-  **On-the-Fly:** Circulate around the room to support students.

J

## Lesson 4 (continued)

**Work Visually:** Students use quotes from the text to label the objects and pieces of furniture that Sherlock uses as clues to solve the case.










-  Students use the digital lesson to complete this step with the Scene of the Crime: Sherlock Holmes app.

K

## Lesson 4 (continued)

Benchmark: ELA.K12.EE.1.1

**Use the Text as Referee:** Students share and compare their room layouts to discuss and defend their layout and quote choices.

-  If students have devices, they can use the Scene of the Crime Sherlock: Sherlock Holmes app to compare room layouts in Activity 1.
-  If students disagree about a quote or an object, encourage them to find text evidence to support their decision.
-  For your reference, use the Answer Key for Mixed-Up Rooms in the digital lesson.
-  Assign students partners.
-  Partners complete Activities 1 and 2 on page 253 of the Student Edition.
-  **On-the-Fly:** Circulate around the room to support students.
-  Discuss responses.
-  **Wrap-Up:** Project Poll 1.
-  **Exit Ticket:** Project.

### End of Lesson 4









## L Lesson 5: Which Clues Does Holmes Use?

Benchmark: ELA.K12.EE.1.1

**Select Text:** Students review the text and list the clues Holmes uses that solve the case.

10 min





-  Direct students to page 254 in the Student Edition.
-  Review the information in Differentiating the Clues in the Student Edition.
-  Students complete Activities 1 and 2 in the Student Edition.
-  **Writing Journal:** Students complete the chart on page 79.
-  Discuss responses.
-  What is the most important clue in solving the case?

## M Lesson 5 (continued)

Benchmark: ELA.K12.EE.1.1

**Review Earlier Predictions:** Students review the details they selected for an earlier Writing Prompt to see if they were the key details Sherlock used to solve the case.

7 min

-  **Writing Journal:** Students review their written response on page 78.
-  Assign partners.
-  Partners complete Activities 1–2 on page 254 of the Student Edition.
-  Discuss responses.

## L Lesson 5—Which Clues Does Holmes Use?

### Differentiating the Clues

There is a distinction between the clues presented in the text and Holmes's thoughts and reasoning.

- For example, there are no clues that directly point to the snake, only Holmes's thoughts and reasoning.
  - Sometimes, Holmes carefully observes and deduces and sometimes, things just come to him and he looks for confirmation.
1. Review paragraphs 248–251 on pages 239–240.
  2. Highlight clues that Holmes uncovers about the case.
  3. Which clues are important and which are not in the story?



On page 79 of your Writing Journal, complete the chart to decide which clues are important and unimportant.

M

1. Review your response to the Writing Prompt from Lesson 2 on page 78 of your Writing Journal.
2. Discuss the following with a partner:
  - What details did you write about that Holmes actually uses to solve the case?
  - What details did you write about that Holmes does not use to solve the case?



### Lesson 5 Materials

No materials.



### Differentiation: Steps L & M

- **ELL(Dev):** Plan how you will assign pairs for these activities. ELL students should be assigned to work with non-ELL students or ELL students at a different level. You may choose to allow students having difficulty reading to work with a partner to locate and list the clues in the text.

N

Which details turned out to be important and unimportant? How does the text confirm this?



Respond to the writing prompt on page 80 of your Writing Journal.

N

## Lesson 5 (continued)

Benchmarks: ELA.6.C.1.4, ELA.K12.EE.1.1

**Write & Share:** Students describe the important and unimportant details to read carefully and find what may have misled them in the text.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students complete the Writing Prompt on page 80.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Exit Ticket:** Project.

End of Lesson 5



### Differentiation: Step L

If your class is having difficulty locating the clues or distinguishing clues from reasoning, you may choose to complete this activity as a whole class.



### Differentiation: Step M

● *ELL(Dev)*: Plan how you will assign pairs for this activity. ELL students should be assigned to work with non-ELL students or ELL students at a different level.



### Differentiation: Step N

● *ELL(Dev)*, ■ *Moderate*: Alternate Writing Prompt provides a list of details to choose from and sentence starters.

### Before You Begin Lesson 6:

Lesson 6 is a Flex Day. Select from a range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts. Please see instructions in the digital lesson.

# “The Red-Headed League”



*by Sir Arthur Conan Doyle*

“The Red-Headed League” (1892) seems to start the same way as “The Speckled Band,” with a distressed client coming to tell a mysterious tale. But this story is even less straightforward—and will leave students wondering what else Sherlock Holmes and his author might be capable of. Make sure students know there are plenty more stories where this one came from in the Amplify Library.

# Sub-Unit 4



Lesson 1:  
“Share my love of all  
that is bizarre.”



Lesson 2:  
Case Notes



Lesson 3:  
“Red-Handed”



Lesson 4:  
Flex Day 5

# Sub-Unit 4 at a Glance

Lesson Objective	Reading
<p><b>Lesson 1:</b> “Share my love of all that is bizarre.”</p> <p><b>Reading:</b> Students will examine the details of Wilson’s story (a red herring) in order to identify important clues and suspicious details. Students will explain why they think a clue is important or suspicious.</p> <p><b>Module:</b>   Literary Elements</p>	<p><i>The Adventures of Sherlock Holmes:</i></p> <ul style="list-style-type: none"> <li>• “The Red-Headed League” (1–88)</li> </ul> <p><b>Solo:</b></p> <ul style="list-style-type: none"> <li>• “The Red-Headed League” (89–162)</li> </ul>
<p><b>Lesson 2:</b> Case Notes</p> <p><b>Reading:</b> Students will continue to examine the details of Wilson’s story (a red herring) in order to identify important clues and suspicious details. Students will explain why they think a clue is important or suspicious.</p> <p><b>Writing:</b> Students will make a claim about which details are key clues in the case and use text details to develop their claim.</p>	<p><i>The Adventures of Sherlock Holmes:</i></p> <ul style="list-style-type: none"> <li>• “The Red-Headed League” (89–162)</li> </ul> <p><b>Solo:</b></p> <ul style="list-style-type: none"> <li>• “The Red-Headed League” (155–215)</li> </ul>
<p><b>Lesson 3:</b> “Red-Handed”</p> <p><b>Reading:</b> Students will examine five key details from Wilson’s story about the Red-headed League and the three key details Holmes discovers in Saxe-Coburg Square to identify how they succeeded in identifying these clues or why they were misdirected by Doyle.</p> <p><b>App:</b>   Caught Red-Handed app</p> <p>We highly recommend that students have access to the digital lesson in order to use the Caught Red-Handed app.</p>	<p><i>The Adventures of Sherlock Holmes:</i></p> <ul style="list-style-type: none"> <li>• “The Red-Headed League” (163–211)</li> </ul> <p><b>Solo:</b></p> <ul style="list-style-type: none"> <li>• “The Red-Headed League” (1–215)</li> </ul>
<p><b>Lesson 4:</b> Flex Day 5</p> <p>The teacher selects from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts.</p>	

## Writing Prompt

## Benchmark Stack

No analytical writing prompt.

**ELA.6.R.1.1**

ELA.K12.EE.2.1

ELA.K12.EE.4.1

ELA.6.V.1.3

What details from the text seem ordinary but actually might be suspicious? Using textual evidence, explain why.

**Extra:** Challenge Writing available in the digital lesson.

**ELA.K12.EE.1.1**

**ELA.6.C.1.4**

ELA.K12.EE.3.1

No analytical writing prompt.

**ELA.6.R.3.2**

ELA.K12.EE.4.1

ELA.6.R.1.1

ELA.6.R.1.2

ELA.6.C.1.3

ELA.6.V.1.1

ELA.6.V.1.3

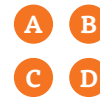
Each Flex Day activity provides practice with particular skills and benchmarks. Consult the Flex Day Activities Guide to see what is targeted by each activity.

# Sub-Unit 4 Preparation Checklist

## Lesson 1

- ❑ The B.E.S.T. Module: Literary Elements, available in the digital lesson, provides an introduction to the Reading Benchmark ELA.6.R.1.1 and can be used to prepare students for this lesson.

*Note that lesson Solos can be completed in the digital curriculum, through the Amplify Mobile Solos app, or in print. Solo Activities PDFs can be found in the Materials section of the digital Unit Guide, along with a Solo Answer Key.*



Pages 218–219

## Lesson 2

*No additional prep.*



Pages 220–221

## Lesson 3

*We highly recommend students have access to the digital lesson in order to create notes and write about facts with the Caught Red-Handed app.*



Pages 222–223

## Lesson 4: Flex Day

- ❑ Review each lesson activity to identify which one(s) will best support your students' skill progress.
- ❑ Each activity requires distinct preparation. Review the Instructional Guide for each activity you will assign.
- ❑ Prepare any texts, materials, or directions you may need to project or distribute.

**Note:** There may be activities in these lessons that students will revise or refer to in a subsequent lesson. By keeping track of lessons that students complete in a print format, you can have students refer to their print work when they reach these activities. In addition, your students will need to copy any Writing Prompts completed in a print lesson into the corresponding digital writing space if you want that writing to be included in Productivity and other reports.





# "The Red-Headed League"

Sir Arthur Conan Doyle

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## Sub-Unit 4 "The Red-Headed League"

### Overview

Now that you have experienced reading a real Sherlock Holmes story and know how Sir Arthur Conan Doyle sets up his mysteries, see if you can figure out what is really going on with "The Red-Headed League."

### Suggested Reading

The following mysteries are sometimes funny, but also serious, thrilling, or scary. *From the Mixed-Up Files of Mrs. Basil E. Frankweiler* (1967) by E.L. Konigsberg is the story of two kids who run away from home to live in a museum. *The Egypt Game* (1967) by Zilpha Keatley Snyder starts with a group of kids playing in an empty lot, but soon turns to murder. *The House of Dies Drear* (1968) by Virginia Hamilton is a historical mystery in the form of a ghost story. If you like spooky, try the *Herculeah Jones* mysteries by Betsy Byars. The detective in *The London Eye Mystery* (2007) by Siobhan Dowd has Asperger's syndrome, which gives him a unique perspective on a missing person case (some people have speculated that Holmes had Asperger's as well). *The Mysterious Benedict Society* (2007) by Trenton Lee Stewart is a fun series about a group of kids sent on a mysterious mission. *Holes* (1998) by Louis Sachar is a mystery set in a prison camp in the desert. And *The Invention of Hugo Cabret* (2007) by Brian Selznick is an unusual mystery (based on a true story) about a boy who lives in a train station.

### App in this Sub-Unit




Caught Red-Handed

You'll use this app to examine how Sherlock Holmes uses the clues provided by Mr. Wilson to solve not one case, but two! You will visit Saxe-Coburg Square to collect evidence, then think like Holmes to help catch the criminal red-handed.



