

#1

ID: b46e0c8a

While researching a topic, a student has taken the following notes:

- Organisms release cellular material into their environment by shedding substances such as hair or skin.
- The DNA in these substances is known as environmental DNA, or eDNA.
- Researchers collect and analyze eDNA to detect the presence of species that are difficult to observe.
- Geneticist Sara Oyler-McCance's research team analyzed eDNA in water samples from the Florida Everglades to detect invasive constrictor snake species in the area.
- The study determined a 91% probability of detecting Burmese python eDNA in a given location.

The student wants to present the study to an audience already familiar with environmental DNA. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Sara Oyler-McCance's researchers analyzed eDNA in water samples from the Florida Everglades for evidence of invasive constrictor snakes, which are difficult to observe.
- B) An analysis of eDNA can detect the presence of invasive species that are difficult to observe, such as constrictor snakes.
- C) Researchers found Burmese python eDNA, or environmental DNA, in water samples; eDNA is the DNA in released cellular materials, such as shed skin cells.
- D) Sara Oyler-McCance's researchers analyzed environmental DNA (eDNA)—that is, DNA from cellular materials released by organisms—in water samples from the Florida Everglades.

#2

ID: 48d0bb34

While researching a topic, a student has taken the following notes:

- Sam Maloof (1916–2009) was an American woodworker and furniture designer.
- He was the son of Lebanese immigrants.
- He received a “genius grant” from the John D. and Catherine T. MacArthur Foundation in 1985.
- The Museum of Fine Arts in Boston, Massachusetts, owns a rocking chair that Maloof made from walnut wood.
- The armrests and the seat of the chair are sleek and contoured, and the back consists of seven spindle-like slats.

The student wants to describe the rocking chair to an audience unfamiliar with Sam Maloof. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) With its sleek, contoured armrests and seat, the walnut rocking chair in Boston’s Museum of Fine Arts is just one piece of furniture created by American woodworker Sam Maloof.
- B) Sam Maloof was born in 1916 and died in 2009, and during his life, he made a chair that you can see if you visit the Museum of Fine Arts in Boston.
- C) Furniture designer Sam Maloof was a recipient of one of the John D. and Catherine T. MacArthur Foundation’s “genius grants.”
- D) The rocking chair is made from walnut, and it has been shaped such that its armrests and seat are sleek and contoured.

#3

ID: aa7e10d0

While researching a topic, a student has taken the following notes:

- Species belonging to the Orchidaceae (orchid) family can be found in both tropical and temperate environments.
- Orchidaceae species diversity has not been well studied in temperate forests, such as those in Oaxaca, Mexico.
- Arelee Estefanía Muñoz-Hernández led a study to determine how many different Orchidaceae species are present in the forests of Oaxaca.
- Muñoz-Hernández and her team collected orchids each month for a year at a site in Oaxaca.
- Seventy-four Orchidaceae species were present at the site.

The student wants to present the study and its findings. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) A study led by Arelee Estefanía Muñoz-Hernández identified a total of 74 Orchidaceae species in the temperate forests of Oaxaca, Mexico.
- B) There are orchids in many environments, but there are 74 Orchidaceae species in Oaxaca, Mexico.
- C) Oaxaca, Mexico, is home to temperate forests containing 74 Orchidaceae species.
- D) Arelee Estefanía Muñoz-Hernández and her team wanted to know how many different Orchidaceae species are present in the forests of Oaxaca, Mexico, so they conducted a study to collect orchids.

#4

ID: 4c43bf61

While researching a topic, a student has taken the following notes:

- The International Center for the Arts of the Americas (ICAA) is directed by Mari Carmen Ramírez.
- Ramírez oversaw an initiative to create an online archive of historical documents related to the history of Latin American and Latino visual art.
- The ICAA digitized over 10,000 documents, including the writings of Latin American and Latino artists and critics.
- The creation of the archive didn't require historical documents to be removed from their countries of origin.
- Scholars now have more access to these documents.

The student wants to explain an advantage of the ICAA's archive being digital. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Over 10,000 documents related to the history of Latin American and Latino visual art are part of the ICAA archive.
- B) By offering online versions of historical documents, the ICAA's archive provides more access to these materials without removing them from their countries of origin.
- C) Among the historical documents in the ICAA's archive are the writings of Latin American and Latino artists and critics.
- D) The ICAA's director, Mari Carmen Ramírez, oversaw the creation of an online archive of historical documents related to Latin American and Latino visual art.

#5

ID: 84e108cf

While researching a topic, a student has taken the following notes:

- Platinum is a rare and expensive metal.
- It is used as a catalyst for chemical reactions.
- Platinum catalysts typically require a large amount of platinum to be effective.
- Researcher Jianbo Tang and his colleagues created a platinum catalyst that combines platinum with liquid gallium.
- Their catalyst was highly effective and required only trace amounts of platinum (0.0001% of the atoms in the mixture).

The student wants to explain an advantage of the new platinum catalyst developed by Jianbo Tang and his colleagues. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Researcher Jianbo Tang and his colleagues created a platinum catalyst that combines platinum, a rare and expensive metal, with liquid gallium.
- B) Like other platinum catalysts, the new platinum catalyst requires a particular amount of the metal to be effective.
- C) Platinum is a rare and expensive metal that is used as a catalyst for chemical reactions; however, platinum catalysts typically require a large amount of platinum to be effective.
- D) While still highly effective, the new platinum catalyst requires far less of the rare and expensive metal than do other platinum catalysts.

#6

ID: 441f0505

While researching a topic, a student has taken the following notes:

- A lever is a simple machine consisting of a rigid beam and a fulcrum.
- The fulcrum is the point about which the beam pivots.
- The input force (effort) is the force applied to the lever.
- The output force (load) is the force that the lever exerts on another object.
- In first-class levers, the fulcrum is located between the effort and the load.
- In second-class levers, the load is located between the effort and the fulcrum.

The student wants to contrast first-class levers and second-class levers. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In levers, the effort is the force applied to the lever; the load, in contrast, is the force that the lever exerts on another object.
- B) In first-class and second-class levers, the fulcrum and the load are in different locations.
- C) First-class levers are simple machines consisting of a rigid beam and a fulcrum, but then again, the same is true of second-class levers.
- D) In first-class levers, the fulcrum is located between the effort and the load, but in second-class levers, the load is located between the effort and the fulcrum.

#7

ID: 4b99b481

While researching a topic, a student has taken the following notes:

- Scientists have developed a “freeze-thaw” battery that can retain 92% of its charge after twelve weeks.
- The battery contains molten salt (a type of salt that liquifies when heated and solidifies at room temperature).
- When the salt is in a liquid state, energy flows through the battery.
- When the salt is in a solid state, energy stops flowing and is stored in the battery.
- The stored (frozen) energy can be used by reheating (thawing) the battery.

The student wants to specify how the salt enables energy storage. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Scientists have developed a freeze-thaw battery that contains molten salt, which liquifies when heated and solidifies at room temperature.
- B) The stored energy in a freeze-thaw battery, which contains molten salt, can be used by reheating the battery.
- C) When the molten salt in a freeze-thaw battery solidifies at room temperature, energy stops flowing and can be stored in the battery.
- D) Molten salt allows a freeze-thaw battery to retain 92% of its charge after twelve weeks.

#8

ID: a4366255

While researching a topic, a student has taken the following notes:

- Musicians around the world have used protest songs to raise awareness about human rights violations.
- US folk singer Aunt Molly Jackson released the protest song “Poor Miner’s Farewell” in 1932.
- It exposed the unlivable wages and dangerous working conditions coal miners faced in Kentucky during the 1920s and 1930s.
- South African singer-songwriter Hugh Masekela released the protest song “Bring Him Back Home” in 1987.
- It called on the South African government to free Nelson Mandela, an anti-apartheid leader who’d been unjustly imprisoned.

The student wants to contrast the song “Poor Miner’s Farewell” with the song “Bring Him Back Home.” Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The songs “Poor Miner’s Farewell” and “Bring Him Back Home” both raised awareness about human rights violations.
- B) While both are protest songs, “Poor Miner’s Farewell” is about coal miners in Kentucky, whereas “Bring Him Back Home” is about the anti-apartheid leader Nelson Mandela.
- C) Hugh Masekela’s song “Bring Him Back Home,” released in 1987, called on the South African government to free Nelson Mandela.
- D) Released in 1932 by Aunt Molly Jackson, the song “Poor Miner’s Farewell” was a protest against the unlivable wages and dangerous working conditions faced by Kentucky coal miners.

#9

ID: 883493d5

While researching a topic, a student has taken the following notes:

- Allan Houser was a Chiricahua Warm Springs Apache sculptor, illustrator, and painter.
- Many of his sculptures featured Native American figures.
- He depicted this subject matter using abstract, modernist forms, developing a distinctive style that influenced many other artists.
- His well-known sculpture *Sacred Rain Arrow* was pictured on the State of Oklahoma license plate.

The student wants to describe the distinctive style of Houser’s sculptures. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) A sculptor, illustrator, and painter, Houser developed a distinctive style for portraying Native American figures.
- B) Houser’s sculptures employ abstract, modernist forms to depict Native American figures.
- C) Many other artists have been influenced by the style of Houser’s sculptures.
- D) The sculpture *Sacred Rain Arrow* is a well-known example of Houser’s style.

#10

ID: 2bf05ae9

While researching a topic, a student has taken the following notes:

- In the midst of the US Civil War, Susie Taylor escaped slavery and fled to Union-army-occupied St. Simons Island off the Georgia coast.
- She began working for an all-Black army regiment as a nurse and teacher.
- In 1902, she published a book about the time she spent with the regiment.
- Her book was the only Civil War memoir to be published by a Black woman.
- It is still available to readers in print and online.

The student wants to emphasize the uniqueness of Taylor's accomplishment. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Taylor fled to St. Simons Island, which was then occupied by the Union army, for whom she began working.
- B) After escaping slavery, Taylor began working for an all-Black army regiment as a nurse and teacher.
- C) The book Taylor wrote about the time she spent with the regiment is still available to readers in print and online.
- D) Taylor was the only Black woman to publish a Civil War memoir.

#11

ID: e876e395

While researching a topic, a student has taken the following notes:

- The melting rate of glaciers varies based on air temperature.
- In the warm summer months, massive glaciers on the coast of Greenland melt into the surrounding water.
- The melting glaciers contribute to rising sea levels each summer.
- Huge icebergs also break off Greenland's glaciers into the water and melt.
- In 2017, geoscientist Twila Moon found that the iceberg melting rate depends not on air temperature but on water temperature.
- Because water temperature is consistent, melting icebergs contribute to rising sea levels all year.

The student wants to emphasize a similarity between glaciers and icebergs in Greenland. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Because icebergs break off Greenland's glaciers into the water, their melting rate depends on water temperature.
- B) Greenland's glaciers and icebergs both melt during the year, contributing to rising sea levels.
- C) Geoscientist Twila Moon found that the melting rate of Greenland's icebergs, unlike that of glaciers, does not depend on air temperature.
- D) Glaciers on the coast of Greenland melt during the warm summer months into the surrounding water, the temperature of which remains consistent throughout the year.

