Threads & Themes Grade 6, Unit 3, Investigation 2 Summative Assessment (Teacher Edition)

Focus Standards: RI.6.1, RI.6.2, RI.6.3, RI.6.5, RI.6.6, RI.6.7, RI.6.8, RI.6.9, L.6.1, L.6.3, L.6.3b, L.6.4, L.6.5

PASSAGE 1

The Chemist Who Disappeared from the Record — Lexile: 1050L | Informational

(1) In 1914, a twenty-two-year-old chemist named Alice Augusta Ball arrived at the College of Hawaii to begin her graduate studies. Ball had already stood out as a student at the University of Washington, where she had published research on the chemistry of plant compounds. Few women, and even fewer Black women, earned advanced degrees in science at that time, but Ball completed her master's degree in chemistry in just one year. She became the first woman and the youngest person to earn that degree at the College of Hawaii. The university saw her talent and offered her a teaching position in the chemistry department. She accepted.

(2) At the same time, a doctor at the Kalihi Hospital in Honolulu was searching for help with a problem that had troubled physicians for centuries. Dr. Harry Hollmann treated patients with Hansen's disease, a condition that damaged the skin, nerves, and limbs. The most widely used treatment came from the seeds of the chaulmoogra tree, which produced a thick, bitter oil. Doctors had tried applying the oil to the skin, feeding it to patients, and injecting it directly. None of these methods worked well. The oil did not dissolve in the body. When injected, it formed painful lumps beneath the skin that often caused blisters and open sores. Patients avoided the treatment because the side effects were nearly as bad as the disease itself.

(3) Hollmann asked Ball whether she could find a way to make the oil usable. The problem was chemical. The oil's molecules were too large and too dense for the human body to absorb. Ball began working in her laboratory at the college, testing different methods of breaking down the oil's fatty acids. She tried heating the compounds, combining them with other substances, and changing the structure of the compounds through a series of controlled reactions. The work required patience and precision. Even a small change in temperature or timing could ruin a batch and force her to start over.

(4) After months of testing, Ball developed a method that succeeded. She converted the fatty acids in chaulmoogra oil into a form that could dissolve in water and be safely injected. The modified compound traveled through the bloodstream and reached the damaged tissue directly. Early tests on patients showed clear improvement for the first time. Doctors finally had a treatment for Hansen's disease that could be delivered effectively without causing severe pain. Ball's method was a major step forward in the fight against a disease that had harmed communities across the world for thousands of years.

(5) Ball never saw the full results of her work. In late 1916, she became seriously ill and died at the age of twenty-four. The exact cause of her death remains unclear. Some historians believe she may have breathed in toxic fumes during a laboratory demonstration. After her death, Arthur Dean, the head of the chemistry department at the college, continued developing Ball's method. He published the findings in medical journals and presented them at scientific conferences. But he did not credit Ball. For years, the treatment was known in the medical community as the "Dean Method." Ball's name appeared nowhere in the published record.

(6) It was Dr. Hollmann who first pushed back against this omission. In 1922, he published a paper that named Ball as the developer of the chaulmoogra oil method. He called it the "Ball Method." A few other scientists took notice, but the correction did not spread widely. For most of the twentieth century, Ball's contribution remained buried in the footnotes of a single paper. Meanwhile, the treatment she had developed was used on patients around the world. The gap between what Ball had accomplished and what the public record showed grew wider with each passing decade.

(7) It took the work of later researchers to close that gap. Historians returned to the university's archives and examined laboratory notebooks, departmental records, and published papers from the early 1900s. The evidence pointed in one direction: Ball had done the foundational work, and Dean had taken credit for it after her death. In 2000, the University of Hawaii placed a bronze plaque on a chaulmoogra tree on its campus to honor Ball. The same year, the state's lieutenant governor named February 29 as Alice Ball Day. Then, in 2022, the governor of Hawaii moved Alice Ball Day to February 28 so that Ball would be celebrated every year. The recognition arrived decades late. But it arrived because researchers had done what Ball herself once did in her laboratory: followed the evidence wherever it led.

ITEMS — PASSAGE 1

Item 1 — RI.6.1 | Cite evidence (explicit) | DOK 1 | MC

According to "The Chemist Who Disappeared from the Record," why did patients avoid the chaulmoogra oil treatment?

A) The oil came from a tree that was not easy to find.