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# “The Red-Headed League”

*Sir Arthur Conan Doyle*

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# “The Red-Headed League”

by Sir Arthur Conan Doyle

- <sup>1</sup> I had called upon my friend, Mr. Sherlock Holmes, one day in the autumn of last year and found him in deep conversation with a very **stout**, **florid**-faced, elderly gentleman with fiery red hair. With an apology for my intrusion, I was about to withdraw when Holmes pulled me abruptly into the room and closed the door behind me.
- <sup>2</sup> “You could not possibly have come at a better time, my dear Watson,” he said cordially.
- <sup>3</sup> “I was afraid that you were engaged.”
- <sup>4</sup> “So I am. Very much so.”
- <sup>5</sup> “Then I can wait in the next room.”
- <sup>6</sup> “Not at all. This gentleman, Mr. Wilson, has been my partner and helper in many of my most successful cases, and I have no doubt that he will be of the utmost use to me in yours also.”
- <sup>7</sup> The stout gentleman half rose from his chair and gave a bob of greeting, with a quick little questioning glance from his small fat-encircled eyes.
- <sup>8</sup> “Try the settee,” said Holmes, relapsing into his armchair and putting his fingertips together, as was his custom when in judicial moods. “I know, my dear Watson, that you share my love of all that is bizarre and outside the conventions and humdrum routine of everyday life. You have shown your relish for it by the enthusiasm which has prompted you to chronicle, and, if you will excuse my saying so, somewhat to embellish so many of my own little adventures.”
- <sup>9</sup> “Your cases have indeed been of the greatest interest to me,” I observed.
- <sup>10</sup> “You will remember that I remarked the other day, just before we went into the very simple problem presented by Miss Mary Sutherland, that for strange effects and extraordinary combinations we must go to life itself, which is always far more daring than any effort of the imagination.”
- <sup>11</sup> “A proposition which I took the liberty of doubting.”
- <sup>12</sup> “You did, Doctor, but none the less you must come round to my view, for otherwise I shall keep on piling fact upon fact on you until your reason breaks down under them and acknowledges me to be right. Now, Mr. Jabez Wilson here

**stout:** short and round

**florid:** red

has been good enough to call upon me this morning, and to begin a narrative which promises to be one of the most singular which I have listened to for some time. You have heard me remark that the strangest and most unique things are very often connected not with the larger but with the smaller crimes, and occasionally, indeed, where there is room for doubt whether any positive crime has been committed. As far as I have heard, it is impossible for me to say whether the present case is an instance of crime or not, but the course of events is certainly among the most singular that I have ever listened to. Perhaps, Mr. Wilson, you would have the great kindness to recommence your narrative. I ask you not merely because my friend Dr. Watson has not heard the opening part but also because the peculiar nature of the story makes me anxious to have every possible detail from your lips. As a rule, when I have heard some slight indication of the course of events, I am able to guide myself by the thousands of other similar cases which occur to my memory. In the present instance I am forced to admit that the facts are, to the best of my belief, unique."

- <sup>13</sup> The **portly** client puffed out his chest with an appearance of some little pride and pulled a dirty and wrinkled newspaper from the inside pocket of his greatcoat. As he glanced down the advertisement column, with his head thrust forward and the paper flattened out upon his knee, I took a good look at the man and endeavoured, after the fashion of my companion, to read the indications which might be presented by his dress or appearance.
- <sup>14</sup> I did not gain very much, however, by my inspection. Our visitor bore every mark of being an average **commonplace** British tradesman, obese, pompous, and slow. He wore rather baggy grey shepherd's check trousers, a not over-clean black frock-coat, unbuttoned in the front, and a drab waistcoat with a heavy brassy Albert chain, and a square pierced bit of metal dangling down as an ornament. A frayed top-hat and a faded brown overcoat with a wrinkled velvet collar lay upon a chair beside him. Altogether, look as I would, there was nothing remarkable about the man save his blazing red head, and the expression of extreme **chagrin** and discontent upon his features.
- <sup>15</sup> Sherlock Holmes's quick eye took in my occupation, and he shook his head with a smile as he noticed my questioning glances. "Beyond the obvious facts that he has at some time done manual labour, that he takes snuff, that he is a Freemason, that he has been in China, and that he has done a considerable amount of writing lately, I can deduce nothing else."
- <sup>16</sup> Mr. Jabez Wilson started up in his chair, with his forefinger upon the paper, but his eyes upon my companion.
- <sup>17</sup> "How, in the name of good-fortune, did you know all that, Mr. Holmes?" he asked. "How did you know, for example, that I did manual labour. It's as true as gospel, for I began as a ship's carpenter."

**portly:** fat  
**commonplace:**  
 ordinary  
**chagrin:**  
 embarrassment

**candid:** direct and truthful

**bequest:** inheritance given upon death

**ejaculated:** said excitedly

- 18 “Your hands, my dear sir. Your right hand is quite a size larger than your left. You have worked with it, and the muscles are more developed.”
- 19 “Well, the snuff, then, and the Freemasonry?”
- 20 “I won’t insult your intelligence by telling you how I read that, especially as, rather against the strict rules of your order, you use an arc-and-compass breastpin.”
- 21 “Ah, of course, I forgot that. But the writing?”
- 22 “What else can be indicated by that right cuff so very shiny for five inches, and the left one with the smooth patch near the elbow where you rest it upon the desk?”
- 23 “Well, but China?”
- 24 “The fish that you have tattooed immediately above your right wrist could only have been done in China. I have made a small study of tattoo marks and have even contributed to the literature of the subject. That trick of staining the fishes’ scales of a delicate pink is quite peculiar to China. When, in addition, I see a Chinese coin hanging from your watch-chain, the matter becomes even more simple.”
- 25 Mr. Jabez Wilson laughed heavily. “Well, I never!” said he. “I thought at first that you had done something clever, but I see that there was nothing in it after all.”
- 26 “I begin to think, Watson,” said Holmes, “that I make a mistake in explaining. ‘Omne ignotum pro magnifico,’ you know, and my poor little reputation, such as it is, will suffer shipwreck if I am so **candid**. Can you not find the advertisement, Mr. Wilson?”
- 27 “Yes, I have got it now,” he answered with his thick red finger planted halfway down the column. “Here it is. This is what began it all. You just read it for yourself, sir.”
- 28 I took the paper from him and read as follows:
- 29 “TO THE RED-HEADED LEAGUE: On account of the **bequest** of the late Ezekiah Hopkins, of Lebanon, Pennsylvania, U.S.A., there is now another vacancy open which entitles a member of the League to a salary of £4 a week for purely nominal services. All red-headed men who are sound in body and mind and above the age of twenty-one years, are eligible. Apply in person on Monday, at eleven o’clock, to Duncan Ross, at the offices of the League, 7 Pope’s Court, Fleet Street.”
- 30 “What on earth does this mean?” I **ejaculated** after I had twice read over the extraordinary announcement.
- 31 Holmes chuckled and wriggled in his chair, as was his habit when in high



spirits. "It is a little off the beaten track, isn't it?" said he. "And now, Mr. Wilson, off you go at scratch and tell us all about yourself, your household, and the effect which this advertisement had upon your fortunes. You will first make a note, Doctor, of the paper and the date."

32 "It is The Morning Chronicle of April 27, 1890. Just two months ago."

33 "Very good. Now, Mr. Wilson?"

34 "Well, it is just as I have been telling you, Mr. Sherlock Holmes," said Jabez Wilson, mopping his forehead; "I have a small pawnbroker's business at Coburg Square, near the City. It's not a very large affair, and of late years it has not done more than just give me a living. I used to be able to keep two assistants, but now I only keep one; and I would have a job to pay him but that he is willing to come for half wages so as to learn the business."

35 "What is the name of this obliging youth?" asked Sherlock Holmes.

36 "His name is Vincent Spaulding, and he's not such a youth, either. It's hard to say his age. I should not wish a smarter assistant, Mr. Holmes; and I know very well that he could better himself and earn twice what I am able to give him. But, after all, if he is satisfied, why should I put ideas in his head?"

37 "Why, indeed? You seem most fortunate in having an employé who comes under the full market price. It is not a common experience among employers in this age. I don't know that your assistant is not as remarkable as your advertisement."

38 "Oh, he has his faults, too," said Mr. Wilson. "Never was such a fellow for photography. Snapping away with a camera when he ought to be improving his mind, and then diving down into the cellar like a rabbit into its hole to develop his pictures. That is his main fault, but on the whole he's a good worker. There's no vice in him."

39 "He is still with you, I presume?"

40 "Yes, sir. He and a girl of fourteen, who does a bit of simple cooking and keeps the place clean—that's all I have in the house, for I am a widower and never had any family. We live very quietly, sir, the three of us; and we keep a roof over our heads and pay our debts, if we do nothing more.

41 "The first thing that put us out was that advertisement. Spaulding, he came down into the office just this day eight weeks, with this very paper in his hand, and he says:

42 "'I wish to the Lord, Mr. Wilson, that I was a red-headed man.'

43 "'Why that?' I asks.

44 "'Why,' says he, 'here's another vacancy on the League of the Red-headed Men. It's worth quite a little fortune to any man who gets it, and I understand that there are more vacancies than there are men, so that the trustees are at their

wits' end what to do with the money. If my hair would only change colour, here's a nice little crib all ready for me to step into.'

45 "“Why, what is it, then?’ I asked. You see, Mr. Holmes, I am a very stay-at-home man, and as my business came to me instead of my having to go to it, I was often weeks on end without putting my foot over the door-mat. In that way I didn’t know much of what was going on outside, and I was always glad of a bit of news.

46 "“Have you never heard of the League of the Red-headed Men?’ he asked with his eyes open.

47 "“Never.’

48 "“Why, I wonder at that, for you are eligible yourself for one of the vacancies.’

49 "“And what are they worth?’ I asked.

50 "“Oh, merely a couple of hundred a year, but the work is slight, and it need not interfere very much with one’s other occupations.’

51 "“Well, you can easily think that that made me prick up my ears, for the business has not been over good for some years, and an extra couple of hundred would have been very handy.

52 "“Tell me all about it,’ said I.

53 "“Well,’ said he, showing me the advertisement, ‘you can see for yourself that the League has a vacancy, and there is the address where you should apply for particulars. As far as I can make out, the League was founded by an American millionaire, Ezekiah Hopkins, who was very peculiar in his ways. He was himself red-headed, and he had a great sympathy for all red-headed men; so, when he died, it was found that he had left his enormous fortune in the hands of trustees, with instructions to apply the interest to the providing of easy **berths** to men whose hair is of that colour. From all I hear it is splendid pay and very little to do.’

54 "“But,’ said I, ‘there would be millions of red-headed men who would apply.’

55 "“Not so many as you might think,’ he answered. ‘You see it is really confined to Londoners, and to grown men. This American had started from London when he was young, and he wanted to do the old town a good turn. Then, again, I have heard it is no use your applying if your hair is light red, or dark red, or anything but real bright, blazing, fiery red. Now, if you cared to apply, Mr. Wilson, you would just walk in; but perhaps it would hardly be worth your while to put yourself out of the way for the sake of a few hundred pounds.’

56 "“Now, it is a fact, gentlemen, as you may see for yourselves, that my hair is of a very full and rich tint, so that it seemed to me that if there was to be any competition in the matter I stood as good a chance as any man that I had ever met. Vincent Spaulding seemed to know so much about it that I thought he

**berths:** positions

might prove useful, so I just ordered him to put up the shutters for the day and to come right away with me. He was very willing to have a holiday, so we shut the business up and started off for the address that was given us in the advertisement.

57 “I never hope to see such a sight as that again, Mr. Holmes. From north, south, east, and west every man who had a shade of red in his hair had tramped into the city to answer the advertisement. Fleet Street was choked with red-headed folk, and Pope’s Court looked like a **coster’s** orange barrow. I should not have thought there were so many in the whole country as were brought together by that single advertisement. Every shade of colour they were—straw, lemon, orange, brick, Irish-setter, liver, clay; but, as Spaulding said, there were not many who had the real vivid flame-coloured tint. When I saw how many were waiting, I would have given it up in despair; but Spaulding would not hear of it. How he did it I could not imagine, but he pushed and pulled and butted until he got me through the crowd, and right up to the steps which led to the office. There was a double stream upon the stair, some going up in hope, and some coming back dejected; but we wedged in as well as we could and soon found ourselves in the office.”

58 “Your experience has been a most entertaining one,” remarked Holmes as his client paused and refreshed his memory with a huge pinch of snuff. “Pray continue your very interesting statement.”