#12

ID: bb275f0d

While researching a topic, a student has taken the following notes:

- Cities tend to have a wide range of flowering vegetation in parks, yards, and gardens.
- This vegetation provides a varied diet for honeybees, strengthening bees' immune systems.
- On average, 62.5 percent of bees in an urban area will survive a harsh winter.
- Rural areas are often dominated by monoculture crops such as corn or wheat.
- On average, only 40 percent of honeybees in a rural area will survive a harsh winter.

The student wants to make and support a generalization about honeybees. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Cities tend to have a wider range of flowering vegetation than do rural areas, which are often dominated by monoculture crops.
- B) In urban areas, over 60 percent of honeybees, on average, will survive a harsh winter, whereas in rural areas, only 40 percent will.
- C) The strength of honeybees' immune systems depends on what the bees eat, and a varied diet is more available to bees in an urban area than to those in a rural area.
- D) Honeybees are more likely to thrive in cities than in rural areas because the varied diet available in urban areas strengthens the bees' immune systems.

#13

ID: 6249b173

While researching a topic, a student has taken the following notes:

- In 2018 researchers Adwait Deshpande, Shreejata Gupta, and Anindya Sinha were observing wild macaques in India's Bandipur National Park.
- They saw macaques calling out to and gesturing at humans who were eating or carrying food.
- They designed a study to find out if the macaques were intentionally communicating to try to persuade the humans to share their food.
- In the study trials, macaques frequently called out to and gestured at humans holding food.
- In the study trials, macaques called out to and gestured at empty-handed humans less frequently.

The student wants to present the study's results. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Macaques in the study called out to and gestured more frequently at humans holding food than at empty-handed humans.
- B) In 2018, researchers who had observed macaques in India's Bandipur National Park calling out to and gesturing at humans designed a study.
- C) The researchers hoped to find out if the macaques were intentionally communicating to try to persuade humans to share their food.
- D) The researchers studied how macaques behaved around both humans holding food and empty-handed humans.

#14

ID: 63a4fa29

While researching a topic, a student has taken the following notes:

- In 2013, archaeologists studied cat bone fragments they had found in the ruins of Quanhucun, a Chinese farming village.
- The fragments were estimated to be 5,300 years old.
- A chemical analysis of the fragments revealed that the cats had consumed large amounts of grain.
- The grain consumption is evidence that the Quanhucun cats may have been domesticated.

The student wants to present the Quanhucun study and its conclusions. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) As part of a 2013 study of cat domestication, a chemical analysis was conducted on cat bone fragments found in Quanhucun, China.
- B) A 2013 analysis of cat bone fragments found in Quanhucun, China, suggests that cats there may have been domesticated 5,300 years ago.
- C) In 2013, archaeologists studied what cats in Quanhucun, China, had eaten more than 5,000 years ago.
- D) Cat bone fragments estimated to be 5,300 years old were found in Quanhucun, China, in 2013.

#15

ID: dd11e5ab

While researching a topic, a student has taken the following notes:

- Muckrakers were journalists who sought to expose corruption in US institutions during the Progressive Era (1897–1920).
- Ida Tarbell was a muckraker who investigated the Standard Oil Company.
- She interviewed Standard Oil Company executives, oil industry workers, and public officials.
- She examined thousands of pages of the company's internal communications, including letters and financial records.
- Her book *The History of the Standard Oil Company* (1904) exposed the company's unfair business practices.

The student wants to emphasize the thoroughness of Ida Tarbell's investigation of the Standard Oil Company. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Ida Tarbell not only interviewed Standard Oil executives, oil industry workers, and public officials but also examined thousands of pages of the company's internal communications.
- B) Ida Tarbell, who investigated the Standard Oil Company, was a muckraker (a journalist who sought to expose corruption in US institutions during the Progressive Era, 1897–1920).
- C) As part of her investigation of the Standard Oil Company, muckraker Ida Tarbell conducted interviews.
- D) Published in 1904, muckraker Ida Tarbell's book *The History of the Standard Oil Company* exposed the company's unfair business practices.

#16

ID: 74149724

While researching a topic, a student has taken the following notes:

- John Carver was one of the 41 signatories of the Mayflower Compact.
- The Mayflower Compact was a legal agreement among the pilgrims that immigrated to Plymouth Colony.
- It was created in 1620 to establish a common government.
- It states that the pilgrims who signed it wanted to “plant the first colony in the northern parts of Virginia” under King James.
- Carver became the first governor of Plymouth Colony.

The student wants to specify the reason the Mayflower Compact was created. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Stating that its signatories wanted to “plant the first colony in the northern parts of Virginia,” the Mayflower Compact was a legal agreement among the pilgrims that immigrated to Plymouth Colony.
- B) Created in 1620, the Mayflower Compact states that the pilgrims wanted to “plant the first colony in the northern parts of Virginia.”
- C) The Mayflower Compact was created to establish a common government among the pilgrims that immigrated to Plymouth Colony.
- D) The Mayflower Compact had 41 signatories, including John Carver, the first governor of Plymouth Colony.

#17

ID: f1d8550e

While researching a topic, a student has taken the following notes:

- Jordan Bennett is a Mi’Kmaq visual artist.
- The Mi’Kmaq are a First Nations people in North America.
- Bennett’s paintings pay homage to traditional Mi’Kmaq craftsmanship and have been displayed in over 75 exhibitions.
- His 2017 exhibition *Wije’wi* was held at the Grenfell Art Gallery.
- His 2018 exhibition *Ketu’elmita’jik* was held at the Art Gallery of Nova Scotia.

The student wants to emphasize the order in which two of Jordan Bennett’s exhibitions were held. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Jordan Bennett’s 2017 exhibition *Wije’wi* was followed a year later by his exhibition *Ketu’elmita’jik*.
- B) Jordan Bennett’s paintings, some of which appeared in 2017 and 2018 exhibitions, pay homage to traditional Mi’Kmaq craftsmanship.
- C) Mi’Kmaq visual artist Jordan Bennett has displayed his work in over 75 exhibitions, including *Wije’wi* and *Ketu’elmita’jik*.
- D) Jordan Bennett’s 2018 exhibition *Ketu’elmita’jik* was held at the Art Gallery of Nova Scotia; another was held at the Grenfell Art Gallery.

#18

ID: ff8d2125

While researching a topic, a student has taken the following notes:

- Crown shyness is a phenomenon in which the tops (crowns) of neighboring trees grow close together but don't overlap.
- To explain how this happens, Australian forester M.R. Jacobs proposes the mutual abrasion theory.
- According to Jacobs's theory, when trees brush against one another, branches break off.
- Malaysian scholar Francis S.P. Ng posits the mutual shade avoidance theory.
- According to Ng's theory, when tree branches detect shade from nearby trees' branches, they stop growing.

The student wants to compare the causes of crown shyness proposed in the two theories. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) While Jacobs proposes that crown shyness is caused by neighboring tree branches brushing against one another, Ng posits that it occurs when branches detect shade from nearby trees' branches.
- B) Both Jacobs and Ng have proposed theories to explain what causes crown shyness.
- C) Ng posits the mutual shade avoidance theory, whereas Jacobs proposes an alternative theory.
- D) Jacobs's mutual abrasion theory proposes that when neighboring trees brush against one another, branches break off, resulting in a phenomenon in which the tops of trees grow close together but don't overlap.

#19

ID: 23da9791

While researching a topic, a student has taken the following notes:

- Scientists have long sought to determine the origin of glass in Chile's Atacama Desert.
- A 2017 study concluded that ancient grass fires had melted the area's sandy soil into glass.
- In 2021, a different study revealed that the mineral signatures of glass samples were consistent with the mineral signatures of comet samples collected by NASA.
- That study concluded that the glass had formed as a result of a cometary explosion close to the desert's surface.

The student wants to describe how scientific understanding about the glass's origin has evolved. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Scientists have long sought to determine the origin of the glass, with one study concluding that it formed when ancient grass fires melted the area's sandy soil.
- B) Studies in 2017 and 2021 offered different explanations for the origin of the glass.
- C) Mineral signatures of glass samples are consistent with those of comet samples collected by NASA, according to new research.
- D) A 2017 study concluded that ancient grass fires had caused the glass's formation, but new research suggests that the glass formed as a result of a cometary explosion close to the desert's surface.

#20

ID: 8432a140

While researching a topic, a student has taken the following notes:

- Marine biologist Camille Jazmin Gaynus studies coral reefs.
- Coral reefs are vital underwater ecosystems that provide habitats to 25% of all marine species.
- Reefs can include up to 8,000 species of fish, such as toadfish, seahorses, and clown triggerfish.
- The Amazon Reef is a coral reef in Brazil.
- It is one of the largest known reefs in the world.

The student wants to introduce the scientist and her field of study to a new audience. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Located in Brazil, the Amazon Reef is one of the largest known coral reefs in the world.
- B) Marine biologist Camille Jazmin Gaynus studies coral reefs, vital underwater ecosystems that provide homes to 25% of all marine species.
- C) Providing homes to 25% of all marine species, including up to 8,000 species of fish, coral reefs are vital underwater ecosystems and thus of great interest to marine biologists.
- D) As Camille Jazmin Gaynus knows well, coral reefs are vital underwater ecosystems, providing homes to thousands of species of fish.

#21

ID: 94f48106

While researching a topic, a student has taken the following notes:

- In 2022, University of Miami researchers discovered brine pools in the Gulf of Aqaba.
- A brine pool is an underwater lake that sits on the ocean floor.
- The water in brine pools is three to eight times saltier than the surrounding ocean.
- The extreme saltiness of this water makes it toxic to most sea life.
- Some forms of bacteria are able to survive in brine pools.

The student wants to explain why brine pools are toxic to most sea life. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Though brine pools are toxic to most sea life, some bacteria can survive there.
- B) The water in brine pools is toxic to most sea life because it is three to eight times saltier than the surrounding ocean.
- C) The brine pools in the Gulf of Aqaba are toxic to most sea life and were discovered by researchers in 2022.
- D) Brine pools are salty underwater lakes that sit on the ocean floor.

#22

ID: 14037904

While researching a topic, a student has taken the following notes:

- *The Heartbeat of Wounded Knee: Native America from 1890 to the Present* is a history book by Ojibwe author David Treuer.
- In a review, a critic for *The Economist* noted that “Treuer’s storytelling skills shine” and that the book is an “elegant handling of [a] complex narrative.”
- A critic for *O, The Oprah Magazine* called it “a marvel of research and storytelling.”
- A critic for the *Missoulian* dubbed it “a monumental achievement.”

The student wants to emphasize a similarity in how critics responded to Treuer’s book. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Treuer’s book, which was widely reviewed, focuses on Native American history from 1890 to the present.
- B) Dubbed “a monumental achievement” by the *Missoulian*, Treuer’s book documents over a century of Native American history.
- C) Critics praised Treuer’s book for its compelling narrative, with *O, The Oprah Magazine* calling it “a marvel of research and storytelling” and *The Economist* likewise writing that “Treuer’s storytelling skills shine” and that the book is an “elegant handling of [a] complex narrative.”
- D) While the *Missoulian* focused on the book’s broader achievement, *The Economist* zeroed in on Treuer’s storytelling skills.