B) Doctors suggested that Hansen's disease would go away on its own.

C) Doctors did not believe the oil could treat Hansen's disease.

D) The oil caused painful lumps, blisters, and open sores when injected.

Item 2 — RI.6.3 | Development of key individual | DOK 2 | MC

How do paragraphs 3 and 4 of "The Chemist Who Disappeared from the Record" develop the reader's understanding of Ball's achievement?

A) They describe the chemical problem Ball faced and explain how she solved it.

B) They compare Ball's approach to the methods other scientists had already tried.

C) They explain why Ball decided to study chemistry instead of another field.

D) They show how Ball's education prepared her for success in her work.

Item 3 — L.6.4a | Context clues (structural) | DOK 2 | MC

Read these sentences from paragraphs 5 and 6 of "The Chemist Who Disappeared from the Record."

> He published the findings in medical journals and presented them at scientific conferences. But he did not credit Ball. For years, the treatment was known in the medical community as the "Dean Method." Ball's name appeared nowhere in the published record.
>
> It was Dr. Hollmann who first pushed back against this omission.

Which words BEST help the reader determine the meaning of omission as it is used in the sentences above?

A) "published the findings"

B) "presented them"

C) "known in the medical community"

D) "appeared nowhere"

Item 4 — RI.6.6 | Author's purpose | DOK 3 | MC

Why does the author of "The Chemist Who Disappeared from the Record" MOST LIKELY include the detail that Hollmann published a paper naming Ball in 1922?

A) to show that Ball's contribution was recognized by at least one person but still largely ignored

B) to argue that Hollmann deserved more credit for treating Hansen's disease than he received

C) to explain why the medical community continued using the chaulmoogra oil treatment

D) to suggest that scientific journals at that time published more accurate information than later journals

Item 5 — L.6.5 | Figurative/connotative meaning | DOK 2 | MC

Read this sentence from paragraph 6 of "The Chemist Who Disappeared from the Record."

> For most of the twentieth century, Ball's contribution remained <u>buried</u> in the footnotes of a single paper.

What does the word buried suggest about Ball's contribution?

A) It was kept in a hidden location that no one could reach.

B) It was stored safely so it could be found later.

C) It was removed from the public record on purpose.

D) It was recorded in a place where few people would find it.

Item 6 — L.6.4b | Morphology | DOK 2 | MC

Read this sentence from paragraph 3 of "The Chemist Who Disappeared from the Record."

> The work required patience and <u>precision</u>.

The Latin root of the word "precise" means "to cut off." The suffix -ion means "the state or act of." What does the word precision mean as it is used in this sentence?

A) the ability to predict what will happen next

B) the state of being exact and careful

C) the act of finishing a task quickly

D) the process of learning a new method

Item 7 — RI.6.2 | Summary | DOK 2 | MC

Which statement BEST summarizes "The Chemist Who Disappeared from the Record"?

A) Alice Ball completed her master's degree at the College of Hawaii and became the first Black woman to hold that degree, which led to a career in research and teaching.

B) Arthur Dean published Alice Ball's research under his own name, and Dr. Hollmann spent years trying to convince the scientific community to recognize Ball's work instead.

C) Alice Ball developed a treatment for Hansen's disease, but after her early death another scientist took credit, and it took decades for historians to restore her name to the record.

D) Historians at the University of Hawaii discovered documents proving that Alice Ball had been the true developer of the chaulmoogra oil treatment, leading to a public ceremony in her honor.

Item 8 — RI.6.2 | Central idea | DOK 3 | MC

What central idea does "The Chemist Who Disappeared from the Record" develop?

A) Scientific discoveries are often the result of teamwork between doctors and chemists who share credit equally.

B) A scientist's important contribution can be erased from the record and only recovered when researchers follow the evidence.

C) Universities should do more to recognize the achievements of Black women in science before those achievements are forgotten.

D) Medical treatments for diseases like Hansen's disease have improved because of advances in chemistry over the past century.

PASSAGE 2

How Hidden Stories Come to Light — Lexile: 1080L | Informational

(1) Behind many celebrated discoveries in science stands a longer, messier history than the one most people know. Textbooks tend to name a single inventor or researcher when describing a breakthrough. But the truth of scientific work is rarely so simple. Laboratories depend on teams. Those teams depend on individuals whose contributions range from running experiments to organizing data to solving problems that make the larger project possible. When credit is assigned, it often flows to the person at the top: the lead researcher, the department head, the one whose name appears on the publication. The others may receive a mention in a footnote—or no mention at all.