59 “There was nothing in the office but a couple of wooden chairs and a deal table, behind which sat a small man with a head that was even redder than mine. He said a few words to each candidate as he came up, and then he always managed to find some fault in them which would disqualify them. Getting a vacancy did not seem to be such a very easy matter, after all. However, when our turn came the little man was much more favourable to me than to any of the others, and he closed the door as we entered, so that he might have a private word with us.

60 “‘This is Mr. Jabez Wilson,’ said my assistant, ‘and he is willing to fill a vacancy in the League.’

61 “‘And he is admirably suited for it,’ the other answered. ‘He has every requirement. I cannot recall when I have seen anything so fine.’ He took a step backward, cocked his head on one side, and gazed at my hair until I felt quite bashful. Then suddenly he plunged forward, wrung my hand, and congratulated me warmly on my success.

62 “‘It would be injustice to hesitate,’ said he. ‘You will, however, I am sure, excuse me for taking an obvious precaution.’ With that he seized my hair in both his hands, and tugged until I yelled with the pain. ‘There is water in your eyes,’ said he as he released me. ‘I perceive that all is as it should be. But we have to be careful, for we have twice been deceived by wigs and once by paint.

**coster’s:**  
fruitseller’s



I could tell you tales of cobbler's wax which would disgust you with human nature.' He stepped over to the window and shouted through it at the top of his voice that the vacancy was filled. A groan of disappointment came up from below, and the folk all trooped away in different directions until there was not a red-head to be seen except my own and that of the manager.

63 "“My name,’ said he, ‘is Mr. Duncan Ross, and I am myself one of the **pensioners** upon the fund left by our noble **benefactor**. Are you a married man, Mr. Wilson? Have you a family?’

64 “I answered that I had not.

65 “His face fell immediately.

66 ““Dear me!’ he said gravely, ‘that is very serious indeed! I am sorry to hear you say that. The fund was, of course, for the **propagation** and spread of the red-heads as well as for their maintenance. It is exceedingly unfortunate that you should be a bachelor.’

67 “My face lengthened at this, Mr. Holmes, for I thought that I was not to have the vacancy after all; but after thinking it over for a few minutes he said that it would be all right.

68 ““In the case of another,’ said he, ‘the objection might be fatal, but we must stretch a point in favour of a man with such a head of hair as yours. When shall you be able to enter upon your new duties?’

69 ““Well, it is a little awkward, for I have a business already,’ said I.

70 ““Oh, never mind about that, Mr. Wilson!’ said Vincent Spaulding. ‘I should be able to look after that for you.’

71 ““What would be the hours?’ I asked.

72 ““Ten to two.’

73 “Now a pawnbroker’s business is mostly done of an evening, Mr. Holmes, especially Thursday and Friday evening, which is just before pay-day; so it would suit me very well to earn a little in the mornings. Besides, I knew that my assistant was a good man, and that he would see to anything that turned up.

74 ““That would suit me very well,’ said I. ‘And the pay?’

75 ““Is £4 a week.’

76 ““And the work?’

77 ““Is purely nominal.’

78 ““What do you call purely nominal?’

79 ““Well, you have to be in the office, or at least in the building, the whole time. If you leave, you forfeit your whole position forever. The will is very clear upon that point. You don’t comply with the conditions if you budge from the office during that time.’

**pensioners:**  
person who  
receives payment  
from an invested  
sum of money

**benefactor:** person  
who provided  
money and support  
for others

**propagation:**  
multiplication

- 80 “‘It’s only four hours a day, and I should not think of leaving,’ said I.
- 81 “‘No excuse will avail,’ said Mr. Duncan Ross; ‘neither sickness nor business nor anything else. There you must stay, or you lose your **billet**.’
- 82 “‘And the work?’
- 83 “‘Is to copy out the Encyclopaedia Britannica. There is the first volume of it in that press. You must find your own ink, pens, and blotting-paper, but we provide this table and chair. Will you be ready to-morrow?’
- 84 “‘Certainly,’ I answered.
- 85 “‘Then, good-bye, Mr. Jabez Wilson, and let me congratulate you once more on the important position which you have been fortunate enough to gain.’ He bowed me out of the room and I went home with my assistant, hardly knowing what to say or do, I was so pleased at my own good fortune.
- 86 “Well, I thought over the matter all day, and by evening I was in low spirits again; for I had quite persuaded myself that the whole affair must be some great hoax or fraud, though what its object might be I could not imagine. It seemed altogether past belief that anyone could make such a will, or that they would pay such a sum for doing anything so simple as copying out the Encyclopaedia Britannica. Vincent Spaulding did what he could to cheer me up, but by bedtime I had reasoned myself out of the whole thing. However, in the morning I determined to have a look at it anyhow, so I bought a penny bottle of ink, and with a quill-pen, and seven sheets of foolscap paper, I started off for Pope’s Court.
- 87 “Well, to my surprise and delight, everything was as right as possible. The table was set out ready for me, and Mr. Duncan Ross was there to see that I got fairly to work. He started me off upon the letter A, and then he left me; but he would drop in from time to time to see that all was right with me. At two o’clock he bade me good-day, complimented me upon the amount that I had written, and locked the door of the office after me.
- 88 “This went on day after day, Mr. Holmes, and on Saturday the manager came in and planked down four golden sovereigns for my week’s work. It was the same next week, and the same the week after. Every morning I was there at ten, and every afternoon I left at two. By degrees Mr. Duncan Ross took to coming in only once of a morning, and then, after a time, he did not come in at all. Still, of course, I never dared to leave the room for an instant, for I was not sure when he might come, and the billet was such a good one, and suited me so well, that I would not risk the loss of it.
- 89 “Eight weeks passed away like this, and I had written about Abbots and Archery and Armour and Architecture and Attica, and hoped with diligence that I might get on to the B’s before very long. It cost me something in foolscap, and I had pretty nearly filled a shelf with my writings. And then suddenly the whole business came to an end.”

**billet:** place

90 “To an end?”

91 “Yes, sir. And no later than this morning. I went to my work as usual at ten o’clock, but the door was shut and locked, with a little square of cardboard hammered on to the middle of the panel with a tack. Here it is, and you can read for yourself.”

92 He held up a piece of white cardboard about the size of a sheet of note-paper. It read in this fashion:

93  
RED-HEADED LEAGUE  
IS  
DISSOLVED  
October 9, 1890.

94 Sherlock Holmes and I surveyed this curt announcement and the **rueful** face behind it, until the comical side of the affair so completely overtopped every other consideration that we both burst out into a roar of laughter.

95 “I cannot see that there is anything very funny,” cried our client, flushing up to the roots of his flaming head. “If you can do nothing better than laugh at me, I can go elsewhere.”

96 “No, no,” cried Holmes, shoving him back into the chair from which he had half risen. “I really wouldn’t miss your case for the world. It is most refreshingly unusual. But there is, if you will excuse my saying so, something just a little funny about it. Pray what steps did you take when you found the card upon the door?”

97 “I was staggered, sir. I did not know what to do. Then I called at the offices round, but none of them seemed to know anything about it. Finally, I went to the landlord, who is an accountant living on the ground floor, and I asked him if he could tell me what had become of the Red-headed League. He said that he had never heard of any such body. Then I asked him who Mr. Duncan Ross was. He answered that the name was new to him.

98 “‘Well,’ said I, ‘the gentleman at No. 4.’

99 “‘What, the red-headed man?’

100 “‘Yes.’

101 “‘Oh,’ said he, ‘his name was William Morris. He was a **solicitor** and was using my room as a temporary convenience until his new premises were ready. He moved out yesterday.’

102 “‘Where could I find him?’

103 “‘Oh, at his new offices. He did tell me the address. Yes, 17 King Edward Street, near St. Paul’s.’

**rueful:** sorry  
**solicitor:** lawyer

104 “I started off, Mr. Holmes, but when I got to that address it was a **manufactory** of artificial knee-caps, and no one in it had ever heard of either Mr. William Morris or Mr. Duncan Ross.”

105 “And what did you do then?” asked Holmes.

106 “I went home to Saxe-Coburg Square, and I took the advice of my assistant. But he could not help me in any way. He could only say that if I waited I should hear by post. But that was not quite good enough, Mr. Holmes. I did not wish to lose such a place without a struggle, so, as I had heard that you were good enough to give advice to poor folk who were in need of it, I came right away to you.”

107 “And you did very wisely,” said Holmes. “Your case is an exceedingly remarkable one, and I shall be happy to look into it. From what you have told me I think that it is possible that graver issues hang from it than might at first sight appear.”

108 “Grave enough!” said Mr. Jabez Wilson. “Why, I have lost four pound a week.”

109 “As far as you are personally concerned,” remarked Holmes, “I do not see that you have any grievance against this extraordinary league. On the contrary, you are, as I understand, richer by some £30, to say nothing of the minute knowledge which you have gained on every subject which comes under the letter A. You have lost nothing by them.”

110 “No, sir. But I want to find out about them, and who they are, and what their object was in playing this prank—if it was a prank—upon me. It was a pretty expensive joke for them, for it cost them two and thirty pounds.”

111 “We shall endeavour to clear up these points for you. And, first, one or two questions, Mr. Wilson. This assistant of yours who first called your attention to the advertisement—how long had he been with you?”

112 “About a month then.”

113 “How did he come?”

114 “In answer to an advertisement.”

115 “Was he the only applicant?”

116 “No, I had a dozen.”

117 “Why did you pick him?”

118 “Because he was handy and would come cheap.”

119 “At half wages, in fact.”

120 “Yes.”

121 “What is he like, this Vincent Spaulding?”

**manufactory:**  
maker

**introspect:** think inwardly

 **268**

- <sup>122</sup> “Small, stout-built, very quick in his ways, no hair on his face, though he’s not short of thirty. Has a white splash of acid upon his forehead.”
- <sup>123</sup> Holmes sat up in his chair in considerable excitement. “I thought as much,” said he. “Have you ever observed that his ears are pierced for earrings?”
- <sup>124</sup> “Yes, sir. He told me that a gipsy had done it for him when he was a lad.”
- <sup>125</sup> “Hum!” said Holmes, sinking back in deep thought. “He is still with you?”
- <sup>126</sup> “Oh, yes, sir; I have only just left him.”
- <sup>127</sup> “And has your business been attended to in your absence?”
- <sup>128</sup> “Nothing to complain of, sir. There’s never very much to do of a morning.”
- <sup>129</sup> “That will do, Mr. Wilson. I shall be happy to give you an opinion upon the subject in the course of a day or two. To-day is Saturday, and I hope that by Monday we may come to a conclusion.”
- <sup>130</sup> “Well, Watson,” said Holmes when our visitor had left us, “what do you make of it all?”
- <sup>131</sup> “I make nothing of it,” I answered frankly. “It is a most mysterious business.”
- <sup>132</sup> “As a rule,” said Holmes, “the more bizarre a thing is the less mysterious it proves to be. It is your commonplace, featureless crimes which are really puzzling, just as a commonplace face is the most difficult to identify. But I must be prompt over this matter.”
- <sup>133</sup> “What are you going to do, then?” I asked.
- <sup>134</sup> “To smoke,” he answered. “It is quite a three pipe problem, and I beg that you won’t speak to me for fifty minutes.” He curled himself up in his chair, with his thin knees drawn up to his hawk-like nose, and there he sat with his eyes closed and his black clay pipe thrusting out like the bill of some strange bird. I had come to the conclusion that he had dropped asleep, and indeed was nodding myself, when he suddenly sprang out of his chair with the gesture of a man who has made up his mind and put his pipe down upon the mantelpiece.
- <sup>135</sup> “Sarasate plays at the St. James’s Hall this afternoon,” he remarked. “What do you think, Watson? Could your patients spare you for a few hours?”
- <sup>136</sup> “I have nothing to do to-day. My practice is never very absorbing.”
- <sup>137</sup> “Then put on your hat and come. I am going through the City first, and we can have some lunch on the way. I observe that there is a good deal of German music on the programme, which is rather more to my taste than Italian or French. It is introspective, and I want to **introspect**. Come along!”
- <sup>138</sup> We travelled by the Underground as far as Aldersgate; and a short walk took us to Saxe-Coburg Square, the scene of the singular story which we had listened to in the morning. It was a poky, little, shabby-genteel place, where four lines

of dingy two-storied brick houses looked out into a small railed-in enclosure, where a lawn of weedy grass and a few clumps of faded laurel bushes made a hard fight against a smoke-laden and **uncongenial** atmosphere. Three gilt balls and a brown board with "JABEZ WILSON" in white letters, upon a corner house, announced the place where our red-headed client carried on his business. Sherlock Holmes stopped in front of it with his head on one side and looked it all over, with his eyes shining brightly between puckered lids. Then he walked slowly up the street, and then down again to the corner, still looking keenly at the houses. Finally he returned to the pawnbroker's, and, having thumped vigorously upon the pavement with his stick two or three times, he went up to the door and knocked. It was instantly opened by a bright-looking, clean-shaven young fellow, who asked him to step in.