#23

ID: 113f16da

While researching a topic, a student has taken the following notes:

- Some animals have evolved to physically resemble another animal, plant, or object.
- This is known as mimicry.
- Crab spiders mimic the appearance of flowers.
- This helps crab spiders ambush their prey.
- Katydid mimic the appearance of leaves.
- This helps katydids hide from their predators.

The student wants to emphasize a difference in how katydids and crab spiders use mimicry. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Katydid mimic the appearance of flowers, and crab spiders mimic that of leaves.
- B) Katydid and crab spiders are two examples of animals that use mimicry.
- C) Unlike crab spiders, which use mimicry to ambush prey, katydids use mimicry to hide from predators.
- D) Animals that use mimicry have evolved to resemble another animal, plant, or object.

#24

ID: d6dec50e

While researching a topic, a student has taken the following notes:

- In 2019, Emily Shepard and colleagues in the UK and Germany studied the effect of wind on auks' success in landing at cliffside nesting sites.
- They found as wind conditions intensified, the birds needed more attempts in order to make a successful landing.
- When the wind was still, almost 100% of landing attempts were successful.
- In a strong breeze, approximately 40% of attempts were successful.
- In near-gale conditions, only around 20% of attempts were successful.

The student wants to summarize the study. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) For a 2019 study, researchers from the UK and Germany collected data on auks' attempts to land at cliffside nesting sites in different wind conditions.
- B) Emily Shepard and her colleagues wanted to know the extent to which wind affected auks' success in landing at cliffside nesting sites, so they conducted a study.
- C) Knowing that auks often need multiple attempts to land at their cliffside nesting sites, Emily Shepard studied the birds' success rate, which was only around 20% in some conditions.
- D) Emily Shepard's 2019 study of auks' success in landing at cliffside nesting sites showed that as wind conditions intensified, the birds' success rate decreased.

#25

ID: 94cb8720

While researching a topic, a student has taken the following notes:

- In 2020, theater students at Radford and Virginia Tech chose an interactive, online format to present a play about woman suffrage activists.
- Their "Women and the Vote" website featured an interactive digital drawing of a Victorian-style house.
- Audiences were asked to focus on a room of their choice and select from that room an artifact related to the suffrage movement.
- One click took them to video clips, songs, artwork, and texts associated with the artifact.
- The play was popular with audiences because the format allowed them to control the experience.

The student wants to explain an advantage of the "Women and the Vote" format. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) "Women and the Vote" featured a drawing of a Victorian-style house with several rooms, each containing suffrage artifacts.
- B) To access video clips, songs, artwork, and texts, audiences had to first click on an artifact.
- C) The "Women and the Vote" format appealed to audiences because it allowed them to control the experience.
- D) Using an interactive format, theater students at Radford and Virginia Tech created "Women and the Vote," a play about woman suffrage activists.

#26

ID: 6de02dfa

While researching a topic, a student has taken the following notes:

- Thailand's annual Songkran Water Festival is held each April.
- It marks Songkran, the traditional Thai New Year.
- People splash and spray each other for fun at the festival's community-wide water fights.
- In Bangkok, thousands gather along Silom Road for the city's largest water fight.
- In Chiang Mai, thousands gather at a historical monument called the Tha Phae Gate for the city's largest water fight.

The student wants to emphasize a similarity in how people in Bangkok and Chiang Mai celebrate Songkran. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The largest water fight in Bangkok takes place along a city street, whereas the largest water fight in Chiang Mai takes place at a historical monument.
- B) In both Bangkok and Chiang Mai, thousands gather to celebrate Songkran with water fights.
- C) People in both Bangkok and Chiang Mai celebrate Songkran, but they don't do so in exactly the same way.
- D) Each April, people in Thailand celebrate Songkran, the traditional Thai New Year.

#27

ID: c92ea686

While researching a topic, a student has taken the following notes:

- *The Ramayana* is a Sanskrit epic poem from ancient India.
- In *The Ramayana*, the character Kaikeyi is often portrayed as a villain.
- *Kaikeyi* is a 2022 novel by Vaishnavi Patel.
- The novel is a retelling of the epic poem from Kaikeyi's point of view.
- It often portrays Kaikeyi as heroic.

The student wants to emphasize whose point of view the novel is told from. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) From the point of view of *The Ramayana*, the character Kaikeyi is often a villain.
- B) Vaishnavi Patel often portrays the character as heroic.
- C) *Kaikeyi* is a retelling of *The Ramayana* from the character Kaikeyi's point of view.
- D) *The Ramayana* is an epic poem that features the character Kaikeyi.

#28

ID: 1bb4aec8

While researching a topic, a student has taken the following notes:

- Meteorites found on Earth are divided into two categories.
- A meteorite that was observed falling to Earth before being recovered is known as a meteorite fall.
- All other meteorites found on Earth are known as meteorite finds.
- There have been about 1,200 recorded meteorite falls.
- There have been over 60,000 recorded meteorite finds.

The student wants to contrast the number of meteorite falls with the number of meteorite finds. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) A meteorite that was observed falling to Earth before being recovered is known as a meteorite fall; all others are known as meteorite finds.
- B) Meteorites found on Earth are divided into two categories: meteorite falls and meteorite finds.
- C) There have been about 1,200 recorded meteorite falls, or meteorites observed falling to Earth.
- D) While there have been only about 1,200 recorded meteorite falls, there have been over 60,000 meteorite finds.

#29

ID: 58281fc4

While researching a topic, a student has taken the following notes:

- Soo Sunny Park is a Korean American artist who uses light as her primary medium of expression.
- She created her work *Unwoven Light* in 2013.
- *Unwoven Light* featured a chain-link fence fitted with iridescent plexiglass tiles.
- When light passed through the fence, colorful prisms formed.

The student wants to describe *Unwoven Light* to an audience unfamiliar with Soo Sunny Park. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Park's 2013 installation *Unwoven Light*, which included a chain-link fence and iridescent tiles made from plexiglass, featured light as its primary medium of expression.
- B) Korean American light artist Soo Sunny Park created *Unwoven Light* in 2013.
- C) The chain-link fence in Soo Sunny Park's *Unwoven Light* was fitted with tiles made from iridescent plexiglass.
- D) In *Unwoven Light*, a 2013 work by Korean American artist Soo Sunny Park, light formed colorful prisms as it passed through a fence Park had fitted with iridescent tiles.

#30

ID: 17ec916d

While researching a topic, a student has taken the following notes:

- Bharati Mukherjee was an Indian-born author of novels and short stories.
- She published the novel *The Holder of the World* in 1993.
- A central character in the novel is a woman living in twentieth-century United States.
- Another central character is a woman living in seventeenth-century India.

The student wants to introduce the novel *The Holder of the World* to an audience already familiar with Bharati Mukherjee. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Bharati Mukherjee's settings include both twentieth-century United States and seventeenth-century India.
- B) In addition to her novel *The Holder of the World*, which was published in 1993, Indian-born author Bharati Mukherjee wrote other novels and short stories.
- C) Bharati Mukherjee's novel *The Holder of the World* centers around two women, one living in twentieth-century United States and the other in seventeenth-century India.
- D) *The Holder of the World* was not the only novel written by Indian-born author Bharati Mukherjee.

#31

ID: d8aa8ba2

While researching a topic, a student has taken the following notes:

- In astronomy, the mass of stars can be described in units called solar masses.
- One solar mass is roughly equal to the mass of the Sun.
- The mass of the star Proxima Centauri is 0.122 solar masses.
- The mass of the star Sirius A is 2.063 solar masses.

The student wants to emphasize the mass of Sirius A. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The mass of stars, like Proxima Centauri, can be described in units called solar masses.
- B) In astronomy, the mass of stars can be described in units called solar masses, and one solar mass is roughly equal to the mass of the Sun.
- C) The Sun is more massive than Proxima Centauri, which has a mass of 0.122 solar masses.
- D) With a mass of 2.063 solar masses, Sirius A is more massive than the Sun.

#32

ID: 24014c3f

While researching a topic, a student has taken the following notes:

- Severo Ochoa discovered the enzyme PNPase in 1955.
- PNPase is involved in both the creation and degradation of mRNA.
- Ochoa incorrectly hypothesized that PNPase provides the genetic blueprints for mRNA.
- The discovery of PNPase proved critical to deciphering the human genetic code.
- Deciphering the genetic code has led to a better understanding of how genetic variations affect human health.

The student wants to emphasize the significance of Ochoa's discovery. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Ochoa's 1955 discovery of PNPase proved critical to deciphering the human genetic code, leading to a better understanding of how genetic variations affect human health.
- B) Ochoa first discovered PNPase, an enzyme that he hypothesized contained the genetic blueprints for mRNA, in 1955.
- C) In 1955, Ochoa discovered the PNPase enzyme, which is involved in both the creation and degradation of mRNA.
- D) Though his discovery of PNPase was critical to deciphering the human genetic code, Ochoa incorrectly hypothesized that the enzyme was the source of mRNA's genetic blueprints.

#33

ID: e2d97f10

While researching a topic, a student has taken the following notes:

- Pterosaurs were flying reptiles that existed millions of years ago.
- In a 2021 study, Anusuya Chinsamy-Turan analyzed fragments of pterosaur jawbones located in the Sahara Desert.
- She was initially unsure if the bones belonged to juvenile or adult pterosaurs.
- She used advanced microscope techniques to determine that the bones had few growth lines relative to the bones of fully grown pterosaurs.
- She concluded that the bones belonged to juveniles.

The student wants to present the study and its findings. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In 2021, Chinsamy-Turan studied pterosaur jawbones and was initially unsure if the bones belonged to juveniles or adults.
- B) Pterosaur jawbones located in the Sahara Desert were the focus of a 2021 study.
- C) In a 2021 study, Chinsamy-Turan used advanced microscope techniques to analyze the jawbones of pterosaurs, flying reptiles that existed millions of years ago.
- D) In a 2021 study, Chinsamy-Turan determined that pterosaur jawbones located in the Sahara Desert had few growth lines relative to the bones of fully grown pterosaurs and thus belonged to juveniles.

#34

ID: bce57278

While researching a topic, a student has taken the following notes:

- Some US reformers sought to improve society in the 1800s by building utopias.
- A utopia is a community intended to represent a perfect society based on a specific set of principles.
- One such community was Brook Farm near Boston, Massachusetts.
- It was founded in 1841 by writer George Ripley.
- Ripley wrote in a letter that his goal for Brook Farm was “to guarantee the highest mental freedom, by providing all with labor, adapted to their tastes and talents, and securing to them the fruits of their industry.”

The student wants to explain the goal of Brook Farm using a quotation from George Ripley. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In a letter, writer George Ripley explained his goal to “guarantee the highest mental freedom.”
- B) Utopias, such as Brook Farm, founded by George Ripley in 1841, were based on a specific set of principles intended to create a perfect society.
- C) Founded by George Ripley near Boston, Massachusetts, Brook Farm was part of a trend in the 1800s, when reformers in the United States built utopias.
- D) Established in 1841, Brook Farm was a utopian community created to “guarantee the highest mental freedom, by providing all with labor... [and] the fruits of their industry,” according to founder George Ripley.