(2) This pattern has repeated itself across centuries and fields. In the early days of scientific publishing, the rules for crediting contributors were loose and uneven. A senior scientist might publish the results of an entire team's work under a single name. Laboratory assistants, graduate students, and junior researchers performed key tasks but had little control over how their contributions were recorded. Women and people of color faced additional barriers. They were often shut out of professional groups, denied authorship on papers they had helped produce, and given temporary positions that left few official traces. Even when their work was known informally within a department, the published record often left them out. Over time, the published version became the accepted history. The original contributions faded from view.

(3) Recovering those contributions requires a different kind of investigation. Historians who study overlooked scientists begin not with published papers but with the unpublished materials behind them. These include laboratory notebooks, private letters, payroll records, and reports from the institutions themselves. Such primary sources often tell a different story than the one that appeared in print. A laboratory notebook might show that a junior researcher designed the

key experiment, even though the published paper listed only the senior scientist as the author. A set of letters between colleagues might reveal that an idea credited to one person actually came from another. The gap between the published account and the primary sources is where hidden contributions tend to surface.

(4) Technology has expanded the reach of this detective work. Digitized archives now allow researchers to search thousands of documents for a single name or phrase. This kind of search once required weeks of sorting through boxes of papers by hand. Online databases link published articles to the institutions, funding sources, and staff records connected to them. A historian studying a particular discovery can follow these digital trails across institutions and decades. In some cases, a single search has turned up documents that had been stored in university basements for half a century. No one had read or examined them until someone knew what to look for.

(5) Not every overlooked story can be recovered, however. When records were not kept, or when documents were lost or destroyed, the evidence may be gone for good. Historians acknowledge that the stories they do uncover likely represent only a small portion of the contributions that went unrecognized. The gaps in the historical record are real. No amount of searching can fill all of them. Some contributions were never written down in the first place. They existed only in the memories of the people who witnessed them.

(6) Some researchers have suggested that the problem of missing credit has largely been solved. Modern publishing rules now require that every contributor to a study be listed as an author. These rules have improved how credit is shared in some fields. But they do not address the decades of earlier work where credit was never recorded in the first place.

(7) The recoveries that have occurred in recent decades have added new names and new viewpoints to the history of science. Researchers who were once absent from textbooks have begun to appear in museum exhibits, award ceremonies, and research journals. Schools have added their stories to the material students study. Each recovered story adds detail to a fuller picture of how scientific progress actually happens. It happens through networks of contributors whose roles were not always recorded with equal care.

ITEMS — PASSAGE 2

Item 9 — RI.6.5 | Section contribution to ideas | DOK 2 | MC

How does paragraph 2 of "How Hidden Stories Come to Light" contribute to the development of ideas in the passage?

A) It explains the historical reasons why some contributors were left out of the published record.

B) It provides examples of individual scientists whose contributions were overlooked.

C) It argues that modern publishing rules have corrected the problem of missing credit.

D) It describes how technology has made it easier to search for overlooked contributions.

Item 10 — RI.6.1 | Cite evidence (inferential) | DOK 2 | MC

Which detail from "How Hidden Stories Come to Light" BEST supports the idea that primary sources can tell a different story from the published record?

A) "In the early days of scientific publishing, the rules for crediting contributors were loose and uneven."

B) "A laboratory notebook might show that a junior researcher designed the key experiment, even though the published paper listed only the senior scientist as the author."

C) "Digitized archives now allow researchers to search thousands of documents for a single name or phrase."

D) "The gaps in the historical record are real. No amount of searching can fill all of them."

Item 11 — L.6.4d | Verify with dictionary | DOK 2 | MC

Read this sentence from paragraph 3 of "How Hidden Stories Come to Light."

> The gap between the published account and the primary sources is where hidden contributions tend to surface.

Read the dictionary entry below.

surface (noun/verb)

1. the outside or top layer of an object or area
2. to rise to the top of a body of water after being below
3. to become known or apparent after being hidden
4. to apply a coating or covering to a road or floor

Which definition BEST matches the way the word surface is used in the passage?