139 "Thank you," said Holmes, "I only wished to ask you how you would go from here to the Strand."

140 "Third right, fourth left," answered the assistant promptly, closing the door.

141 "Smart fellow, that," observed Holmes as we walked away. "He is, in my judgment, the fourth smartest man in London, and for daring I am not sure that he has not a claim to be third. I have known something of him before."

142 "Evidently," said I, "Mr. Wilson's assistant counts for a good deal in this mystery of the Red-headed League. I am sure that you inquired your way merely in order that you might see him."

143 "Not him."

144 "What then?"

145 "The knees of his trousers."

146 "And what did you see?"

147 "What I expected to see."

148 "Why did you beat the pavement?"

149 "My dear doctor, this is a time for observation, not for talk. We are spies in an enemy's country. We know something of Saxe-Coburg Square. Let us now explore the parts which lie behind it."

150 The road in which we found ourselves as we turned round the corner from the retired Saxe-Coburg Square presented as great a contrast to it as the front of a picture does to the back. It was one of the main arteries which conveyed the traffic of the City to the north and west. The roadway was blocked with the immense stream of commerce flowing in a double tide inward and outward, while the footpaths were black with the hurrying swarm of pedestrians. It was difficult to realise as we looked at the line of fine shops and stately business premises that they really abutted on the other side upon the faded and stagnant square which we had just quitted.

**uncongenial:**  
unfriendly

**vex:** annoy

**conundrums:**  
problems

**languid:** relaxed

**astuteness:**  
excellent  
intelligence in  
practical matters

**predominated:**  
took over

**languor:** pleasant  
tiredness

**improvisations:**  
unplanned playing  
of his instrument

**askance:** sideways

**mortals:** humans

<sup>151</sup> “Let me see,” said Holmes, standing at the corner and glancing along the line, “I should like just to remember the order of the houses here. It is a hobby of mine to have an exact knowledge of London. There is Mortimer’s, the tobacconist, the little newspaper shop, the Coburg branch of the City and Suburban Bank, the Vegetarian Restaurant, and McFarlane’s carriage-building depot. That carries us right on to the other block. And now, Doctor, we’ve done our work, so it’s time we had some play. A sandwich and a cup of coffee, and then off to violin-land, where all is sweetness and delicacy and harmony, and there are no red-headed clients to **vex** us with their **conundrums**.”

<sup>152</sup> My friend was an enthusiastic musician, being himself not only a very capable performer but a composer of no ordinary merit. All the afternoon he sat in the stalls wrapped in the most perfect happiness, gently waving his long, thin fingers in time to the music, while his gently smiling face and his **languid**, dreamy eyes were as unlike those of Holmes the sleuth-hound, Holmes the relentless, keen-witted, ready-handed criminal agent, as it was possible to conceive. In his singular character the dual nature alternately asserted itself, and his extreme exactness and **astuteness** represented, as I have often thought, the reaction against the poetic and contemplative mood which occasionally **predominated** in him. The swing of his nature took him from extreme **languor** to devouring energy; and, as I knew well, he was never so truly formidable as when, for days on end, he had been lounging in his armchair amid his **improvisations** and his black-letter editions. Then it was that the lust of the chase would suddenly come upon him, and that his brilliant reasoning power would rise to the level of intuition, until those who were unacquainted with his methods would look **askance** at him as on a man whose knowledge was not that of other **mortals**. When I saw him that afternoon so enwrapped in the music at St. James’s Hall I felt that an evil time might be coming upon those whom he had set himself to hunt down.

<sup>153</sup> “You want to go home, no doubt, Doctor,” he remarked as we emerged.

<sup>154</sup> “Yes, it would be as well.”

<sup>155</sup> “And I have some business to do which will take some hours. This business at Coburg Square is serious.”

<sup>156</sup> “Why serious?”

<sup>157</sup> “A considerable crime is in contemplation. I have every reason to believe that we shall be in time to stop it. But to-day being Saturday rather complicates matters. I shall want your help to-night.”

<sup>158</sup> “At what time?”

<sup>159</sup> “Ten will be early enough.”

<sup>160</sup> “I shall be at Baker Street at ten.”



161 “Very well. And, I say, Doctor, there may be some little danger, so kindly put your army revolver in your pocket.” He waved his hand, turned on his heel, and disappeared in an instant among the crowd.

162 I trust that I am not more dense than my neighbours, but I was always oppressed with a sense of my own stupidity in my dealings with Sherlock Holmes. Here I had heard what he had heard, I had seen what he had seen, and yet from his words it was evident that he saw clearly not only what had happened but what was about to happen, while to me the whole business was still confused and **grotesque**. As I drove home to my house in Kensington I thought over it all, from the extraordinary story of the red-headed copier of the Encyclopaedia down to the visit to Saxe-Coburg Square, and the **ominous** words with which he had parted from me. What was this **nocturnal** expedition, and why should I go armed? Where were we going, and what were we to do? I had the hint from Holmes that this smooth-faced pawnbroker’s assistant was a formidable man—a man who might play a deep game. I tried to puzzle it out, but gave it up in despair and set the matter aside until night should bring an explanation.

163 It was a quarter-past nine when I started from home and made my way across the Park, and so through Oxford Street to Baker Street. Two hansoms were standing at the door, and as I entered the passage I heard the sound of voices from above. On entering his room, I found Holmes in animated conversation with two men, one of whom I recognised as Peter Jones, the official police agent, while the other was a long, thin, sad-faced man, with a very shiny hat and oppressively respectable frock-coat.

164 “Ha! Our party is complete,” said Holmes, buttoning up his pea-jacket and taking his heavy hunting crop from the rack. “Watson, I think you know Mr. Jones, of Scotland Yard? Let me introduce you to Mr. Merryweather, who is to be our companion in to-night’s adventure.”

165 “We’re hunting in couples again, Doctor, you see,” said Jones in his **consequential** way. “Our friend here is a wonderful man for starting a chase. All he wants is an old dog to help him to do the running down.”

166 “I hope a wild goose may not prove to be the end of our chase,” observed Mr. Merryweather gloomily.

167 “You may place considerable confidence in Mr. Holmes, sir,” said the police agent **loftily**. “He has his own little methods, which are, if he won’t mind my saying so, just a little too theoretical and fantastic, but he has the makings of a detective in him. It is not too much to say that once or twice, as in that business of the Sholto murder and the Agra treasure, he has been more nearly correct than the official force.”

168 “Oh, if you say so, Mr. Jones, it is all right,” said the stranger with **deference**. “Still, I confess that I miss my **rubber**. It is the first Saturday night for seven-and-twenty years that I have not had my rubber.”

**grotesque:** strange and ugly

**ominous:** threatening

**nocturnal:** night time

**consequential:** important

**loftily:** in a high-minded way

**deference:** respect

**rubber:** card game



**tenacious:**  
dedicated

 **272**

- <sup>169</sup> “I think you will find,” said Sherlock Holmes, “that you will play for a higher stake to-night than you have ever done yet, and that the play will be more exciting. For you, Mr. Merryweather, the stake will be some £30,000; and for you, Jones, it will be the man upon whom you wish to lay your hands.”
- <sup>170</sup> “John Clay, the murderer, thief, smasher, and forger. He’s a young man, Mr. Merryweather, but he is at the head of his profession, and I would rather have my bracelets on him than on any criminal in London. He’s a remarkable man, is young John Clay. His grandfather was a royal duke, and he himself has been to Eton and Oxford. His brain is as cunning as his fingers, and though we meet signs of him at every turn, we never know where to find the man himself. He’ll crack a crib in Scotland one week, and be raising money to build an orphanage in Cornwall the next. I’ve been on his track for years and have never set eyes on him yet.”
- <sup>171</sup> “I hope that I may have the pleasure of introducing you to-night. I’ve had one or two little turns also with Mr. John Clay, and I agree with you that he is at the head of his profession. It is past ten, however, and quite time that we started. If you two will take the first hansom, Watson and I will follow in the second.”
- <sup>172</sup> Sherlock Holmes was not very communicative during the long drive and lay back in the cab humming the tunes which he had heard in the afternoon. We rattled through an endless labyrinth of gas-lit streets until we emerged into Farrington Street.
- <sup>173</sup> “We are close there now,” my friend remarked. “This fellow Merryweather is a bank director, and personally interested in the matter. I thought it as well to have Jones with us also. He is not a bad fellow, though an absolute imbecile in his profession. He has one positive virtue. He is as brave as a bulldog and as **tenacious** as a lobster if he gets his claws upon anyone. Here we are, and they are waiting for us.”
- <sup>174</sup> We had reached the same crowded thoroughfare in which we had found ourselves in the morning. Our cabs were dismissed, and, following the guidance of Mr. Merryweather, we passed down a narrow passage and through a side door, which he opened for us. Within there was a small corridor, which ended in a very massive iron gate. This also was opened, and led down a flight of winding stone steps, which terminated at another formidable gate. Mr. Merryweather stopped to light a lantern, and then conducted us down a dark, earth-smelling passage, and so, after opening a third door, into a huge vault or cellar, which was piled all round with crates and massive boxes.
- <sup>175</sup> “You are not very vulnerable from above,” Holmes remarked as he held up the lantern and gazed about him.
- <sup>176</sup> “Nor from below,” said Mr. Merryweather, striking his stick upon the flags which lined the floor. “Why, dear me, it sounds quite hollow!” he remarked, looking up in surprise.

177 “I must really ask you to be a little more quiet!” said Holmes severely. “You have already imperilled the whole success of our expedition. Might I beg that you would have the goodness to sit down upon one of those boxes, and not to interfere?”