#35

ID: 2b89bfe5

While researching a topic, a student has taken the following notes:

- In 1999, astronomer Todd Henry studied the differences in surface temperature between the Sun and nearby stars.
- His team mapped all stars within 10 parsecs (approximately 200 trillion miles) of the Sun.
- The surface temperature of the Sun is around 9,800°F, which classifies it as a G star.
- 327 of the 357 stars in the study were classified as K or M stars, with surface temperatures under 8,900°F (cooler than the Sun).
- 11 of the 357 stars in the study were classified as A or F stars, with surface temperatures greater than 10,300°F (hotter than the Sun).

The student wants to emphasize how hot the Sun is relative to nearby stars. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) At around 9,800°F, which classifies it as a G star, the Sun is hotter than most but not all of the stars within 10 parsecs of it.
- B) Astronomer Todd Henry determined that the Sun, at around 9,800°F, is a G star, and several other stars within a 10-parsec range are A or F stars.
- C) Of the 357 stars within ten parsecs of the Sun, 327 are classified as K or M stars, with surface temperatures under 8,900°F.
- D) While most of the stars within 10 parsecs of the Sun are classified as K, M, A, or F stars, the Sun is classified as a G star due to its surface temperature of 9,800°F.

#36

ID: 7572131d

While researching a topic, a student has taken the following notes:

- Elizabeth Catlett's sculpture *Recognition* (1970) shows two African American figures with rounded, indistinct features.
- The figures reach out to each other in a pose that symbolizes a close, supportive relationship.
- Her sculpture *Students Aspire* (1978) shows two African American figures with sharply defined features.
- The figures hold an equal sign above their heads with one hand and embrace each other with the other hand.
- This pose symbolizes their support for each other in the pursuit of equality.

The student wants to emphasize a similarity between the two sculptures. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Catlett's *Students Aspire* depicts two figures supporting each other in the pursuit of equality.
- B) *Recognition* and *Students Aspire* both show African American figures in poses that symbolize supportive relationships.
- C) Catlett completed *Recognition* in 1970 and *Students Aspire* in 1978.
- D) The figures in *Recognition* have features that are rounded and indistinct, while the figures in *Students Aspire* have sharply defined features.

#37

ID: 54c1b2dd

While researching a topic, a student has taken the following notes:

- In 1851, German American artist Emanuel Leutze painted *Washington Crossing the Delaware*.
- His huge painting (149 × 255 inches) depicts the first US president crossing a river with soldiers in the Revolutionary War.
- In 2019, Cree artist Kent Monkman painted *mistikôsiwak (Wooden Boat People): Resurgence of the People*.
- Monkman's huge painting (132 × 264 inches) was inspired by Leutze's.
- It portrays Indigenous people in a boat rescuing refugees.

The student wants to emphasize a similarity between the two paintings. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Monkman, a Cree artist, finished his painting in 2019; Leutze, a German American artist, completed his in 1851.
- B) Although Monkman's painting was inspired by Leutze's, the people and actions the two paintings portray are very different.
- C) Leutze's and Monkman's paintings are both huge, measuring 149 × 255 inches and 132 × 264 inches, respectively.
- D) Leutze's painting depicts Revolutionary War soldiers, while Monkman's depicts Indigenous people and refugees.

#38

ID: 5d3177aa

While researching a topic, a student has taken the following notes:

- In the early 1960s, the US had a strict national-origins quota system for immigrants.
- The number of new immigrants allowed from a country each year was based on how many people from that country lived in the US in 1890.
- This system favored immigrants from northern Europe.
- Almost 70% of slots were reserved for immigrants from Great Britain, Ireland, and Germany.
- The 1965 Hart-Celler Act abolished the national-origins quota system.

The student wants to present the significance of the Hart-Celler Act to an audience unfamiliar with the history of US immigration. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Almost 70% of slots were reserved for immigrants from Great Britain, Ireland, and Germany at the time the Hart-Celler Act was proposed.
- B) Prior to the Hart-Celler Act, new immigration quotas were based on how many people from each country lived in the US in 1890.
- C) The quota system in place in the early 1960s was abolished by the 1965 Hart-Celler Act.
- D) The 1965 Hart-Celler Act abolished the national-origins quota system, which favored immigrants from northern Europe.

#39

ID: 7c9d0e38

While researching a topic, a student has taken the following notes:

- Roughly 96% of Australia’s estimated 200,000 animal species are invertebrates.
- Invertebrates of the order Hymenoptera, which consists of sawflies, wasps, bees, and ants, are estimated to total 14,800 species in Australia.
- Invertebrates of the order Coleoptera, which consists of beetles and weevils, are estimated to total 28,200 species in Australia.
- Some of these invertebrates’ populations are threatened by invasive bird and fish species.

The student wants to emphasize the different orders in which Australia’s invertebrate animals are classified. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In Australia, 28,200 species are estimated to be beetles and weevils, both classified as invertebrates of the order Coleoptera.
- B) Among Australia’s many invertebrates, sawflies, wasps, bees, and ants belong to the order Hymenoptera, while beetles and weevils belong to the order Coleoptera.
- C) Many sawflies, wasps, bees, and ants of the order Hymenoptera are threatened by some of Australia’s invasive bird and fish species.
- D) The order Hymenoptera is estimated to make up 14,800 of Australia’s 200,000 animal species.

#40

ID: 35507eba

While researching a topic, a student has taken the following notes:

- Pointillism is a painting technique in which small, distinct dots of color are applied in patterns to form an image.
- Betty Acquah is an artist from Ghana who uses pointillism in her work.
- “By extending dabs of color in the subject matter into the background and vice-versa, an illusion of movement is created,” she says about pointillism.
- Her work often portrays Ghanaian women, whom she sees as the “unsung heroines of the Ghanaian Republic.”
- Her pointillist painting “Exquisite” (2016) features five dancing women twirling their skirts.

The student wants to provide a quotation from Acquah that explains why she used pointillism in “Exquisite.” Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In painting “Exquisite,” Acquah applied pointillism to create what she called an “illusion of movement” within the painting’s five dancing women and their twirling skirts.
- B) Pointillism, the technique used in Acquah’s “Exquisite,” involves the application of small, distinct dots of color.
- C) In “Exquisite,” Acquah uses a technique that she says involves “extending dabs of color in the subject matter into the background and vice-versa.”
- D) “Exquisite” portrays Acquah’s fellow Ghanaian women as she sees them: the “unsung heroes of the Ghanaian Republic.”

#41

ID: f1631638

While researching a topic, a student has taken the following notes:

- Gaspar Enriquez is an artist.
- He specializes in portraits of Mexican Americans.
- A portrait is an artistic representation of a person.
- Enriquez completed a painting of the sculptor Luis Jimenez in 2003.
- He completed a drawing of the writer Rudolfo Anaya in 2016.

The student wants to emphasize a difference between the two portraits. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The portraits, or artistic representations, of Luis Jimenez and Rudolfo Anaya were both completed by Enriquez in the early 2000s.
- B) Enriquez has completed portraits of numerous Mexican Americans, including sculptor Luis Jimenez and writer Rudolfo Anaya.
- C) While both are by Enriquez, the 2003 portrait of Luis Jimenez is a painting, and the 2016 portrait of Rudolfo Anaya is a drawing.
- D) Luis Jimenez was a Mexican American sculptor, and Rudolfo Anaya was a Mexican American writer.

#42

ID: 1b94a80a

While researching a topic, a student has taken the following notes:

- Wool is a natural—and economically important—fiber that is obtained from animals like sheep.
- Australia is a leading producer of wool.
- The thickness of wool fibers varies across sheep breeds.
- Merino sheep produce fine wool that is used for apparel.
- Rambouillet sheep produce fine wool that is used for apparel.
- Romney sheep produce thick wool that is used for rugs and blankets.

The student wants to emphasize how Romney wool differs from Merino and Rambouillet wool. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Romney wool is just one of the many kinds of wools, each originating from a different breed of sheep.
- B) Sheep wool varies from breed to breed, so Romney wool will be different than other kinds of wool.
- C) The fine wool produced by Merino and Rambouillet sheep is used for apparel, whereas the thicker wool of Romney sheep is used in rugs and blankets.
- D) Wool is an economically important fiber—especially in Australia—that can be used to make apparel or even rugs and blankets.

#43

ID: 88308a39

While researching a topic, a student has taken the following notes:

- Shaun Tan is an Australian author.
- In 2008, he published *Tales from Outer Suburbia*, a book of fifteen short stories.
- The stories describe surreal events occurring in otherwise ordinary suburban neighborhoods.
- In 2018, he published *Tales from the Inner City*, a book of twenty-five short stories.
- The stories describe surreal events occurring in otherwise ordinary urban settings.

The student wants to emphasize a similarity between the two books by Shaun Tan. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Shaun Tan's book *Tales from Outer Suburbia*, which describes surreal events occurring in otherwise ordinary places, contains fewer short stories than *Tales from the Inner City* does.
- B) *Tales from Outer Suburbia* was published in 2008, and *Tales from the Inner City* was published in 2018.
- C) Unlike *Tales from the Inner City*, Shaun Tan's book *Tales from Outer Suburbia* is set in suburban neighborhoods.
- D) Shaun Tan's books *Tales from Outer Suburbia* and *Tales from the Inner City* both describe surreal events occurring in otherwise ordinary places.

#44

ID: a0da8114

While researching a topic, a student has taken the following notes:

- Tibetan mastiffs are large dogs native to the Himalayas.
- A mutation in their EPAS1 gene prevents excess hemoglobin production.
- A mutation in their HBB gene boosts hemoglobin's oxygen-carrying ability.
- These mutations enable the dogs to withstand hypoxic (low-oxygen) conditions at high altitudes.
- In a 2016 study, Zhen Wang and colleagues noted that Tibetan wolves' DNA has the same EPAS1 and HBB mutations.
- Wang and colleagues determined that the dogs first acquired these mutations by interbreeding with Tibetan wolves around 24,000 years ago.

The student wants to present the conclusion of Zhen Wang and colleagues' 2016 study. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Like Tibetan mastiffs, Tibetan wolves can withstand hypoxic conditions at high altitudes.
- B) Both Tibetan mastiffs and Tibetan wolves have mutations in their EPAS1 and HBB genes, which prevent excess hemoglobin production and boost hemoglobin's oxygen-carrying ability, respectively.
- C) In addition to preventing excess hemoglobin production, a mutation in Tibetan mastiffs' HBB gene boosts hemoglobin's oxygen-carrying ability.
- D) By interbreeding with Tibetan wolves around 24,000 years ago, Tibetan mastiffs acquired the genetic mutations that enable them to withstand hypoxic conditions.

#45

ID: 56cad44a

While researching a topic, a student has taken the following notes:

- Mexican tetras are a fish species with two distinct populations.
- Surface-dwelling tetras live on the surface and are able to see.
- Cave-dwelling tetras live in total darkness and have lost the ability to see.
- Cave-dwelling tetras have asymmetrical skulls with more sensory receptors on one side than the other.
- These receptors help cave-dwelling tetras navigate in darkness.