A) Definition 1

B) Definition 2

C) Definition 3

D) Definition 4

Item 12 — RI.6.5 | Role of paragraph in structure | DOK 3 | MC

What role does paragraph 6 of "How Hidden Stories Come to Light" play in the overall structure of the passage?

A) It introduces the main argument that the passage will develop in the paragraphs that follow.

B) It provides additional evidence to support the claim that technology has improved research.

C) It summarizes the key findings that historians have made about overlooked scientists.

D) It presents a claim that the passage has already provided evidence against in earlier paragraphs.

Item 13 — RI.6.8 | Evaluate argument | DOK 2 | TEI – Sorting

Read these claims about "How Hidden Stories Come to Light." Sort each claim into the correct category.

SUPPORTED BY THE PASSAGE:

NOT SUPPORTED BY THE PASSAGE:

Tiles:

A) Credit for scientific work often went to the person at the top rather than to all contributors.

B) Sources such as private letters can reveal contributions that published papers left out.

C) Scientists who were left out of the record often spoke publicly about the unfair treatment they received.

D) Recovered stories have added new names and viewpoints to the history of science.

E) Government agencies created review programs to correct errors in the historical record of scientific research.

Item 14 — RI.6.2 | Central idea | DOK 3 | MC

What central idea does "How Hidden Stories Come to Light" develop?

A) Technology has made it possible to recover each overlooked contribution in the history of science.

B) Publishing rules have changed many times over the years and now make the scientific record more fair by requiring all contributors to be listed.

C) The published record of science often left out important contributors, and recovering their stories requires careful research into primary sources.

D) The most important scientific discoveries were made by teams, not by individual researchers working alone.

Item 15 — L.6.1c | Inappropriate pronoun shifts | DOK 2 | MC

Read these sentences.

> Jane and Frankie read an article for school about overlooked scientists. We enjoyed learning about this topic!

Which pronoun should replace "We" to make the second sentence correct?

A) She
B) They
C) Them
D) You

Item 16 — L.6.3a | Sentence patterns | DOK 2 | MC

A student is writing a paragraph about how Alice Ball's method was used around the world. Read the student's draft.

> Ball's method was used to treat patients in hospitals across several countries. Doctors in the Philippines used it. Doctors in Japan used it. Doctors in Brazil used it too.

Which revision BEST improves the sentence pattern of the draft while keeping the same meaning?

A) Ball's method was used to treat patients in hospitals across several countries. Doctors in the Philippines, Japan, and Brazil all used it.

B) Ball's method was used. It was used to treat patients. It was used in hospitals. It was used across several countries, including the Philippines, Japan, and Brazil.

C) Doctors in the Philippines used Ball's method, and doctors in Japan used Ball's method, and doctors in Brazil used Ball's method too, all to treat patients in hospitals.

D) Ball's method was used to treat patients in hospitals across several countries because doctors in the Philippines used it and doctors in Japan used it and doctors in Brazil used it.

Item 17 — L.6.3b | Style consistency | DOK 2 | MC

A student is writing a formal research report about overlooked scientists. Read this paragraph from the report.

> Many scientists who made important contributions to their fields were never given proper credit. Their names were left out of published papers. Some of them got totally ripped off by the people in charge. This is clearly unfair and should be addressed.

Which sentence should the student revise to maintain a consistent formal style throughout the paragraph?

A) The first sentence because "important contributions" is too vague for a research report.

B) The second sentence because it uses passive voice instead of active voice.

C) The third sentence because "got totally ripped off" and "people in charge" are too informal for a research report.

D) The fourth sentence because it expresses the opinion of the author.

ITEMS — BOTH PASSAGES

Item 18 — RI.6.9 | Cross-text comparison | DOK 3 | MC

How does the author of "The Chemist Who Disappeared from the Record" present the topic of overlooked contributions differently from the author of "How Hidden Stories Come to Light"?

A) The first author uses mainly facts and dates, while the second author includes personal opinions about the scientists discussed.

B) The first author explains how technology helped recover Ball's story, while the second author explains the limitations of technology for this kind of research.

C) The first author argues that overlooked scientists deserve more recognition, while the second author argues that the problem has been solved.

D) The first author focuses on one scientist's specific experience, while the second author explains the broader pattern of how contributions get lost and recovered.

Item 19 — RI.6.7 | Compare media adaptation | DOK 2 | MC

Read these sentences from paragraph 4 of "The Chemist Who Disappeared from the Record."