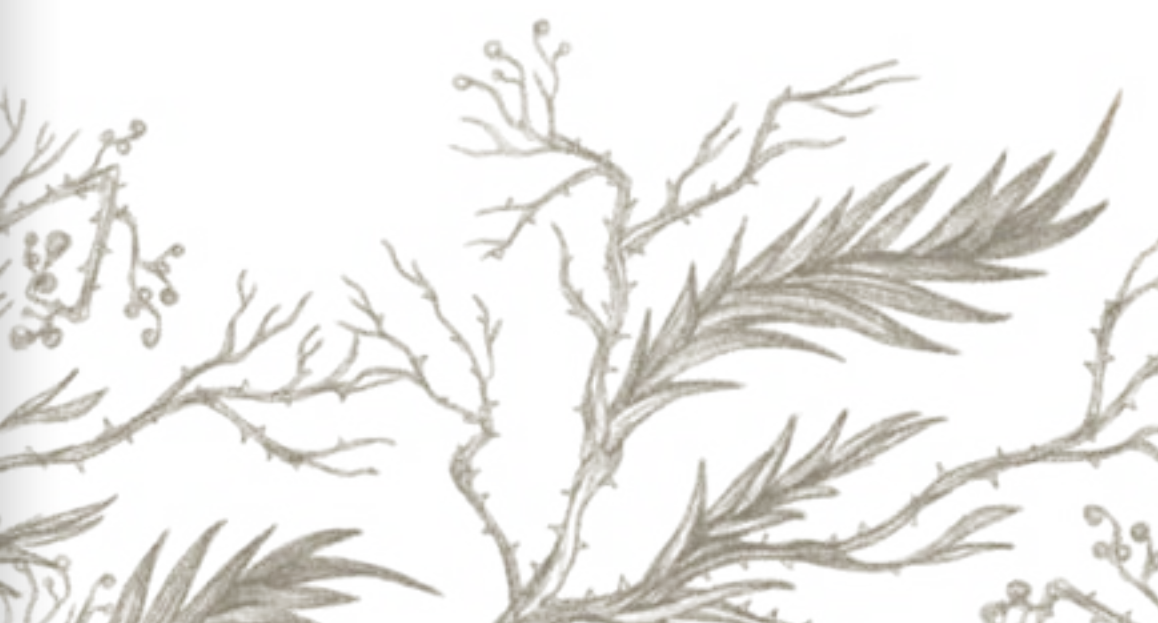
178 The solemn Mr. Merryweather perched himself upon a crate, with a very injured expression upon his face, while Holmes fell upon his knees upon the floor and, with the lantern and a magnifying lens, began to examine minutely the cracks between the stones. A few seconds sufficed to satisfy him, for he sprang to his feet again and put his glass in his pocket.

179 “We have at least an hour before us,” he remarked, “for they can hardly take any steps until the good pawnbroker is safely in bed. Then they will not lose a minute, for the sooner they do their work the longer time they will have for their escape. We are at present, Doctor—as no doubt you have divined—in the cellar of the City branch of one of the principal London banks. Mr. Merryweather is the chairman of directors, and he will explain to you that there are reasons why the more daring criminals of London should take a considerable interest in this cellar at present.”

180 “It is our French gold,” whispered the director. “We have had several warnings that an attempt might be made upon it.”

181 “Your French gold?”

182 “Yes. We had occasion some months ago to strengthen our resources and borrowed for that purpose 30,000 napoleons from the Bank of France. It has become known that we have never had occasion to unpack the money, and that it is still lying in our cellar. The crate upon which I sit contains 2,000 napoleons packed between layers of lead foil. Our reserve of **bullion** is much larger at present than is usually kept in a single branch office, and the directors have had misgivings upon the subject.”



**bullion:** gold and silver

183 “Which were very well justified,” observed Holmes. “And now it is time that we arranged our little plans. I expect that within an hour matters will come to a head. In the meantime Mr. Merryweather, we must put the screen over that dark lantern.”

184 “And sit in the dark?”

185 “I am afraid so. I had brought a pack of cards in my pocket, and I thought that, as we were a *partie carrée*, you might have your rubber after all. But I see that the enemy’s preparations have gone so far that we cannot risk the presence of a light. And, first of all, we must choose our positions. These are daring men, and though we shall take them at a disadvantage, they may do us some harm unless we are careful. I shall stand behind this crate, and do you conceal yourselves behind those. Then, when I flash a light upon them, close in swiftly. If they fire, Watson, have no **compunction** about shooting them down.”

186 I placed my revolver, cocked, upon the top of the wooden case behind which I crouched. Holmes shot the slide across the front of his lantern and left us in pitch darkness—such an absolute darkness as I have never before experienced. The smell of hot metal remained to assure us that the light was still there, ready to flash out at a moment’s notice. To me, with my nerves worked up to a pitch of expectancy, there was something depressing and subduing in the sudden gloom, and in the cold dank air of the vault.

187 “They have but one retreat,” whispered Holmes. “That is back through the house into Saxe-Coburg Square. I hope that you have done what I asked you, Jones?”

188 “I have an inspector and two officers waiting at the front door.”

189 “Then we have stopped all the holes. And now we must be silent and wait.”

190 What a time it seemed! From comparing notes afterwards it was but an hour and a quarter, yet it appeared to me that the night must have almost gone, and the dawn be breaking above us. My limbs were weary and stiff, for I feared to change my position; yet my nerves were worked up to the highest pitch of tension, and my hearing was so acute that I could not only hear the gentle breathing of my companions, but I could distinguish the deeper, heavier in-breath of the bulky Jones from the thin, sighing note of the bank director. From my position I could look over the case in the direction of the floor. Suddenly my eyes caught the glint of a light.

191 At first it was but a **lurid** spark upon the stone pavement. Then it lengthened out until it became a yellow line, and then, without any warning or sound, a gash seemed to open and a hand appeared, a white, almost womanly hand, which felt about in the centre of the little area of light. For a minute or more the hand, with its writhing fingers, **protruded** out of the floor. Then it was withdrawn as suddenly as it appeared, and all was dark again save the single lurid spark which marked a **chink** between the stones.

**compunction:**  
reluctance

**lurid:** unpleasantly  
bright

**protruded:** stuck

**chink:** small  
opening

<sup>192</sup> Its disappearance, however, was but momentary. With a rending, tearing sound, one of the broad, white stones turned over upon its side and left a square, gaping hole, through which streamed the light of a lantern. Over the edge there peeped a clean-cut, boyish face, which looked keenly about it, and then, with a hand on either side of the **aperture**, drew itself shoulder-high and waist-high, until one knee rested upon the edge. In another instant he stood at the side of the hole and was hauling after him a companion, lithe and small like himself, with a pale face and a shock of very red hair.

<sup>193</sup> "It's all clear," he whispered. "Have you the chisel and the bags? Great Scott! Jump, Archie, jump, and I'll swing for it!"

<sup>194</sup> Sherlock Holmes had sprung out and seized the intruder by the collar. The other dived down the hole, and I heard the sound of rending cloth as Jones clutched at his skirts. The light flashed upon the barrel of a revolver, but Holmes's hunting crop came down on the man's wrist, and the pistol clinked upon the stone floor.

<sup>195</sup> "It's no use, John Clay," said Holmes blandly. "You have no chance at all."

<sup>196</sup> "So I see," the other answered with the utmost coolness. "I fancy that my pal is all right, though I see you have got his coat-tails."

<sup>197</sup> "There are three men waiting for him at the door," said Holmes.

<sup>198</sup> "Oh, indeed! You seem to have done the thing very completely. I must compliment you."

<sup>199</sup> "And I you," Holmes answered. "Your red-headed idea was very new and effective."

<sup>200</sup> "You'll see your pal again presently," said Jones. "He's quicker at climbing down holes than I am. Just hold out while I fix the **derbies**."

<sup>201</sup> "I beg that you will not touch me with your filthy hands," remarked our prisoner as the handcuffs clattered upon his wrists. "You may not be aware that I have royal blood in my veins. Have the goodness, also, when you address me always to say 'sir' and 'please.' "

<sup>202</sup> "All right," said Jones with a stare and a **snigger**. "Well, would you please, sir, march upstairs, where we can get a cab to carry your Highness to the police-station?"

<sup>203</sup> "That is better," said John Clay serenely. He made a sweeping bow to the three of us and walked quietly off in the custody of the detective.

<sup>204</sup> "Really, Mr. Holmes," said Mr. Merryweather as we followed them from the cellar, "I do not know how the bank can thank you or repay you. There is no doubt that you have detected and defeated in the most complete manner one of the most determined attempts at bank robbery that have ever come within my experience."

**aperture:** hole

**derbies:** races

**snigger:** muffled  
laugh

<sup>205</sup> “I have had one or two little scores of my own to settle with Mr. John Clay,” said Holmes. “I have been at some small expense over this matter, which I shall expect the bank to refund, but beyond that I am amply repaid by having had an experience which is in many ways unique, and by hearing the very remarkable narrative of the Red-headed League.”

<sup>206</sup> “You see, Watson,” he explained in the early hours of the morning as we sat over a glass of whisky and soda in Baker Street, “it was perfectly obvious from the first that the only possible object of this rather fantastic business of the advertisement of the League, and the copying of the Encyclopaedia, must be to get this not over-bright pawnbroker out of the way for a number of hours every day. It was a curious way of managing it, but, really, it would be difficult to suggest a better. The method was no doubt suggested to Clay’s ingenious mind by the colour of his accomplice’s hair. The £4 a week was a lure which must draw him, and what was it to them, who were playing for thousands? They put in the advertisement, one rogue has the temporary office, the other **rogue** incites the man to apply for it, and together they manage to secure his absence every morning in the week. From the time that I heard of the assistant having come for half wages, it was obvious to me that he had some strong motive for securing the situation.”

<sup>207</sup> “But how could you guess what the motive was?”

<sup>208</sup> “Had there been women in the house, I should have suspected a mere vulgar intrigue. That, however, was out of the question. The man’s business was a small one, and there was nothing in his house which could account for such elaborate preparations, and such an **expenditure** as they were at. It must, then, be something out of the house. What could it be? I thought of the assistant’s fondness for photography, and his trick of vanishing into the cellar. The cellar! There was the end of this tangled clue. Then I made inquiries as to this mysterious assistant and found that I had to deal with one of the coolest and most daring criminals in London. He was doing something in the cellar—something which took many hours a day for months on end. What could it be, once more? I could think of nothing save that he was running a tunnel to some other building.

<sup>209</sup> “So far I had got when we went to visit the scene of action. I surprised you by beating upon the pavement with my stick. I was ascertaining whether the cellar stretched out in front or behind. It was not in front. Then I rang the bell, and, as I hoped, the assistant answered it. We have had some **skirmishes**, but we had never set eyes upon each other before. I hardly looked at his face. His knees were what I wished to see. You must yourself have remarked how worn, wrinkled, and stained they were. They spoke of those hours of burrowing. The only remaining point was what they were burrowing for. I walked round the corner, saw the City and Suburban Bank abutted on our friend’s

**rogue:** dishonest person

**expenditure:** cost

**skirmishes:** fights

premises, and felt that I had solved my problem. When you drove home after the concert I called upon Scotland Yard and upon the chairman of the bank directors, with the result that you have seen."

210 "And how could you tell that they would make their attempt to-night?" I asked.

211 "Well, when they closed their League offices that was a sign that they cared no longer about Mr. Jabez Wilson's presence—in other words, that they had completed their tunnel. But it was essential that they should use it soon, as it might be discovered, or the bullion might be removed. Saturday would suit them better than any other day, as it would give them two days for their escape. For all these reasons I expected them to come to-night."

212 "You reasoned it out beautifully," I exclaimed in **unfeigned** admiration. "It is so long a chain, and yet every link rings true."

213 "It saved me from **ennui**," he answered, yawning. "Alas! I already feel it closing in upon me. My life is spent in one long effort to escape from the commonplaces of existence. These little problems help me to do so."

214 "And you are a benefactor of the race," said I.

215 He shrugged his shoulders. "Well, perhaps, after all, it is of some little use," he remarked. "'L'homme c'est rien—l'oeuvre c'est tout,' as Gustave Flaubert wrote to George Sand."