The student wants to emphasize a difference between surface-dwelling and cave-dwelling tetras. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Surface-dwelling and cave-dwelling tetras may belong to the same species, but they are quite different.
- B) Cave-dwelling tetras can no longer see but use sensory receptors on their skulls to navigate.
- C) Mexican tetras are a fish species with two distinct populations: surface-dwelling tetras and cave-dwelling tetras.
- D) Surface-dwelling tetras can see, whereas cave-dwelling tetras cannot.

#46

ID: dede8260

While researching a topic, a student has taken the following notes:

- When medical students mention their patients on social media, they may violate patient confidentiality.
- Terry Kind led a study to determine how many medical schools have student policies that mention social media use.
- Kind and her team reviewed 132 medical school websites, examining publicly available student policies.
- Only thirteen medical schools had guidelines that explicitly mention social media, and only five defined what constitutes acceptable social media use.

The student wants to emphasize the study's methodology. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The student policies of 132 medical schools can be found online, according to research by Terry Kind.
- B) To find out how many medical schools have guidelines about student social media use, Terry Kind and her team examined the student policies of 132 medical schools.
- C) Out of 132 medical schools, only thirteen had student policies that mentioned social media, and only five specified what use was acceptable.
- D) Terry Kind and her team wanted to know how many medical schools have student social media policies in place about protecting patient confidentiality.

#47

ID: 81315093

While researching a topic, a student has taken the following notes:

- A marathon is a long-distance running race that is 26.2 miles long.
- An ultramarathon is a long-distance running race of more than 26.2 miles.
- The Kepler Challenge is a one-day, 37.3-mile ultramarathon in New Zealand.
- The Spreelauf is a six-day, 261-mile ultramarathon in Germany.

The student wants to make a generalization about ultramarathons. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Examples of ultramarathons include the 37.3-mile Kepler Challenge in New Zealand and the 261-mile Spreelauf in Germany.
- B) A marathon is 26.2 miles long, but the Spreelauf ultramarathon, at 261 miles, is far longer.
- C) Ultramarathons range widely in length, from a few dozen miles to a few hundred.
- D) While the Kepler Challenge is a one-day ultramarathon, the Spreelauf is a six-day ultramarathon.

#48

ID: 49fe306b

While researching a topic, a student has taken the following notes:

- From Earth, all the meteors in a meteor shower appear to originate from a single spot in the sky.
- This spot is called the meteor shower's radiant.
- The Perseid meteor shower is visible in the northern hemisphere in July and August.
- Like many meteor showers, it is named for the location of its radiant.
- Its radiant is located within the constellation Perseus.

The student wants to explain the origin of the Perseid meteor shower's name. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The Perseid meteor shower is named for the constellation Perseus, the location of the meteor shower's radiant.
- B) A meteor shower's name may be linked to a single spot in the sky.
- C) The Perseid meteor shower, which has a radiant, is visible in the northern hemisphere in July and August.
- D) From Earth, all the meteors in a meteor shower appear to originate from a radiant, such as the one within Perseus.

#49

ID: 5888712f

While researching a topic, a student has taken the following notes:

- Physicist Mulunch Abebe was working on a garment suited for both warm and cold conditions.
- He analyzed the emissivity, or ability to emit heat, of the materials he planned to use.
- Abebe found that reflective metal fibers emitted almost no heat and had an emissivity of 0.02.
- He found that silicon carbide fibers absorbed large amounts of heat and had an emissivity of 0.74.
- The amount of heat a material absorbs is equal to the amount of heat it emits.

The student wants to contrast the emissivity of reflective metal fibers with that of silicon carbide fibers. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The ability of reflective metal fibers and silicon carbide fibers to emit heat was determined by an analysis of each material's emissivity.
- B) The amount of heat a material absorbs is equal to the amount it emits, as evidenced in Abebe's analyses.
- C) Though the reflective metal fibers and silicon carbide fibers had different rates of emissivity, Abebe planned to use both in a garment.
- D) Whereas the reflective metal fibers had an emissivity of just 0.02, the silicon carbide fibers absorbed large amounts of heat, resulting in an emissivity of 0.74.

#50

ID: 04397a63

While researching a topic, a student has taken the following notes:

- The Haudenosaunee Confederacy is a nearly 1,000-year-old alliance of six Native nations in the northeastern US.
- The members are bound by a centuries-old agreement known as the Great Law of Peace.
- Historian Bruce Johansen is one of several scholars who believe that the principles of the Great Law of Peace influenced the US Constitution.
- This theory is called the influence theory.
- Johansen cites the fact that Benjamin Franklin and Thomas Jefferson both studied the Haudenosaunee Confederacy.

The student wants to present the influence theory to an audience unfamiliar with the Haudenosaunee Confederacy. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Historian Bruce Johansen believes that the Great Law of Peace was very influential.
- B) The influence theory is supported by the fact that Benjamin Franklin and Thomas Jefferson both studied the Haudenosaunee Confederacy.
- C) The influence theory holds that the principles of the Great Law of Peace, a centuries-old agreement binding six Native nations in the northeastern US, influenced the US Constitution.
- D) Native people, including the members of the Haudenosaunee Confederacy, influenced the founding of the US in many different ways.

#51

ID: 164a32e7

While researching a topic, a student has taken the following notes:

- Claude McKay (1889–1948) was a Jamaican American writer.
- *Songs of Jamaica* (1912) and *Constab Ballads* (1912) are two acclaimed poetry collections that McKay published while living in Jamaica.
- McKay moved to Harlem in New York City in 1914.
- He is best known as a poet and novelist of the Harlem Renaissance, a literary and cultural movement of the 1920s and 1930s.
- His most famous works include the poetry collection *Harlem Shadows* (1922) and the novel *Home to Harlem* (1928).

The student wants to emphasize Claude McKay’s accomplishments before moving to Harlem. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Jamaican American writer Claude McKay is the author of works such as *Songs of Jamaica* (1912), *Constab Ballads* (1912), *Harlem Shadows* (1922), and *Home to Harlem* (1928).
- B) Although he is best known as a Harlem Renaissance writer, Claude McKay had published two acclaimed poetry collections in 1912 while living in Jamaica: *Songs of Jamaica* and *Constab Ballads*.
- C) In 1914, Claude McKay moved to Harlem, where he would become known as a poet and novelist of the Harlem Renaissance (a literary and cultural movement of the 1920s and 1930s).
- D) Before moving to Harlem, Claude McKay—author of the poetry collection *Harlem Shadows* (1922) and the novel *Home to Harlem* (1928)—lived in Jamaica.

#52

ID: 804928b6

While researching a topic, a student has taken the following notes:

- Mary Kang is a Korean American portrait photographer.
- She is based in New York City and in Austin, Texas.
- One of Kang's photographs features artist Dominique Fung.
- In the portrait, Fung is seated on the floor.
- Five of Fung's paintings are resting against the wall behind her.

The student wants to describe where Fung is in the photograph to an audience already familiar with Kang and Fung. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Dominique Fung is in a photograph by Mary Kang, a portrait photographer based in New York City and Austin, Texas.
- B) Mary Kang is a photographer based in both New York City and Austin, Texas.
- C) Five paintings by artist Dominique Fung can be seen in the background of Mary Kang's photograph.
- D) In Kang's portrait of her, Fung is seated on the floor, with five of her paintings resting against the wall behind her.

#53

ID: 4223d4a6

While researching a topic, a student has taken the following notes:

- In 1965, Yale University historians claimed that a world map called the Vinland Map was drawn in the fifteenth century.
- Since that time, the map's age has been the subject of debate.
- In 2021, researchers conducted a study to analyze the elemental composition of the map's ink.
- Their analysis revealed that the ink contains a titanium compound not used in inks until the 1920s.
- The researchers concluded that the map was drawn in the twentieth century.

The student wants to present the study and its findings. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Given the debate about the Vinland Map's age, researchers in 2021 conducted a study to analyze the elemental composition of the map's ink.
- B) A 2021 study of the Vinland Map's ink revealed that it contains a titanium compound not used in inks until the 1920s, indicating that the map was drawn in the twentieth century.
- C) The Vinland Map, believed by some to have been drawn in the fifteenth century, was the focus of a 2021 study.
- D) Aware that a certain titanium compound was not used in inks until the 1920s, researchers in 2021 studied the elemental composition of the Vinland Map's ink.

#54

ID: 7aac173e

While researching a topic, a student has taken the following notes:

- Architect Julian Abele studied Gregorian and neo-Gothic architecture in Europe.
- Abele worked for an architecture firm that was hired in 1924 to design buildings for Duke University's new campus.
- Most of the buildings on Duke's campus were designed in the Gregorian or neo-Gothic architectural styles.
- At the time, Abele was not formally credited with designing the buildings.
- Based on the buildings' architectural styles, historians believe Abele designed most of the campus buildings.

The student wants to specify why historians believe Abele designed most of Duke's campus buildings. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Given that most of the buildings on Duke's campus feature architectural styles that Abele had studied in Europe, historians believe Abele is the one who designed them.
- B) Though Abele wasn't formally credited at the time, historians believe he designed most of the buildings on Duke's campus.
- C) Most of Duke's campus buildings, which were designed by a firm Abele worked for, were designed in the Gregorian and neo-Gothic architectural styles.
- D) Abele, an architect who studied Gregorian and neo-Gothic architecture in Europe, is believed to have designed most of the buildings on Duke's campus.

#55

ID: 72ae9bca

While researching a topic, a student has taken the following notes:

- In the early 1900s, suffragists organized marches for women's voting rights.
- Suffragists in the United Kingdom marched from Edinburgh to London.
- This march began on October 12, 1912, and ended on November 16, 1912.
- Suffragists in the United States marched from New York City to Albany, New York.
- This march began on December 16, 1912, and ended on December 28, 1912.

The student wants to emphasize the order in which the two marches occurred. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) After suffragists in the UK marched from Edinburgh to London, suffragists in the US marched from New York City to Albany, New York.
- B) In the early 1900s, suffragists in the UK and the US marched for women's voting rights.
- C) A march from New York City to Albany, New York, was followed by one that began in Edinburgh and ended in London.
- D) From October 12 to November 16, 1912, suffragists in the UK marched from Edinburgh to London.

#56

ID: a1ca7ec4

While researching a topic, a student has taken the following notes:

- Cecilia Vicuña is a multidisciplinary artist.
- In 1971, her first solo art exhibition, *Pinturas, poemas y explicaciones*, was shown at the Museo Nacional de Bellas Artes in Santiago, Chile.
- Her poetry collection *Precario/Precarious* was published in 1983 by Tanam Press.
- Her poetry collection *Instan* was published in 2002 by Kelsey St. Press.
- She lives part time in Chile, where she was born, and part time in New York.