> After months of testing, Ball developed a method that succeeded. She converted the fatty acids in chaulmoogra oil into a form that could dissolve in water and be safely injected. The modified compound traveled through the bloodstream and reached the damaged tissue directly. Early tests on patients showed clear improvement for the first time.

Now read how this same scene might appear in a short documentary film.

> The screen shows a black-and-white photograph of a laboratory from the early 1900s.
>
> NARRATOR: After months of failed attempts, Ball finally found the answer.
>
> The camera slowly zooms in on glass beakers and test tubes. Soft music plays in the background. Then the screen cuts to
>
> MODERN DAY DOCTOR: What she did was remarkable. She figured out how to make the oil work when no one else could.

What does the documentary provide that the written passage does NOT?

A) an outside expert's reaction to explain why Ball's work was important

B) a description of how Ball changed the oil so it could be injected

C) information about how many months Ball spent testing the oil

D) details about what happened to patients after they received Ball's treatment

Item 20 — MSLS 2.2 | Source evaluation | DOK 2 | MC

A student is writing a research report about scientists whose contributions were overlooked. The student finds four sources.

Source 1: A blog post written by a middle school student last year titled "Cool Scientists You Never Heard Of"

Source 2: A chapter from a book published in 2021 by a university professor who studies the history of science

Source 3: A website with no listed author or publication date titled "Famous Inventors and Their Stories"

Source 4: A newspaper editorial about fairness in scientific journals

Which source is MOST credible and authoritative for the student's research report?

A) Source 1 because it was written recently and covers the same topic as the report.

B) Source 2 because it was written by an expert in the field and published in a reviewed book.

C) Source 3 because websites are easier to access than books and contain more information

D) Source 4 because it expresses a point of view about a topic related to the report.

SPELLING

Administrator note: Read the word, then read the sentence, then repeat the word clearly, and pause for students to write.

Item 21

regulations

When Alice Ball arrived in Hawaii, there were few regulations about who could lead scientific research at the university.

regulations

Write the spelling word you heard:

_____

Item 22

aerodynamic

The engineers tested whether the new design was aerodynamic enough to fly smoothly through the air.

aerodynamic

Write the spelling word you heard:

_____

Item 23

calculate

Ball had to calculate the exact amount of each substance needed for her experiments.

calculate

Write the spelling word you heard:

_____

Item 24

reliable

Doctors needed a reliable treatment that would work the same way every time.

reliable

Write the spelling word you heard:

_____

ANSWER KEY

#	Answer	Standard	Skill	DOK	Type
1	**D**	RI.6.1	Cite evidence (explicit)	1	MC
2	**A**	RI.6.3	Development of key individual	2	MC
3	**C**	L.6.4a	Context clues (structural)	2	MC
4	**A**	RI.6.6	Author's purpose	3	MC
5	**D**	L.6.5	Figurative/connotative meaning	2	MC
6	**B**	L.6.4b	Morphology	2	MC
7	**C**	RI.6.2	Summary	2	MC
8	**B**	RI.6.2	Central idea	3	MC
9	**A**	RI.6.5	Section contribution	2	MC
10	**B**	RI.6.1	Cite evidence (inferential)	2	MC
11	**C**	L.6.4d	Verify with dictionary	2	MC
12	**D**	RI.6.5	Role of paragraph in structure	3	MC
13	**A,B,D / C,E**	RI.6.8	Evaluate argument	2	TEI – Sorting
14	**C**	RI.6.2	Central idea	3	MC
15	**B**	L.6.1c	Pronoun shifts	2	MC
16	**A**	L.6.3a	Sentence patterns	2	MC
17	**C**	L.6.3b	Style consistency	2	MC
18	**D**	RI.6.9	Cross-text comparison	3	MC
19	**A**	RI.6.7	Compare media adaptation	2	MC

20	**A**	MSLS 2.2	Source evaluation	2	MC
21	**regulations**	Spelling	Spelling	1	FITB
22	**aerodynamic**	Spelling	Spelling	1	FITB
23	**calculate**	Spelling	Spelling	1	FITB
24	**reliable**	Spelling	Spelling	1	FITB

RATIONALE APPENDIX

Item 1 — RI.6.1

✘ **Incorrect: A)** The passage does not mention difficulty in finding the chaulmoogra tree.

✘ **Incorrect: B)** The passage states that doctors were working on a treatment for the disease, not that they felt it would resolve without treatment.