**unfeigned**: honest

**ennui**: boredom



•

**autumn:** fall

**bob:** nod

**unique:** special

**peculiar:** strange

**thrust:** pushed

**ornament:** decoration

**labour:** work

**considerable:** great

**LEAGUE:** group

**satisfied:** pleased

**faults:** problems

**widower:** man whose marriage partner has died

**slight:** small

**sympathy:** friendly feeling

**tint:** coloring

**fatal:** deadly

**complimented:** praised

**DISSOLVED:** broken up

**exceedingly:** greatly

**bill:** beak

**lounging:** sitting in a relaxed way

**revolver:** gun

**assure:** satisfy

**secure:** guarantee

**absence:** being away

**fondness:** strong liking

••

**abruptly:** suddenly

**cordially:** in a friendly way

**engaged:** busy

**utmost:** greatest

**settee:** couch

**relapsing:** falling back

**judicial:** judge-like

**conventions:** usual way of doing things

**humdrum:** boring

**relish:** enjoyment

**chronicle:** record the story of

**embellish:** exaggerate

**remarked:** said

**proposition:** suggestion

**acknowledges:** accepts

**narrative:** story

**singular:** one of a kind

**recommence:** continue

**merely:** simply

**indication:** hint

**endeavoured:** tried

**fashion:** habit

**indications:** signs

**tradesman:** worker

**pompous:** self-important

**drab:** dull

**waistcoat:** vest

**frayed:** ragged

**discontent:** unhappiness

**occupation:** job

**manual:** physical

**snuff:** powdered tobacco

**Freemason:** member of a secret society

**deduce:** reason out

**gospel:** the Bible

**contributed:** added

**vacancy:** space

**nominal:** slight and unimportant

**eligible:** allowed

**pawnbroker's:** money-lending in exchange for personal property

**affair:** business

**obliging:** generously helpful

•• (continued)

**vice:** bad behavior

**presume:** assume

**vacancies:** openings

**trustees:** responsible person of an organization

**interfere:** get in the way

**occupations:** jobs

**prick:** suddenly raise

**particulars:** details

**holiday:** vacation

**tramped:** marched

**barrow:** wagon

**vivid:** bright

**despair:** hopelessness

**dejected:** feeling bad

**admirably:** excellently

**suited:** fit

**cocked:** tilted

**bashful:** shy

**precaution:** step to prevent a bad outcome

**perceive:** see

**deceived:** tricked

**cobbler's:** shoemaker's

**gravely:** seriously

**maintenance:** being kept in good condition

**bachelor:** unmarried man

**objection:** statement of disapproval

**forfeit:** give up

**comply:** follow

**avail:** be accepted

**hoax:** prank

**fraud:** the act of wrongfully tricking someone for gain

**bade:** wished

**planked:** dropped

**diligence:** careful and hard work

**surveyed:** looked over

**curt:** short

**flushing:** blushing

**Pray:** please

**staggered:** shocked

**premises:** offices

**post:** mail

**graver:** more serious

**grievance:** problem

**minute:** tiny

**endeavour:** try

**gipsy:** member of the traveling Romany people

**conclusion:** end

**frankly:** directly and honestly

**featureless:** ordinary-seeming

**prompt:** quick and on time

**gesture:** act

**mantelpiece:** shelf on top of a fireplace

**dingy:** dark and dull

**enclosure:** enclosed space

**gilt:** gold

**puckered:** tightly wrinkled

**keenly:** sharply

**vigorously:** energetically

**promptly:** quickly

**Evidently:** clearly

**inquired:** asked

**observation:** watching

**contrast:** difference

**arteries:** roads

**conveyed:** carried

**commerce:** money and business

**pedestrians:** people who are walking

**stagnant:** lifeless

**quitted:** left

**depot:** garage

**delicacy:** delicate quality

**composer:** music writer

**merit:** worth

**sleuth:** detective

**conceive:** imagine

**dual:** double

**asserted:** forcefully presented

**contemplative:** thoughtful

**devouring:** overwhelming

**formidable:** challenging

**lust:** intense love

**intuition:** instinct



•• (continued)

**unacquainted:** not familiar  
**enwrapped:** completely focused  
**emerged:** came out  
**contemplation:** the act of being thought out  
**complicates:** confuses  
**dense:** stupid  
**oppressed:** greatly bothered  
**expedition:** trip  
**puzzle:** figure  
**hansoms:** hired carriages  
**animated:** lively  
**oppressively:** uncomfortably  
**respectable:** fancy and upper-class  
**party:** group of people  
**crop:** whip  
**observed:** noted  
**gloomily:** darkly  
**confidence:** trust  
**theoretical:** idea-based  
**fantastic:** unbelievable  
**smasher:** thief who steals by breaking store windows  
**profession:** line of work  
**bracelets:** handcuffs  
**cunning:** sneakily smart  
**communicative:** talkative  
**labyrinth:** maze  
**imbecile:** stupid person

**virtue:** good quality  
**thoroughfare:** street  
**dismissed:** sent away  
**terminated:** ended  
**conducted:** led  
**vulnerable:** unprotected  
**severely:** seriously  
**imperilled:** put in danger  
**solemn:** serious  
**injured:** hurt  
**sufficed:** was enough  
**divined:** predicted  
**attempt:** try  
**resources:** available money  
**napoleons:** French gold coins  
**misgivings:** doubts  
**presence:** appearance  
**daring:** brave  
**conceal:** hide  
**swiftly:** quickly  
**expectancy:** a state of waiting for something to happen  
**subduing:** overpowering  
**dank:** wet and cold  
**retreat:** way out  
**weary:** tired  
**tension:** stress  
**acute:** sharp  
**distinguish:** tell the difference between

**gash:** deep cut  
**writhing:** twisting  
**save:** except  
**momentary:** for the moment  
**rending:** ripping  
**hauling:** pulling  
**chisel:** tool used for shaping hard material  
**skirts:** lower coat  
**blandly:** plainly  
**fancy:** imagine  
**effective:** successful  
**clattered:** rattled  
**serenely:** peacefully  
**custody:** control  
**detected:** discovered  
**amply:** fully  
**ingenious:** extremely intelligent  
**accomplice's:** partner in crime's  
**lure:** bait  
**incites:** causes  
**motive:** reason  
**situation:** job  
**vulgar:** low  
**elaborate:** complicated  
**inquiries:** searches for answers  
**ascertaining:** figuring out  
**burrowing:** digging  
**abutted:** was set next to


...


**stout:** short and round**florid:** red**portly:** fat**commonplace:** ordinary**chagrin:** embarrassment**candid:** direct and truthful**bequest:** inheritance given upon death**ejaculated:** said excitedly**berths:** positions**coster's:** fruitseller's**pensioners:** people who receive payment from an invested sum of money**benefactor:** person who provided money and support for others**propagation:** multiplication**billet:** place**rueful:** sorry**solicitor:** lawyer**manufactory:** maker**introspect:** think inwardly**uncongenial:** unfriendly**vex:** annoy**conundrums:** problems**languid:** relaxed**astuteness:** excellent intelligence in practical matters**predominated:** took over**languor:** pleasant tiredness**improvisations:** unplanned playing of his instrument**askance:** sideways**mortals:** humans**grotesque:** strange and ugly**ominous:** threatening**nocturnal:** night time**consequential:** important**loftily:** in a high-minded way**deference:** respect**rubber:** card game**tenacious:** dedicated**bullion:** gold and silver**compunction:** reluctance**lurid:** unpleasantly bright**protruded:** stuck**chink:** small opening**aperture:** hole**derbies:** races**snigger:** muffled laugh**rogue:** dishonest person**expenditure:** cost**skirmishes:** fights**unfeigned:** honest**ennui:** boredom


Use the Vocab App to play mini games related to the words in this lesson.


## A Lesson 1: "Share my love of all that is bizarre."

**Discuss:** Students consider which aspects of the story they just read might appear again in the story they are now reading.

 If students did not complete the Solo, or if they had difficulty reading and comprehending the story, then you may choose to read paragraphs 1–88 aloud before the discussion.


 Holmes and Watson are in every Sherlock Holmes story. There are a lot of repeating elements in these stories.


 Students complete Activities 1–3 on page 282 of the Student Edition.


 Discuss responses.


## B Lesson 1 (continued)


**Discuss:** Students discuss some of the red herrings the author plants so that they will fully experience his misdirection.

 Direct students to page 282 of the Student Edition.

 Students complete Activities 1 and 2 in the Student Edition.

 Lead a class discussion using Activity 2 in the Student Edition.

 This Sherlock Holmes story is filled with false clues and misdirection, or "red herrings."

 Without pointing out that these "clues" are red herrings, purposely guide students to consider the clues during the discussion.

## A Lesson 1—"Share my love of all that is bizarre."

Many Sherlock Holmes stories follow a similar pattern. This is true for both "The Red-Headed League" and "The Speckled Band."

With your partner, answer the following questions:

1. Who is the narrator in both of these Sherlock Holmes stories?
2. What do both of the Sherlock Holmes stories start with?
  - A shocking crime
  - Holmes arriving at the scene of a crime
  - A client arriving to describe a mystery
3. What other similarities do you notice so far between "The Red-Headed League" and "The Speckled Band"?

1. Review paragraphs 29–88 from "The Red-Headed League" on pages 260–265.

### 2. Discussion Questions:

Share your thoughts in the class discussion.

- What kind of crimes might the Red-Headed League be involved in?
- Why might the color of hair have to be "real bright, blazing, fiery red" (55)?
- Why would someone pay another person to copy an encyclopedia?
- Do you think a crime was committed or was it just a harmless prank?

## Lesson 1 Materials

No materials.

C

1. Review paragraphs 34–53 from "The Red-Headed League" on pages 261–262.
2. Highlight any interesting or suspicious details about **Vincent Spaulding** in paragraphs 34–53.
3. Review paragraphs 44–88 on pages 261–265.
4. Highlight any interesting or suspicious details about the **Red-Headed League** in paragraphs 44–88.
5. Review paragraphs 63–88 on pages 264–265.
6. Highlight any interesting or suspicious details about **Duncan Ross** and the job he offers Wilson in paragraphs 63–88.
7. Based on the details you have highlighted, what is your theory about the case of the Red-Headed League? Share your response in the class discussion.

D

1. Using your highlights from the last activity, copy the details that you identified as suspicious in your Writing Journal.
2. Then, under each quote, write an explanation of why you think that detail is suspicious.



Go to page 84 in your Writing Journal to complete this activity.



### Differentiation: Step C

If students are having difficulty reading and comprehending this text independently, you may choose to have them do this activity in pairs.

- **ELL(Dev):** ELL students and students who are having difficulty comprehending this text will benefit from a review and discussion of all the suspicious details students found in this exercise before proceeding to the next activity.

C

## Lesson 1 (continued)

Benchmark: ELA.6.R.1.1

**Select Text:** Students read the text and highlight suspicious details to consider possible theories about the case.

Direct students to page 283 of the Student Edition.

Students complete Activities 1 and 2 in the Student Edition.

**On-the-Fly:** Circulate around the room to support students.

Discuss responses.

Students complete Activities 3 and 4 in the Student Edition.

Discuss responses.

Students complete Activities 5–7 in the Student Edition.

Discuss responses.

30 min

D

## Lesson 1 (continued)

Benchmark: ELA.6.R.1.1

**Select Text:** Students copy the text that they think shows something is suspicious and explain why they think it is suspicious.

Direct students to page 283 in the Student Edition.

Students complete Activities 1 and 2 in the Student Edition.

**Writing Journal:** Students complete the activity on page 84.

**On-the-Fly:** Circulate around the room to support students.

Discuss responses.

**Wrap-Up:** Project Poll 1.

**Exit Ticket:** Project.





15 min

9 min

End of Lesson 1

## E Lesson 2: Case Notes

**Discuss:** Students put forth their theories about the case of the Red-Headed League.













-  Direct students to page 284 of the Student Edition.
-  Ask students for a quick show of hands to the following question:
  - Do you think the case of the Red-Headed League is a prank, or a more serious crime?
-  What do you think is really going on?
-  What clues in the case do you think support your theory?

4 min

## F Lesson 2 (continued)

Benchmark: ELA.K12.EE.1.1

**Select Text:** Students review passages from the previous Solo and highlight the details that they think are suspicious.