The student wants to introduce the artist's 1983 poetry collection. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Before she published the books *Precario/Precarious* (1983) and *Instan* (2002), Cecilia Vicuña exhibited visual art at the Museo Nacional de Bellas Artes in Santiago, Chile.
- B) Cecilia Vicuña is a true multidisciplinary artist whose works include numerous poetry collections and visual art exhibitions.
- C) Published in 1983 by Tanam Press, *Precario/Precarious* is a collection of poetry by the multidisciplinary artist Cecilia Vicuña.
- D) In 1971, Cecilia Vicuña exhibited her first solo art exhibition, *Pinturas, poemas y explicaciones*, in Chile, her country of birth.

#57

ID: 4c26f18a

While researching a topic, a student has taken the following notes:

- By interlocking their bodies, ants can form bridges to help fellow ants cross gaps.
- In 2020, Yasemin Ozkan-Aydin was inspired by ant behavior to design collaborative quadruped robots.
- Over the course of a year, she designed, built, tested, and refined her robots.
- Each robot is programmed to send a signal to another robot upon encountering a gap in a path.
- The signaled robot connects to the back of the signaler robot via magnetic sensors and pushes it across the gap.

The student wants to begin a narrative about the creation of the robots. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) When one of Yasemin Ozkan-Aydin's robots encounters a gap in its path, it sends a signal to another robot; the signaled robot connects to the back of the signaler and pushes it across the gap.
- B) After a year, Yasemin Ozkan-Aydin had designed, built, tested, and refined her robots.
- C) Inspired by ants, which form bridges with their interlocked bodies to help fellow ants cross gaps, Yasemin Ozkan-Aydin set out to design quadruped robots capable of similarly collaborative behavior.
- D) Ants, which have inspired the design of robots, form bridges by interlocking their bodies.

#58

ID: d7c5388f

While researching a topic, a student has taken the following notes:

- Planetary scientists classify asteroids based on their composition.
- C-type asteroids are composed primarily of carbon.
- They account for roughly 75 percent of known asteroids.
- S-type asteroids are primarily made up of silicate minerals.
- They account for roughly 17 percent of known asteroids.

The student wants to emphasize a difference between C-type and S-type asteroids. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Planetary scientists classify asteroids into types, two of which are the C-type and the S-type.
- B) Planetary scientists consider an asteroid's composition (such as whether the asteroid is composed mainly of silicate minerals or carbon) when classifying it.
- C) Roughly 17 percent of known asteroids are classified as S-type asteroids; another percentage is classified as C-type asteroids.
- D) C-type asteroids are mainly composed of carbon, whereas S-type asteroids are primarily made up of silicate minerals.

#59

ID: 34e1124f

While researching a topic, a student has taken the following notes:

- In geology, an Aeolian landform is one that has been created by the wind.
- In Greek mythology, Aeolus is the keeper of the winds.
- Aeolian landforms are created when the wind erodes, transports, or deposits material.
- A mushroom rock is a rock formation in which the top is wider than the base.
- A mushroom rock can be formed when the wind erodes the base and the top at different rates.

The student wants to provide an explanation and an example of Aeolian landforms. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Aeolian landforms are created by different wind-based processes; for example, some are created by wind erosion.
- B) Aeolian landforms—landforms created by the wind—include the mushroom rock, a rock formation in which the wind erodes the base of the rock faster than the top.
- C) Erosion, transportation, and deposition are three examples of how the wind can create Aeolian landforms and mushroom rocks.
- D) A mushroom rock is a rock formation that owes its shape to the wind, a natural force associated with Aeolus in Greek mythology.

#60

ID: 7fd39a42

While researching a topic, a student has taken the following notes:

- Circular particle accelerators known as synchrotrons radiate energy in the form of light.
- Synchrotron light is among the brightest light ever produced.
- Synchrotron light is an ideal tool for researchers investigating the structure of matter.
- The first synchrotron created for the purpose of providing synchrotron light was built in 1968.
- It was called Tantalus and was housed near the University of Wisconsin–Madison.

The student wants to emphasize the location of the first synchrotron built to provide synchrotron light. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Tantalus, the first synchrotron created for the purpose of providing synchrotron light, was built in 1968.
- B) Circular particle accelerators known as synchrotrons radiate energy in the form of light, and this light is an ideal tool for researchers investigating the structure of matter.
- C) The first synchrotron created for the purpose of providing synchrotron light, Tantalus, was housed near the University of Wisconsin–Madison.
- D) Synchrotron light is among the brightest light ever produced, making it an ideal tool for researchers investigating the structure of matter.

#61

ID: d9d314d9

While researching a topic, a student has taken the following notes:

- Pinnipeds, which include seals, sea lions, and walruses, live in and around water.
- Pinnipeds are descended not from sea animals but from four-legged, land-dwelling carnivores.
- Canadian paleobiologist Natalia Rybczynski recently found a fossil with four legs, webbed toes, and the skull and teeth of a seal.
- Rybczynski refers to her rare find as a “transitional fossil.”
- The fossil illustrates an early stage in the evolution of pinnipeds from their land-dwelling ancestors.

The student wants to emphasize the fossil’s significance. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Canadian paleobiologist Natalia Rybczynski’s fossil has the skull and teeth of a seal, which, like sea lions and walruses, is a pinniped.
- B) Pinnipeds are descended from four-legged, land-dwelling carnivores; a fossil that resembles both was recently found.
- C) Having four legs but the skull and teeth of a seal, the rare fossil illustrates an early stage in the evolution of pinnipeds from their land-dwelling ancestors.
- D) A “transitional fossil” was recently found by paleobiologist Natalia Rybczynski.

#62

ID: ce282575

While researching a topic, a student has taken the following notes:

- J.R.R. Tolkien's 1937 novel *The Hobbit* features two maps.
- The novel opens with a reproduction of the map that the characters use on their quest.
- This map introduces readers to the fictional world they are about to enter.
- The novel closes with a map depicting every stop on the characters' journey.
- That map allows readers to reconstruct the story they have just read.

The student wants to contrast the purposes of the two maps in *The Hobbit*. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) *The Hobbit's* opening map introduces readers to the fictional world they are about to enter, while the closing map allows them to reconstruct the story they have just read.
- B) *The Hobbit*, a novel published by J.R.R. Tolkien in 1937, features a reproduction of a map that the characters use on their quest, as well as a map that appears at the end of the novel.
- C) *The Hobbit's* two maps, one opening and one closing the novel, each serve a purpose for readers.
- D) In 1937, author J.R.R. Tolkien published *The Hobbit*, a novel featuring both an opening and a closing map.

#63

ID: 1469d23a

While researching a topic, a student has taken the following notes:

- Etel Adnan was a Lebanese American poet and artist known for making many leporellos.
- A leporello is an artist's book that is folded accordion style.
- When the book is expanded, the artist's work is revealed, and its zigzag shape allows it to stand on its own.
- Her leporello *December from My Window* (1993) features a panoramic landscape.
- It is painted using ink and watercolor.

The student wants to describe Adnan's *December from My Window* to an audience already familiar with leporellos.

Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Featuring a panoramic landscape, the 1993 work is one of Adnan's many leporellos, which are accordion-style folded books that when expanded reveal the artist's work.
- B) When expanded, Adnan's 1993 leporello *December from My Window* reveals a panoramic landscape painted in ink and watercolor.
- C) Known for making many other accordion-style folded books called leporellos, Adnan created *December from My Window* in 1993.
- D) A leporello, such as Adnan's *December from My Window*, is folded accordion style, and due to its zigzag shape it is able to stand on its own when fully expanded.

#64

ID: 3ea7372e

While researching a topic, a student has taken the following notes:

- In the art world, the term biennial traditionally refers to an art exhibition that takes place every two years in a single location.
- Such biennials are held in New York, Berlin, and Venice.
- In 2006, artists Ed Gomez and Luis Hernandez founded the unconventional MexiCali Biennial.
- The MexiCali Biennial hosts exhibitions in different venues on both sides of the US-Mexico border.
- The MexiCali Biennial has taken place on an uneven schedule, with exhibitions in 2006, 2009–10, 2013, and 2018–20.

The student wants to emphasize a difference between the MexiCali Biennial and traditional biennials. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In 2006, artists Ed Gomez and Luis Hernandez founded the MexiCali Biennial, which has taken place in 2006, 2009–10, 2013, and 2018–20.
- B) Unlike traditional biennials, the MexiCali Biennial hosts exhibitions in different venues on an uneven schedule.
- C) The term biennial traditionally refers to an art exhibition that takes place every two years in a single location, not to exhibitions hosted at a variety of times and venues.
- D) Biennial exhibitions have been held in New York, Berlin, and Venice but also on both sides of the US-Mexico border.

#65

ID: 28a46cb0

While researching a topic, a student has taken the following notes:

- The international Slow Food movement was founded in 1989 with the signing of the “Slow Food Manifesto.”
- The movement promotes universal access to healthy, high-quality food.
- It calls for sustainable food production practices that protect local environments, ecosystems, and biodiversity.
- It advocates for fair treatment of and compensation for food production workers.
- The Slow Food USA organization was founded in 2000.

The student wants to introduce the Slow Food movement to a new audience. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The international Slow Food movement, founded in 1989, promotes universal access to healthy, high-quality food that is produced sustainably by workers who are treated and compensated fairly.
- B) The signing of the “Slow Food Manifesto” in 1989 marked the founding of the international Slow Food movement, while the Slow Food USA organization was founded in 2000.
- C) The Slow Food movement advocates for food production workers.
- D) Goals of the movement include universal access to healthy, high-quality food and sustainable food practices.

#66

ID: 259d16ac

While researching a topic, a student has taken the following notes:

- In 1859, the novel *Adam Bede* was published in England.
- According to the novel's title page, the author's name was George Eliot.
- George Eliot was widely assumed to be a pseudonym.
- A pseudonym is a fake name used to conceal an author's identity.
- A woman named Mary Ann Evans later revealed herself as the novel's real author.

The student wants to identify the real author of *Adam Bede*. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The real author of *Adam Bede* was Mary Ann Evans, who published the novel using the pseudonym George Eliot.
- B) George Eliot, which *Adam Bede*'s title page indicated was the name of the novel's author, was widely assumed to be a pseudonym.
- C) The title page of the novel *Adam Bede* indicated that the author's name was George Eliot.
- D) A woman who had used a pseudonym to conceal her identity later revealed herself as the real author of *Adam Bede*.

#67

ID: f2f6009b

While researching a topic, a student has taken the following notes:

- Little is known about the life of Wong Fei-hung (1847–1925).
- He was born near Foshan, China, and gained local recognition as a physician and Hung Ga (also known as Hung Gar) Kung Fu master.
- He achieved many incredible martial arts feats—some confirmed and some rumored.
- He has become an internationally known folk hero thanks to his depiction in over a hundred films, television shows, and other media.
- In the 1991 film *Once Upon a Time in China*, actor Jet Li portrays Wong Fei-hung using superhuman kung fu abilities to save his community.

The student wants to emphasize the effect media had on building Wong Fei-hung's legacy. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Thanks to his depiction in over a hundred pieces of media, Wong Fei-hung was locally known as a successful physician and Hung Ga Kung Fu master.
- B) Though he was known locally during his lifetime, Wong Fei-hung's later depiction in television, film, and other media has turned him into an internationally known folk hero.
- C) Various media have depicted Wong Fei-hung, the successful physician and kung fu master who became an internationally known folk hero.
- D) Wong Fei-hung's abilities as a kung fu master are depicted in many media, including the 1991 film *Once Upon a Time in China*.