✘ **Incorrect: C)** Paragraph 2 indicates doctors tried multiple methods of applying the oil, showing they believed it could work.

✔ **Correct: D)** Paragraph 2 states the oil "formed painful lumps beneath the skin that often caused blisters and open sores," directly explaining why patients avoided the treatment.

Item 2 — RI.6.3

✔ **Correct: A)** Paragraph 3 describes the problem (the oil's molecules were too large to absorb) and Ball's process of testing methods, while paragraph 4 explains her successful solution and its results. Together they develop the reader's understanding by showing both the challenge and the breakthrough.

✘ **Incorrect: B)** Paragraph 2 mentions earlier attempts by doctors, but paragraphs 3 and 4 focus on Ball's own work, not a direct comparison.

✘ **Incorrect: C)** The passage does not discuss why Ball chose chemistry as a field.

✘ **Incorrect: D)** Paragraph 1 mentions Ball's time at the University of Washington, but paragraphs 3 and 4 do not address her teachers or training.

Item 3 — L.6.4a

✘ **Incorrect: A)** This phrase describes what Dean did with the research findings, not what was left out.

✘ **Incorrect: B)** This phrasedescribes what Dean did with the research findings, not what was left out.

✘ **Incorrect: C)** This phrase explains how the treatment was known, not what was omitted.

✔ **Correct: D)** The phrase "appeared nowhere" indicates that something was missing—Ball's name and credit—which is what "omission" refers to.

Item 4 — RI.6.6

✔ **Correct: A)** The author describes Hollmann's 1922 paper to show that a correction was attempted and then immediately notes "the correction did not spread widely" and Ball's contribution "remained buried in the footnotes." This develops the passage's focus on the gap between Ball's achievement and its recognition.

✘ **Incorrect: B)** The passage focuses on Ball's overlooked credit, not on Hollmann deserving more recognition for his own medical work.

✘ **Incorrect: C)** This detail is not related to whether the treatment Ball developed was continued or discontinued.

✘ **Incorrect: D)** The passage does not compare the accuracy of scientific journals across different time periods.

Item 5 — L.6.5

✘ **Incorrect: A)** The contribution was in a published footnote, not physically hidden or unreachable. This reads the word too literally.

✘ **Incorrect: B)** This is reading the option too narrowly.

✘ **Incorrect: C)** The passage describes the contribution being overlooked, not deliberately removed. The word "buried" suggests neglect, not intentional deletion.

✔ **Correct: D)** "Buried" is used figuratively to mean concealed or hidden from notice. The footnote existed, but its placement in a single paper meant almost no one encountered it—conveying that Ball's contribution was effectively invisible even though a record of it technically existed.

Item 6 — L.6.4b

✘ **Incorrect: A)** Predicting outcomes is not related to the root precise ("to be exact") or the context of laboratory work requiring careful control.

✔ **Correct: B)** Combining the root precise ("to cut off") with the suffix -ion ("the state or act of") produces "the state of being exact." The passage context confirms this: Ball needed exactness because "even a small change in temperature or timing could ruin a batch."

✘ **Incorrect: C)** The root precise relates to exactness, not speed. The passage emphasizes careful, controlled work, not quick completion.

✘ **Incorrect: D)** The passage describes Ball applying a method she was developing, not learning one. The root precise does not relate to learning.

Item 7 — RI.6.2

✘ **Incorrect: A)** This covers only paragraph 1 and misses the central arc of the passage—Ball's treatment, the credit dispute, and the eventual recovery of her name.

✘ **Incorrect: B)** This is strong but not the best option; it does not fully capture the depth.

✔ **Correct: C)** This captures the full arc: Ball's achievement (paragraphs 3–4), Dean taking credit after her death (paragraph 5), and the long process of restoring her recognition (paragraphs 6–7).

✘ **Incorrect: D)** This describes only the final section (paragraph 7) and omits Ball's scientific work and the decades of lost credit that make the recovery meaningful.

Item 8 — RI.6.2

✘ **Incorrect: A)** The passage shows the opposite of shared credit—Dean took Ball's credit, and Ball worked largely independently in her laboratory.

✔ **Correct: B)** The passage traces how Ball's contribution was erased (paragraphs 5–6) and eventually recovered through archival research (paragraph 7). The closing line reinforces this idea: recognition "arrived because researchers had done what Ball herself once did . . . followed the evidence wherever it led."