-  Students complete Activities 1 and 2 on page 284 of the Student Edition.
-  Lead a class discussion to list the correct order of events on the board for Activity 2.
-  **On-the-Fly:** Circulate around the room to support students.
-  Good readers look for important details, such as suspicious details of the characters involved and their actions in the story.
-  We also need to be alert to what Holmes is observing and reasoning.
-  Students complete Activity 3 in the Student Edition.
-  Discuss responses.
-  Students complete Activity 4 in the Student Edition.
-  Discuss responses.
-  This time when you highlight, look for quotes that make you alert to the actions that Holmes is taking.
-  Students complete Activity 5 in the Student Edition.
-  Discuss responses.

18 min


## Lesson 2—Case Notes

A prank is a trick that is done to someone, usually as a joke.

Do you think the case of the Red-Headed League is a prank, or a more serious crime? Share your response in the class discussion.

F

1. Review paragraphs 89–162 on pages 265–271.
2. Look at the following list of events. Participate in the class discussion to order the events on the board:
  - Holmes knocks on Wilson's shop door and speaks with Spaulding.
  - Holmes states he knows Spaulding.
  - Wilson learns Duncan Ross is also called William Morris.
  - Holmes asks more questions about Vincent Spaulding.
  - Holmes visits Wilson's neighborhood and storefront.
  - Wilson's work at the Red-Headed League ends.
3. Highlight any new details about the **Red-Headed League** that you think are important to solving the case in paragraphs 93–109 on pages 266–267.
4. Highlight any new details about **Duncan Ross** that you think are important to solving the case in paragraphs 97–105 on pages 266–267.
5. Highlight any new details about Holmes's visit to **Saxe-Coburg Square** that you think are important to solving the case in paragraphs 138–151 on pages 268–270.

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### Lesson 2 Materials

No materials.

### Differentiation: Step E

● *ELL(Dev)*: ELL students will benefit from reviewing the definition of “prank.” All students may enjoy giving examples of pranks to ensure that ELL students understand the term.

G

1. Using your highlights from the last activity, copy the details that you identified as suspicious in your Writing Journal.
2. Then, under each quote, write an explanation of why you think that detail is suspicious.



Go to page 85 in your Writing Journal to write the details and explain why each detail is suspicious.

H

Review paragraphs 89–162 if needed before writing.

Which details from the story seem ordinary and which seem suspicious?



On page 86 of your Writing Journal, explain your answer to this question with evidence from the text.

"The Red-Headed League" • Lesson 2 285

G

## Lesson 2 (continued)

Benchmark: ELA.K12.EE.1.1

**Select Text:** Students write quotes that they consider suspicious and explain why they think those quotes are suspicious.



Suspicious details can be about the characters involved in the prank or crime and their actions.



We need to be alert to the actions Holmes takes as it gives us insight into what he is thinking and observing.



**Writing Journal:** Students complete the activity on page 85.



Discuss responses.

8 min

H

## Lesson 2 (continued)

Benchmarks: ELA.6.C.1.4, ELA.K12.EE.1.1

**Write & Share:** Students use the evidence they have gathered to examine which details from the story are suspicious and why.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



**Writing Prompt:** Students complete the Writing Prompt on page 86.



**Differentiation:** Digital PDF.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Exit Ticket:** Project.

19 min

End of Lesson 2



### Differentiation: Step F

Students who are reading below grade level will benefit by working in pairs with students who are reading on or above grade level.

If students are having difficulty comprehending this text, take a few minutes to review and discuss all the suspicious details students found in this exercise before proceeding to the next activity.



### Differentiation: Step H

● *ELL(Dev):* Alternate Writing Prompt reduces the amount of text and provides a list of details for students to choose from and sentence starters.


■ *Moderate:* Alternate Writing Prompt reduces the amount of text and provides sentence starters.

### Before You Begin Lesson 3:


We highly recommend students have access to the digital lesson in order to use the Caught Red-Handed app in Step L to organize notes and write about the facts in the case. Please see instructions in the digital lesson. If using digital activities, manage print activities accordingly.


## I Lesson 3: "Red-Handed"


**Use the Text as Referee:** Students answer questions to review the important characters and clarify their understanding about the plot.


 Direct students to page 286 of the Student Edition.


 Assign partners.


 Partners complete Activities 1 and 2 in the Student Edition.


 Discuss responses.

 Students complete Activity 3 in the Student Edition.


 Lead a class discussion using Activity 3 in the Student Edition.

 **Writing Journal:** Students answer questions 1–3 on page 87.

 Discuss responses.

 Students complete Activity 4 in the Student Edition.

 **Writing Journal:** Students complete Activity 4 on page 87.

 Discuss responses.

I

## Lesson 3—"Red-Handed"

1. Review paragraphs 163–211 on pages 271–277.
2. With a partner, decide which characters in the left column are connected to those in the right column.

John Clay	Police officer
Mr. Merryweather	Vincent Spaulding
Mr. Jones	William Morris
John Clay's partner in crime	Bank director

3. Share your responses to the following in the class discussion:
  - Which names are fake?
  - What are the real names of the people who created the Red-Headed League?



On page 87 of your Writing Journal, answer questions 1–3.

4. Review paragraphs 163–211 on pages 271–277.



Go to page 87 of your Writing Journal to complete the chart with the characters' locations.



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### Lesson 3 Materials

 Caught Red-Handed app



### Differentiation: Step I

- **ELL(Dev):** For ELL students, you may need to explain the words "cellar" and "inspector."
- **ELL(Dev):** ELL students and students having difficulty reading or comprehending the text will benefit from a review of the answers for all the questions discussed in this activity.



### Differentiation: Step J

- Students who are reading below grade level should work in pairs with students who are reading on or above grade level to complete this activity.
- **ELL(Dev):** Before proceeding to the next activity, support ELL students and students who are having difficulty comprehending the text by reviewing the importance of each of the clues Holmes used.

J

1. Review paragraphs 206–211 on pages 276–277 where Holmes explains his reasoning process to Watson.
2. Highlight the text that shows the clues that Holmes used to solve the case in paragraphs 206–211.

K

### Class Discussion Questions

1. How many of these clues did you identify as suspicious in your Writing Journal notes?
  - The very talented assistant works for half salary.
  - The assistant finds the ad and knows a lot about the Red-Headed League.
  - The assistant spends hours in the cellar developing photos.
  - The street is full of redheads, but Mr. Wilson is led to the front and chosen for the league.
  - Wilson must be in the Red-Headed League office from 10–2 every day or he loses his salary.
2. How many of these clues did you identify as suspicious in your Writing Journal notes?
  - Holmes looks at the knees of the assistant's trousers.
  - Holmes thumps the ground outside Wilson's pawnshop.
  - There is a bank branch near the pawnshop.



### Differentiation: Step K

- **ELL(Dev):** Students who are reading below grade level and ELL students will benefit from a review of the meaning of each of the clues before moving to the next activity.
- **ELL(Dev):** For ELL students, you may need to explain terms such as "talented," "salary," and "(bank) branch."

### Before You Begin Lesson 4:

**Lesson 4 is a Flex Day. Select from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts. Please see instructions in the digital lesson.**

J

## Lesson 3 (continued)

Benchmark: ELA.6.R.3.2

**Select Text:** Students review a passage and highlight the clues that Holmes used to solve the case to identify the key details.

- Direct students to page 287 in the Student Edition.
- Students complete Activities 1 and 2 on page 287.
- 10 min** **On-the-Fly:** Circulate around the room to support students.
- Discuss responses.
- Which clues did Holmes use to solve the case? What is the evidence in the text for each clue?

K

## Lesson 3 (continued)

**Discuss:** Students check the clues that were essential for Holmes to solve the crime to consider how the author led them toward or away from these details.

- Direct students to page 287 of the Student Edition.
- Look back at the notes in your Writing Journal for Lesson 1 on page 84 for a reminder.
- 5 min** Lead a class discussion using question 1 in the Student Edition.
- Look back at the notes in your Writing Journal for Lesson 2 on page 85 for a reminder.
- Lead a class discussion using question 2 in the Student Edition.

L

## Lesson 3 (continued)

Benchmark: ELA.6.R.3.2

**Work Visually:** Students connect each of the details in the fake case to actual events in the real crime to understand the story.

- Students use the digital lesson to complete this step with the Caught Red-Handed app.
- 10 min** **Wrap-Up:** Project Poll 3.
- Exit Ticket:** Project.

End of Lesson 3



# Write an Essay



In this lesson series, students write an essay to explain which character trait is most useful for problem solvers and investigators. From brainstorming ideas to gathering textual evidence, students will be engaged with their peers while making connections and drawing inferences. Once textual evidence has been gathered and students have made decisions regarding the topic in their essay, they begin the process of piecing together their essay. After crafting a claim statement in the first lesson to create a focus for their writing, students spend the second lesson writing their body paragraphs. In these body paragraphs students work to explain and describe their textual evidence. The third lesson is a more flexible work day for you to support students to develop key parts of their essay at the pace which works best for them. After the Flex Day, students focus on revising their body paragraphs and crafting their introductions. Finally, students write their conclusion and do the final polishing of their work. Throughout all of these lessons, students have a sample essay to use as a guide, a structured layout for the essay itself, and guidelines about how to incorporate specific pieces as they go.

## Essay Prompt:

People—like scientists, detectives, and health workers—take many approaches to solving problems. They take bold and brave actions; they work methodically; they think carefully and logically; they collaborate with others; they try new approaches.

Based on the texts you have read, what stands out to you as one important characteristic to have as a problem solver or investigator?

Include two examples of individuals demonstrating this characteristic in your response.

## Note:

**Each Print essay sub-unit follows the same developmental path as the digital lesson, although there are digital-only activities specific to each sub-unit's Essay Prompt and text(s). We recommend you prepare and project as needed as you work through the Print essay activities to get the most out of essay lessons.**

This sub-unit contains a group of digital lessons in which students are drafting a polished essay in clear stages. Therefore, if students do not have access to the digital lesson as they begin the essay, or will not have access during portions of the essay lessons, it is best to have them complete their writing for all lessons in print, rather than the digital writing space provided in the lesson.

However, as with other writing assignments, your students will need to copy their final essay into the corresponding digital writing space if you want that writing to be included in Productivity and other reports.

# Sub-Unit 5



Lesson 1



Lesson 2



Lesson 3



Lesson 4



Lesson 5

# Sub-Unit 5 at a Glance & Preparation Checklist

Lesson Preparation	Reading
<p><b>Lesson 1</b></p> <ul style="list-style-type: none"><li>❑ Review the Possible Evidence and Explanations chart, which lists direct quotes, possible explanations, and counterarguments that students might use in their essays.</li><li>❑ Review <i>The Secret of the Yellow Death</i>, “Yellow Fever Circles Brazil’s Huge Cities,” “The Red-Headed League” and “The Speckled Band” so that you can support students as they prepare to write the essay.</li><li>❑ Plan to put students in pairs for part of this lesson.</li><li>❑ Please review the essay rubric found in the Materials section so you are aware of the skills that will be emphasized through the essay writing process of this unit. After students finish writing their essays, you will use this rubric to assess each essay.</li><li>❑ Print the Evidence and Possible Explanations Chart PDF to help you support students review particular characters or text.</li><li>❑ Print the Essay Graphic Organizer PDF and the Mysteries &amp; Investigations Essay Sentence Starters PDF for students who would benefit from this support.</li></ul> <p><i>Note that lesson Solos can be completed in the digital curriculum, through the Amplify Mobile Solos app, or in print. Solo Activities PDFs can be found in the Materials section of the digital Unit Guide, along with a Solo Answer Key.</i></p>	<ul style="list-style-type: none"><li>• <i>The Secret of the Yellow Death: A True Story of Medical Sleuthing</i> by Suzanne Jurmain</li><li>• “Yellow Fever Circles Brazil’s Huge Cities,” <i>The New York Times</i></li><li>• “The Red-Headed League” by Sir Arthur Conan Doyle</li><li>• “The Speckled Band” by Sir Arthur Conan Doyle</li></ul>
<p><b>Lesson 2</b></p> <ul style="list-style-type: none"><li>❑ Comment on student writing and create Spotlights as described in the last teacher-only activity in the previous lesson.</li><li>❑ If needed, print the Essay Graphic Organizer (in Lesson 1) for students who would benefit from this support.</li><li>❑ Print the Mysteries &amp; Investigations Sentence Starters PDF for students who would benefit from this support.</li></ul>	<ul style="list-style-type: none"><li>• <i>The Secret of the Yellow Death: A True Story of Medical Sleuthing</i> by Suzanne Jurmain</li><li>• “Yellow Fever Circles Brazil’s Huge Cities,” <i>The New York Times</i></li><li>• “The Red-Headed League” by Sir Arthur Conan Doyle</li><li>• “The Speckled Band” by Sir Arthur Conan Doyle</li></ul>

## Writing Prompt

**Essay Prompt:** People—like scientists, detectives, and health workers—take many approaches to solving problems. They take bold and brave actions; they work methodically; they think carefully and logically; they collaborate with others; they try new approaches.