#68

ID: ed80971c

While researching a topic, a student has taken the following notes:

- The Pueblo of Zuni is located about 150 miles west of Albuquerque, New Mexico.
- It is the traditional home of the A:shiwi (Zuni) people.
- The A:shiwi A:wan Museum and Heritage Center was established by tribal members in 1992.
- Its mission is stated on its website: “As a tribal museum and heritage center for the Zuni people and by the Zuni people we work to provide learning experiences that emphasize A:shiwi ways of knowing, as well as exploring modern concepts of knowledge and the transfer of knowledge.”

The student wants to emphasize how long the museum has existed. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The Pueblo of Zuni is home to the A:shiwi A:wan Museum and Heritage Center, which was founded by tribal members.
- B) The A:shiwi A:wan Museum and Heritage Center has served the Pueblo of Zuni since 1992.
- C) According to its website, the A:shiwi A:wan Museum and Heritage Center (founded in the 1990s) works to “emphasize A:shiwi ways of knowing.”
- D) Knowledge has been one of the central themes of the A:shiwi A:wan Museum and Heritage Center from its founding.

#69

ID: 114bbce6

While researching a topic, a student has taken the following notes:

- Earthquakes start at a point called a “focus” and spread out from there as seismic waves.
- The two types of seismic waves that travel beneath Earth’s surface are primary waves (P waves) and secondary waves (S waves).
- P waves travel more quickly beneath Earth’s surface than do S waves.
- P waves compress and expand the ground, causing it to move backward and forward.
- S waves cause the ground to move from side to side.

The student wants to emphasize a similarity between P waves and S waves. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) P waves and S waves both travel beneath Earth’s surface, causing the ground to move.
- B) P waves travel away from an earthquake’s starting point at a higher rate of speed than do S waves.
- C) Spreading out from the focus of an earthquake, P waves move the ground backward and forward.
- D) Although P waves and S waves start at the same point, they behave very differently.

#70

ID: a86c0b1b

While researching a topic, a student has taken the following notes:

- Ancient Native American and Australian Aboriginal cultures described the Pleiades star cluster as having seven stars.
- It was referred to as the Seven Sisters in the mythology of ancient Greece.
- Today, the cluster appears to have only six stars.
- Two of the stars have moved so close together that they now appear as one.

The student wants to specify the reason the Pleiades' appearance changed. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Ancient Native American and Australian Aboriginal cultures described the Pleiades, which was referred to in Greek mythology as the Seven Sisters, as having seven stars.
- B) Although once referred to as the Seven Sisters, the Pleiades appears to have only six stars today.
- C) In the time since ancient cultures described the Pleiades as having seven stars, two of the cluster's stars have moved so close together that they now appear as one.
- D) The Pleiades has seven stars, but two are so close together that they appear to be a single star.

#71

ID: e2eb70b9

While researching a topic, a student has taken the following notes:

- Traditionally, manufacturers have dyed denim jeans blue by dipping them in a solution containing indigo powder.
- Indigo doesn't dissolve in just water, so manufacturers must mix hazardous chemicals with water to dissolve the powder.
- Textile researcher Smriti Rai discovered a process for dyeing blue jeans without chemicals.
- Rai added indigo powder to a hydrogel containing nanocellulose and produced a dye that could be spread directly onto the denim.
- Nanocellulose is a natural, plant-based substance that separates the molecules of indigo powder.

The student wants to emphasize a difference between the two approaches to dyeing blue jeans. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Though created using a different process, Rai's dye contains the same ingredient as the dye produced by blue jean manufacturers.
- B) Nanocellulose is a natural, plant-based substance that separates the molecules of indigo powder, which doesn't dissolve in water.
- C) The traditional approach to dyeing blue jeans is to dip them in a solution containing hazardous chemicals.
- D) Rai's approach substitutes a natural, plant-based substance for the hazardous chemicals that manufacturers have traditionally used.

#72

ID: 86b78078

While researching a topic, a student has taken the following notes:

- Samuel Selvon was a Trinidadian author.
- *The Lonely Londoners* is one of his most celebrated novels.
- Selvon published the novel in 1956.
- It is about a group of men who emigrate from the Caribbean to Great Britain after World War II.
- Some of *The Lonely Londoners*' characters also appear in Selvon's later novel *Moses Ascending*.

The student wants to introduce Samuel Selvon and his novel *The Lonely Londoners* to a new audience. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In 1956, Trinidadian author Samuel Selvon published one of his most celebrated novels, *The Lonely Londoners*, which is about a group of men who emigrate from the Caribbean to Great Britain after World War II.
- B) Samuel Selvon wrote the novel *Moses Ascending* after he wrote *The Lonely Londoners*.
- C) *The Lonely Londoners*, a celebrated novel that was published in 1956, depicts post–World War II Caribbean migration from the perspective of a Trinidadian author.
- D) Some of the characters who appear in Samuel Selvon's *Moses Ascending* also appear in *The Lonely Londoners*.

#73

ID: 4f9ee1dc

While researching a topic, a student has taken the following notes:

- Seven species of sea turtle exist today.
- Five sea turtle species can be found in the Atlantic Ocean.
- One of those species is the Kemp's ridley sea turtle.
- Its scientific name is *Lepidochelys kempii*.
- Another of those species is the olive ridley sea turtle.
- Its scientific name is *Lepidochelys olivacea*.

The student wants to emphasize a similarity between the two sea turtle species. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Among the seven species of sea turtle is the olive ridley sea turtle, which can be found in the Atlantic Ocean.
- B) The Kemp's ridley sea turtle is referred to as *Lepidochelys kempii*, while the olive ridley sea turtle is referred to as *Lepidochelys olivacea*.
- C) Both the Kemp's ridley sea turtle and the olive ridley sea turtle can be found in the Atlantic Ocean.
- D) The Kemp's ridley sea turtle (*Lepidochelys kempii*) and the olive ridley sea turtle (*Lepidochelys olivacea*) are different species.

#74

ID: 2c7dced2

While researching a topic, a student has taken the following notes:

- Sister Rosetta Tharpe (1915–1973) was a gospel musician.
- She was known for her passionate vocals and electric guitar performances.
- In 2018, Tharpe was inducted into the Rock and Roll Hall of Fame for her major impact on the genre.
- According to songwriter Roxie Moore, “[Tharpe] would sing until you cried and then she would sing until you danced for joy.”
- According to guitarist Celisse Henderson, “Tharpe is the unquestioned founding mother of rock ’n’ roll.”

The student wants to use a quotation to support a claim about Tharpe’s contribution to rock ’n’ roll. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Gospel musician Sister Rosetta Tharpe had a major impact on rock ’n’ roll, and she was known for her passionate electric guitar performances.
- B) Celisse Henderson believes that Sister Rosetta Tharpe had a major impact on the development of rock ’n’ roll.
- C) Sister Rosetta Tharpe had such a major impact on rock ’n’ roll that Celisse Henderson called her “the unquestioned founding mother” of the genre.
- D) A gospel musician, Sister Rosetta Tharpe had the ability to “sing until you cried” and also “until you danced for joy,” according to Roxie Moore.

#75

ID: 5a5e22b5

While researching a topic, a student has taken the following notes:

- Gravitational waves are powerful ripples that originate in deep space and eventually pass through Earth.
- The Laser Interferometer Gravitational Wave Observatory (LIGO) is a physics study that began in 2002.
- LIGO’s goal is to detect and analyze gravitational waves.
- LIGO uses a pair of massive gravitational wave detectors called interferometers that are thousands of miles apart.
- In 2015, for the first time in history, LIGO researchers detected a gravitational wave passing through Earth.

The student wants to present LIGO’s aim and methodology. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In 2015, LIGO’s massive interferometers detected a powerful ripple that originated in deep space and eventually passed through Earth.
- B) Though the physics study LIGO began in 2002, its massive interferometers didn’t detect a gravitational wave until 2015.
- C) To achieve its aims, LIGO uses a pair of massive interferometers that are thousands of miles apart.
- D) A physics study designed to detect and analyze gravitational waves, LIGO uses a pair of massive interferometers that are thousands of miles apart.

#76

ID: bc56170b

While researching a topic, a student has taken the following notes:

- Most, but not all, of the Moon's oxygen comes from the Sun, via solar wind.
- Cosmochemist Kentaro Terada from Osaka University wondered if some of the unaccounted-for oxygen could be coming from Earth.
- In 2008, he analyzed data from the Japanese satellite Kaguya.
- Kaguya gathered data about gases and particles it encountered while orbiting the Moon.
- Based on the Kaguya data, Terada confirmed his suspicion that Earth is sending oxygen to the Moon.

The student wants to emphasize the aim of the research study. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) As it orbited the Moon, the Kaguya satellite collected data that was later analyzed by cosmochemist Kentaro Terada.
- B) Before 2008, Kentaro Terada wondered if the Moon was receiving some of its oxygen from Earth.
- C) Cosmochemist Kentaro Terada set out to determine whether some of the Moon's oxygen was coming from Earth.
- D) Kentaro Terada's study determined that Earth is sending a small amount of oxygen to the Moon.

#77

ID: 6351062d

While researching a topic, a student has taken the following notes:

- In the late 1890s, over 14,000 unique varieties of apples were grown in the US.
- The rise of industrial agriculture in the mid-1900s narrowed the range of commercially grown crops.
- Thousands of apple varieties considered less suitable for commercial growth were lost.
- Today, only 15 apple varieties dominate the market, making up 90% of apples purchased in the US.
- The Lost Apple Project, based in Washington State, attempts to find and grow lost apple varieties.

The student wants to emphasize the decline in unique apple varieties in the US and specify why this decline occurred. Which choice most effectively uses relevant information from the notes to accomplish these goals?

- A) The Lost Apple Project is dedicated to finding some of the apple varieties lost following a shift in agricultural practices in the mid-1900s.
- B) While over 14,000 apple varieties were grown in the US in the late 1890s, only 15 unique varieties make up most of the apples sold today.
- C) Since the rise of industrial agriculture, US farmers have mainly grown the same few unique apple varieties, resulting in the loss of thousands of varieties less suitable for commercial growth.
- D) As industrial agriculture rose to prominence in the mid-1900s, the number of crops selected for cultivation decreased dramatically.

#78

ID: 5bb7dc03

While researching a topic, a student has taken the following notes:

- Started in 1925, the Scripps National Spelling Bee is a US-based spelling competition.
- The words used in the competition have diverse linguistic origins.
- In 2008, Sameer Mishra won by correctly spelling the word “guerdon.”
- “Guerdon” derives from the Anglo-French word “guerdun.”
- In 2009, Kavya Shivashankar won by correctly spelling the word “Laodicean.”
- “Laodicean” derives from the ancient Greek word “Laodikeia.”