✘ **Incorrect: C)** The passage describes what happened to Ball's legacy, but it does not argue that universities should do more. This reads an advocacy message into the text that the author does not state.

✘ **Incorrect: D)** While the passage mentions Ball's treatment as an advance, the central idea is about lost credit and recovery, not about the history of medical treatments.

Item 9 — RI.6.5

✔ **Correct: A)** Paragraph 2 explains why contributions were left out: loose crediting rules, senior scientists publishing under their own names, and additional barriers faced by women and people of color. This establishes the historical causes that the rest of the passage then addresses.

✘ **Incorrect: B)** Paragraph 2 describes categories of people (laboratory assistants, graduate students, women, people of color) but does not name specific scientists.

✘ **Incorrect: C)** Modern publishing rules are discussed in paragraph 6, not paragraph 2.

✘ **Incorrect: D)** Technology and digital search tools are discussed in paragraph 4, not paragraph 2.

Item 10 — RI.6.1

✘ **Incorrect: A)** This detail explains why credit was uneven but does not illustrate a difference between primary sources and published records.

✔ **Correct: B)** This sentence from paragraph 3 directly illustrates the gap: the notebook (a primary source) shows one thing, while the published paper shows something different—the junior researcher did the work, but only the senior scientist's name appeared.

✘ **Incorrect: C)** This detail describes how technology helps researchers access documents, not what those documents reveal.

✘ **Incorrect: D)** This detail acknowledges limits in recovery, not the ability of primary sources to reveal different information.

Item 11 — L.6.4d

✘ **Incorrect: A)** Definition 1 describes a physical layer, not the action of something becoming visible. This is a noun usage, while the passage uses "surface" as a verb.

✘ **Incorrect: B)** Definition 2 describes rising through water, which shares the idea of emerging but applies to a physical context, not to contributions becoming known.

✔ **Correct: C)** Definition 3—"to become known or apparent after being hidden"—matches the student's preliminary determination and the passage context, where hidden contributions become visible through research.

✘ **Incorrect: D)** Definition 4 describes applying a physical coating, which is unrelated to contributions becoming known.

Item 12 — RI.6.5

✘ **Incorrect: A)** Paragraph 6 appears near the end of the passage, not at the beginning. The main argument is established in paragraphs 1–2.

✘ **Incorrect: B)** This is a strong interpretation but not the best fit.

✘ **Incorrect: C)** Paragraph 6 discusses modern publishing rules, not historians' findings. Paragraph 7 addresses recoveries made by researchers.

✔ **Correct: D)** Paragraph 6 presents the claim that modern publishing rules have "largely" solved the problem. However, paragraphs 2–5 have already shown that the problem is deep and historical—rooted in decades of lost records, systemic barriers, and permanently missing evidence. Paragraph 6 functions as a counterpoint that the passage's earlier evidence complicates.

Item 13 — RI.6.8

✔ **Correct: A)** SUPPORTED. Paragraphs 1 and 2 develop this claim with specific details: credit flows to “the person at the top,” and senior scientists published team results under a single name.

✔ **Correct: B)** SUPPORTED. Paragraph 3 explains that “letters between colleagues might reveal that an idea credited to one person actually came from another.”

✘ **Incorrect: C)** NOT SUPPORTED. The passage never states that overlooked scientists spoke publicly about unfair treatment. Paragraph 2 says their contributions “faded from view,” and paragraph 5 says

some contributions “existed only in the memories of the people who witnessed them.” The passage describes silence, not protest.

✔ **Correct: D)** SUPPORTED. Paragraph 7 states that recovered stories “have added new names and new viewpoints to the history of science” and that researchers have begun appearing in “museum exhibits, award ceremonies, and research journals.”

✘ **Incorrect: E)** NOT SUPPORTED. The passage never mentions government agencies or government-led review programs. Paragraphs 3 and 4 attribute the recovery of overlooked contributions to historians and digital technology, not to any official government effort.

Item 14 — RI.6.2

✘ **Incorrect: A)** The passage explicitly states the opposite in paragraph 5: "no amount of searching can fill all of them," and some contributions "were never written down in the first place."

✘ **Incorrect: B)** This is not the strongest central idea since the passage does not offer details about various iterations of publishing rules.