Based on the texts you have read, what stands out to you as one important characteristic to have as a problem solver or investigator?

Include two examples of individuals demonstrating this characteristic in your response.

## Benchmark Stack

ELA.K12.EE.5.1

ELA.6.C.1.4

ELA.K12.EE.6.1

The essay lessons use daily revision to organize and improve writing, enabling students to build up to the final, finished essay.

ELA.K12.EE.5.1

ELA.6.C.1.4

## Lesson Preparation

## Reading

### Lesson 3

- ❑ The teacher selects from the range of activities to guide students to work on needed skills: grammar, revising an existing piece of writing, creating a new piece of writing, practicing close reading and discussion, or working visually with complex texts.
- ❑ If needed, print the Essay Graphic Organizer PDF for students who would benefit from this support.

- *The Secret of the Yellow Death: A True Story of Medical Sleuthing* by Suzanne Jurmain
- “Yellow Fever Circles Brazil’s Huge Cities,” *The New York Times*
- “The Red-Headed League” by Sir Arthur Conan Doyle
- “The Speckled Band” by Sir Arthur Conan Doyle

### Lesson 4

- ❑ Prepare for the RA and create Spotlights, if possible, as described in the last teacher-only activity in the previous lesson.
- ❑ If needed, print the Essay Graphic Organizer (in Lesson 1) for students who would benefit from this support.
- ❑ Print the Mysteries & Investigations Essay Sentence Starters PDF for students who would benefit from this support.
- ❑ Plan to put students in pairs for part of this lesson.

- *The Secret of the Yellow Death: A True Story of Medical Sleuthing* by Suzanne Jurmain
- “Yellow Fever Circles Brazil’s Huge Cities,” *The New York Times*
- “The Red-Headed League” by Sir Arthur Conan Doyle
- “The Speckled Band” by Sir Arthur Conan Doyle

### Lesson 5

- ❑ When students finish writing their essays, please use the essay rubric found in the Materials section to assess each essay.
- ❑ If needed, print the Essay Graphic Organizer (in Lesson 1) for students who would benefit from this support.
- ❑ Print the Mysteries & Investigations Essay Sentence Starters PDF for students who would benefit from this support.

- *The Secret of the Yellow Death: A True Story of Medical Sleuthing* by Suzanne Jurmain
- “Yellow Fever Circles Brazil’s Huge Cities,” *The New York Times*
- “The Red-Headed League” by Sir Arthur Conan Doyle
- “The Speckled Band” by Sir Arthur Conan Doyle

## Writing Prompt

## Benchmark Stack

The essay lessons use daily revision to organize and improve writing, enabling students to build up to the final, finished essay.

ELA.K12.EE.5.1  
ELA.6.C.1.4  
ELA.6.C.1.5

The essay lessons use daily revision to organize and improve writing, enabling students to build up to the final, finished essay.

ELA.K12.EE.5.1  
ELA.6.C.1.4  
ELA.6.C.1.5

The essay lessons use daily revision to organize and improve writing, enabling students to build up to the final, finished essay.

ELA.K12.EE.5.1  
ELA.K12.EE.6.1  
ELA.6.C.1.4  
ELA.6.C.1.5  
ELA.6.C.3.1  
ELA.6.C.5.2

# Sub-Unit 5 Essay Lessons

## Lesson 1: Gathering Evidence and Making a Claim

A

**Present:** Students review the Essay Prompt and the work they will do on the essay in this lesson.

7 min



Read aloud the Essay Prompt.



Use the calendar to preview the work students will complete in today's lesson on page 642 of the Student Edition.



Review the elements that students will include in their essays.

B

**Select & Connect Text:** Students select evidence to prepare for drafting the essay.

24 min



Project the digital activity for students to gather evidence for their essay responses.

C

**Write:** Students draft a preliminary claim statement to clarify the characteristic they will examine in their essay.

9 min



**Writing Journal:** Students write a claim statement on page 92.



Lead a class discussion by asking students to share their claim statements. Record 2 or 3 claims on the board and discuss if the claims answer the prompt.



**Wrap-Up:** Project.

End of Lesson 1

## Lesson 1 Materials



Essay Rubric



Essay Graphic Organizer



Sentence Starters



6B Evidence and Possible Explanations Chart

## Differentiation for Essay:

An Essay Graphic Organizer is provided in Materials to assist students who need support planning for their essay. The Essay Graphic Organizer can be utilized as a whole document, or different pages can be handed out to students based on their needs.

Sentence starters are also provided to support students with language conventions and to help them get started with their essay. This will be especially helpful for ELLs or students below grade level in writing.

## Before You Begin Lesson 2:

Review the writing that students completed during the previous stage of the essay process to plan for needed supports, comment on places where students use a skill effectively, and create Spotlights as models for the skills you want students to practice during the essay lessons.

## Lesson 2: Writing Body Paragraphs

D

**Discuss:** Students identify a claim statement and highlight sentences in the sample essay to identify them as sentences that explain and describe evidence.



Project digital activity for students to consider Sample Essay 1.



Occasionally, essay sub-units skip this activity.

E

**Write & Share:** Students draft the body of their essays and give their classmates feedback about a specific place in their writing.



Read aloud the body paragraphs section of the Elements of a Response to Text Essay on page 642 of the Student Edition.



Clarify for students that the bullets within each part of the essay are not in any specific order.



**Warm-Up:** Use the digital lesson to make sure students have language to start writing.



Read aloud the Essay Prompt.



**Writing Journal:** Students write the 2 body paragraphs on page 94.



**On-the-Fly:** Circulate around the room to support students.



Students can write a third body paragraph if they have used and described enough evidence to support their claims.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Wrap-Up:** Project.

End of Lesson 2

## Lesson 2 Materials



Sample Essay 1

## Before You Begin Lesson 3:

Students will complete a student-selected Revision Assignment.

1. Identify students who need help choosing two places in their writing to revise by adding or further explaining evidence. Mark one place where they could do this work (they can find the second place independently).
2. Review the students' writing from the last lesson to plan for needed supports, comment on places where students used a skill effectively, and create Spotlights as models for the skills you want to practice.



## Lesson 3: Essay Flex Day

F

**Self-Assess:** Students review the work they've already done on their essays.



**Project:** Self-Assessment activity from the digital lesson.



**Writing Journal:** Students note which things they say "No" to.



**On-the-Fly:** Circulate to review students' answers in order to provide targeted support. Note which students have requested a teacher conference.

5 min

G

**Present:** Preview today's activities.



**Project:** Digital activity for Present.



Explain that students will complete the steps in order, beginning with Session 1. The session goal is to complete their body paragraphs. They may not all get to Session 2 in this lesson.

5 min

H

**Session 1:** Students continue to develop and clarify their reasoning and evidence by writing an additional paragraph or developing evidence in an existing paragraph.



Review body paragraphs in Elements of a Body Paragraph on page 642.



**Writing Journal:** Students complete Session 1 on page 96.



**On-the-Fly:** Circulate around the room to support students.



Discuss responses.



Call on 3 or 4 students to identify one piece of their body paragraphs that they can still develop.

15 min

## Lesson 3 (continued)

I

**Session 2:** Students draft 2 additional versions of their claim statements.



**Writing Journal:** Students write 2 different claim statements under Claim Statement #2 and #3 on pages 98 and 99.



**On-the-Fly:** Circulate around the room to support students.



**Wrap-Up:** Project if not completing next Step.

13 min

J

**Session 3:** Students develop a third body paragraph that addresses possible counterclaims and reasserts their claim's validity.



**OPT:** Students complete if they are writing an argumentative essay.



**Writing Journal:** Students write a third body paragraph on page 100.



**On-the-Fly:** Circulate around the room to support students.



**Wrap-Up:** Project.

13 min

End of Lesson 3

## Lesson 3 Materials

No materials.

## Lesson 4: Revising and Writing an Introduction

K

**Revise:** Students identify additional textual evidence and then use it to strengthen the body of their essays.

17 min



Assign partners.



Help students identify places where they still need to develop their evidence or reasoning about that evidence.



**Writing Journal:** Students complete Activities 1–6 and add to their body paragraphs on pages 101 and 102.



**On-the-Fly:** Circulate around the room to support students.

L

**Present:** Students learn about the purpose and elements of an introduction to prepare for writing the introductions to their essays.

8 min



Review the Elements of an Introduction on page 642 of the Student Edition.



**OPT Project:** Digital activity.



Use Sample Essay Introduction for students to compare essay introductions.



Occasionally, essay sub-units skip this activity.

## Lesson 4 (continued)

M

**Write & Share:** Students craft an introduction to draw in a reader, introduce their claim, and clearly reflect the ideas they develop in the body paragraphs.

15 min



Review How to Write a Lead on page 643 of the Student Edition.



**Writing Journal:** Students write their leads and introductions on page 104.



**On-the-Fly:** Circulate around the room to support students.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Wrap-Up:** Project.

End of Lesson 4

## Lesson 4 Materials



Sample Essay Introduction



## Lesson 5: Concluding and Polishing the Essay

N

**Write:** Students experiment with ways to write a conclusion for their essay.

10 min



Review the Elements of a Conclusion on page 642 in the Student Edition.



**Writing Journal:** Students write their conclusions on page 106.

O

**Revise:** Students revise their essays to create transitions between and within body paragraphs and eliminate wordiness and redundancy.

7 min



Review Revising Transitions on page 643 of the Student Edition.



**Writing Journal:** Students write new transitions in Activities 1–3 on page 107.



Discuss responses and answer questions.



**Writing Journal:** Students revise their essays in Activities 4–6 on page 108.



Students can rewrite their draft during this Step before writing the final essay.



Discuss responses and answer questions.

## Lesson 5 (continued)

P

**Revise & Write:** Students polish their essays, first by focusing on sentence flow, style consistency, and essay completeness, and then on proofreading issues.

23 min



Review the Editing Process on page 644 of the Student Edition.



**Writing Journal:** Students revise their essay and write their final essay on page 110.



Give students time to work independently to edit their writing. Support students who have a hard time locating errors or correcting them.



Remind students that their sentences should follow formal sentence rules, rather than sound like a conversation with a friend.



**Share:** Call on 2 or 3 volunteers to share their writing. Each volunteer should call on 1–3 listeners to comment.



**Wrap-Up:** Project.

End of Lesson 5

## Lesson 5 Materials



Editing Process



Guidelines for Citing and Punctuating a Direct Quote



Essay Rubric



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