✔ **Correct: C)** The passage develops this idea across all seven paragraphs: paragraphs 1–2 explain why contributors were left out, paragraphs 3–4 explain how primary sources and technology help recover their stories, and paragraphs 5–7 address the limits and results of this recovery process.

✘ **Incorrect: D)** While the passage mentions teamwork in paragraph 1, the central focus is on why certain contributors were left out and how their stories are recovered—not on whether discoveries are made by teams or individuals.

Item 15 — L.6.1

✘ **Incorrect: A)** “She” is singular and does not match the antecedent “Jane and Frankie,” which is more than one person.

✔ **Correct: B)** "They” is the correct pronoun to refer to two people—Jane and Frankie.

✘ **Incorrect: C)** “Them” is an object pronoun, but the sentence calls for a subject pronoun.

✘ **Incorrect: D)** "You” is a second-person pronoun, and Jane and Frankie should be referred to in the third person.

Item 16 — L.6.3

✔ **Correct: A)** This revision combines three repetitive sentences into one clear sentence that lists the countries, eliminating unnecessary repetition while keeping the meaning intact.

✘ **Incorrect: B)** This revision breaks the first sentence into short, choppy fragments that are more repetitive than the original draft.

✘ **Incorrect: C)** This revision uses three "and" conjunctions and repeats "Ball's method" three times, creating an awkward run-on pattern.

✘ **Incorrect: D)** This revision uses "because" to suggest a causal relationship that does not make sense—the countries where doctors used the method do not explain why the method was used.

Item 17 — L.6.3b

✘ **Incorrect: A)** "Important contributions" is appropriate formal language for a research report and does not need revision.

✘ **Incorrect: B)** Passive voice ("were left out") is commonly used in formal academic writing and is not a style inconsistency.

✔ **Correct: C)** The phrases "got totally ripped off" and "people in charge" are casual and colloquial, which breaks from the formal style established in the first two sentences. In a formal report, the student should use language such as "were denied credit by senior researchers."

✘ **Incorrect: D)** Opinions can be appropriate in formal writing.

Item 18 — RI.6.9

✘ **Incorrect: A)** This does not capture the distinction as well as the correct answer.

✘ **Incorrect: B)** The first passage does not discuss technology.

✘ **Incorrect: C)** Neither author makes a direct argument for more recognition. The second author does not argue the problem has been solved—paragraph 6 presents that claim and immediately qualifies it.

✔ **Correct: D)** "The Chemist Who Disappeared from the Record" tells Alice Ball's individual story in detail—her work, the loss of credit, and the recovery of her name. "How Hidden Stories Come to Light" steps back to explain the systemic pattern: why contributions are lost, how historians recover them, and what limits that process. The two authors present the same topic through different lenses—specific case vs. general explanation.

Item 19 — RI.6.7

✔ **Correct: A)** The documentary includes a modern doctor saying "What she did was remarkable" and explaining its significance. This expert reaction provides an outside perspective that the written passage—which simply states the facts of what happened—does not include.

✘ **Incorrect: B)** The written passage provides this information in detail—Ball "converted the fatty acids" into a form that "could dissolve in water." The documentary does not explain the chemistry.

✘ **Incorrect: C)** Neither the passage nor the documentary provides a specific number of months.

✘ **Incorrect: D)** The written passage states "early tests on patients showed clear improvement." The documentary excerpt does not include this detail.

Item 20 — MSLS 2.2

✘ **Incorrect: A)** Being recently written does not make a source credible. A middle school student's blog lacks the expertise and review process that make a source authoritative.

✔ **Correct: B)** Source 2 is written by a university professor with expertise in the history of science and was published in a book, which typically undergoes editorial review. Authority and credibility come from the author's qualifications and the publication process

✘ **Incorrect: C)** Ease of access does not determine credibility. A website with no author or date cannot be verified for accuracy or authority.

✘ **Incorrect: D)** Expressing a point of view is not a measure of credibility. This source lacks the authority of Source 2.

SPELLING ANSWER KEY

Item 21: regulations

Common errors: “regulashions,” “regulatons,” “regalations”

Item 22: aerodynamic

Common errors: “arodynamic,” “airodynamic,” “aerodynemic”

Item 23: calculate

Common errors: “calulate,” “calculait,” “calcalate”

Item 24: reliable

Common errors: “reliabel,” “relible,” “relyable”