The student wants to emphasize a difference in the origins of the two words. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) “Guerdon,” the final word of the 2008 Scripps National Spelling Bee, is of Anglo-French origin, while the following year’s final word, “Laodicean,” derives from ancient Greek.
- B) In 2008, Sameer Mishra won the Scripps National Spelling Bee by correctly spelling the word “guerdon”; however, the following year, Kavya Shivashankar won based on spelling the word “Laodicean.”
- C) Kavya Shivashankar won the 2009 Scripps National Spelling Bee by correctly spelling “Laodicean,” which derives from the ancient Greek word “Laodikeia.”
- D) The Scripps National Spelling Bee uses words from diverse linguistic origins, such as “guerdon” and “Laodicean.”

#79

ID: e6b57c9b

While researching a topic, a student has taken the following notes:

- Iranian scholar Abu Rayhan al-Biruni studied Earth’s physical features.
- He theorized that a large landmass existed west of Europe and east of Asia.
- Al-Biruni published his landmass theory in 1037 CE.

The student wants to specify when al-Biruni published his landmass theory. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) In 1037 CE, al-Biruni published his theory that a large landmass existed west of Europe and east of Asia.
- B) Al-Biruni, who studied Earth’s physical features, published a theory about a large landmass.
- C) Al-Biruni was an Iranian scholar who studied Earth’s physical features.
- D) An Iranian scholar who studied Earth’s physical features, al-Biruni theorized that a large landmass existed west of Europe and east of Asia.

#80

ID: 9e2d4ef7

While researching a topic, a student has taken the following notes:

- Abdulrazak Gurnah was awarded the 2021 Nobel Prize in Literature.
- Gurnah was born in Zanzibar in East Africa and currently lives in the United Kingdom.
- Many readers have singled out Gurnah's 1994 book *Paradise* for praise.
- *Paradise* is a historical novel about events that occurred in colonial East Africa.

The student wants to introduce *Paradise* to an audience unfamiliar with the novel and its author. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Abdulrazak Gurnah, who wrote *Paradise* and later was awarded the Nobel Prize in Literature, was born in Zanzibar in East Africa and currently lives in the United Kingdom.
- B) Many readers have singled out Abdulrazak Gurnah's 1994 book *Paradise*, a historical novel about colonial East Africa, for praise.
- C) A much-praised historical novel about colonial East Africa, *Paradise* (1994) was written by Abdulrazak Gurnah, winner of the 2021 Nobel Prize in Literature.
- D) *Paradise* is a historical novel about events that occurred in colonial East Africa, Abdulrazak Gurnah's homeland.

#81

ID: 94f4eeeb

While researching a topic, a student has taken the following notes:

- *Las sergas de Esplandián* was a novel popular in sixteenth-century Spain.
- The novel featured a fictional island inhabited solely by Black women and known as California.
- That same century, Spanish explorers learned of an "island" off the west coast of Mexico.
- They called it California after the island in the novel.
- The "island" was actually the peninsula now known as Baja California ("Lower California"), which lies to the south of the US state of California.

The student wants to emphasize the role a misconception played in the naming of a place. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The novel *Las sergas de Esplandián* featured a fictional island known as California.
- B) To the south of the US state of California lies Baja California ("Lower California"), originally called California after a fictional place.
- C) In the sixteenth century, Spanish explorers learned of a peninsula off the west coast of Mexico and called it California.
- D) Thinking it was an island, Spanish explorers called a peninsula California after an island in a popular novel.

#82

ID: 99183985

While researching a topic, a student has taken the following notes:

- Some sandstone arches in Utah's Arches National Park have been defaced by tourists' carvings.
- Park rangers can smooth away some carvings using power grinders.
- For deep carvings, power grinding is not always feasible because it can greatly alter or damage the rock.
- Park rangers can use an infilling technique, which involves filling in carvings with ground sandstone and a bonding agent.
- This technique is minimally invasive.

The student wants to explain an advantage of the infilling technique. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) To remove carvings from sandstone arches in Utah's Arches National Park, power grinding is not always feasible.
- B) Filling in carvings with ground sandstone and a bonding agent is less invasive than smoothing them away with a power grinder, which can greatly alter or damage the sandstone arches.
- C) Park rangers can use a power grinding technique to smooth away carvings or fill them in with ground sandstone and a bonding agent.
- D) As methods for removing carvings from sandstone, power grinding and infilling differ in their level of invasiveness.

#83

ID: 70538b9a

While researching a topic, a student has taken the following notes:

- In the 1930s, the Imperial Sugar Cane Institute in India sought to limit the country's dependence on imported sugarcane.
- The institute enlisted botanist Janaki Ammal to breed a local variety of sugarcane.
- She crossbred the imported sugarcane species *Saccharum officinarum* with grasses native to India.
- She succeeded in creating sugarcane hybrids well suited to India's climate.

The student wants to emphasize Janaki Ammal's achievement. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) By crossbreeding the imported sugarcane species *Saccharum officinarum* with grasses native to India, Ammal succeeded in creating sugarcane hybrids well suited to India's climate.
- B) In the 1930s, the Imperial Sugar Cane Institute, which enlisted Ammal, sought to limit dependence on imported sugarcane.
- C) Ammal was enlisted by the Imperial Sugar Cane Institute at a time when a local variety of sugarcane needed to be produced.
- D) As part of efforts to breed a local variety of sugarcane, an imported sugarcane species called *Saccharum officinarum* was crossbred with grasses native to India.

#84

ID: 570dd854

While researching a topic, a student has taken the following notes:

- *Here I Have Returned* is a sculpture by Egyptian American artist Sherin Guirguis.
- It is a large, curved strip of wood inspired by the shape of a sistrum.
- A sistrum is a curved musical instrument played by ancient Egyptian priestesses in ceremonies.
- Guirguis says that the sculpture symbolizes “women who have lifted and supported Egyptian society and culture.”
- Overall, Guirguis wants her works to “engage audiences in a dialogue about power, agency, and social transformation.”

The student wants to use a quotation from Guirguis to explain what the sculpture represents. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Guirguis, whose works include a sculpture that is a large, curved strip of wood, has explained that she wants her work to create a dialogue with audiences.
- B) Inspired by the sistrum played by Egyptian priestesses, *Here I Have Returned* symbolizes “women who have lifted and supported Egyptian society and culture,” according to Guirguis.
- C) According to Guirguis, the curved strip of wood used in *Here I Have Returned* was inspired by the sistrum, a musical instrument played by ancient Egyptian priestesses in ceremonies.
- D) Guirguis, the sculptor of *Here I Have Returned*, wants her works to “engage audiences in a dialogue about power, agency, and social transformation.”

#85

ID: efc19153

While researching a topic, a student has taken the following notes:

- Just like states have state flags, some cities have city flags.
- Over one hundred US cities have redesigned their flags since 2015.
- The city of Pocatello, Idaho, redesigned its flag after it was named the most poorly designed flag in North America.
- Pocatello's new flag better represents the city's mountainous geography and civic priorities.
- Residents consider the new flag to be a meaningful symbol of civic pride.

The student wants to make and support a generalization about the effect of redesigning a city flag. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Over one hundred US cities have redesigned their flags, including Pocatello, whose flag had been named the most poorly designed flag in North America.
- B) Pocatello is just one of over one hundred US cities that have redesigned their flags.
- C) After it was named the most poorly designed flag in North America, the flag of Pocatello was redesigned to better represent the city's geography and civic priorities.
- D) Redesigning a poorly designed city flag can create a meaningful symbol of civic pride, as was the case when Pocatello redesigned its original flag to better represent its geography and civic priorities.

#86

ID: 835b101b

While researching a topic, a student has taken the following notes:

- Minnesota defines a lake as an inland body of water of at least 10 acres.
- Wisconsin's definition of a lake doesn't take size into account.
- By its own definition, Wisconsin has over 15,000 lakes, many smaller than 10 acres.
- By Minnesota's definition, Wisconsin has only about 6,000 lakes.

The student wants to contrast Minnesota's definition of a lake with Wisconsin's. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Wisconsin, which doesn't take size into account in defining a lake, claims that it has over 15,000 lakes.
- B) Because its definition of a lake is different from Minnesota's, it is unclear how many lakes Wisconsin really has.
- C) According to Minnesota's definition of a lake—an inland body of water of at least 10 acres—Wisconsin has about 6,000 lakes.
- D) Minnesota's definition of a lake—an inland body of water of at least 10 acres—is more restrictive than Wisconsin's, which doesn't take size into account.

#87

ID: aec8d3e8

While researching a topic, a student has taken the following notes:

- Chemical leavening agents cause carbon dioxide to be released within a liquid batter, making the batter rise as it bakes.
- Baking soda and baking powder are chemical leavening agents.
- Baking soda is pure sodium bicarbonate.
- To produce carbon dioxide, baking soda needs to be mixed with liquid and an acidic ingredient such as honey.
- Baking powder is a mixture of sodium bicarbonate and an acid.
- To produce carbon dioxide, baking powder needs to be mixed with liquid but not with an acidic ingredient.

The student wants to emphasize a difference between baking soda and baking powder. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) To make batters rise, bakers use chemical leavening agents such as baking soda and baking powder.
- B) Baking soda and baking powder are chemical leavening agents that, when mixed with other ingredients, cause carbon dioxide to be released within a batter.
- C) Baking soda is pure sodium bicarbonate, and honey is a type of acidic ingredient.
- D) To produce carbon dioxide within a liquid batter, baking soda needs to be mixed with an acidic ingredient, whereas baking powder does not.

#88

ID: 7fa2b1ee

While researching a topic, a student has taken the following notes:

- In meteorology, an air mass is a large body of air with generally uniform humidity and temperature.
- Air masses are commonly classified by two-letter names.
- The first letter indicates the humidity of the air mass, while the second letter indicates the temperature.
- cA (continental arctic) means dry and cold, for example.
- mT (maritime tropical) means moist and warm.
- This classification system is based on the work of a Swedish meteorologist named Tor Bergeron (1891–1977).

The student wants to provide an example of an air mass. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Air masses are large bodies of air with generally uniform humidity and temperature.
- B) The air mass classification system uses two-letter names and is based on the work of Tor Bergeron, a Swedish meteorologist.
- C) Air masses are commonly classified by a two-letter name that indicates humidity and temperature.
- D) One type of air mass is known as a cA, or continental arctic, air mass because it is dry and cold.

#89

ID: f6d454c1

While researching a topic, a student has taken the following notes:

- If a moon orbiting a planet comes close enough to that planet, tidal forces can cause the moon to break apart.
- In a 2022 study, researchers proposed that Saturn was once orbited by a large moon they named Chrysalis.
- Their simulations indicated that Chrysalis would likely have come very close to Saturn around 160 million years ago.
- At that distance, Chrysalis would have been broken apart by tidal forces.
- The researchers hypothesized that the resulting debris formed Saturn's rings.

The student wants to recount the sequence of events proposed by the researchers. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) According to researchers' simulations, two events likely occurred around 160 million years ago: first, Chrysalis came very close to Saturn, and second, debris from Saturn's rings caused the moon to break apart.
- B) If a moon orbiting a planet (like Saturn) comes close enough to that planet, tidal forces can cause the moon to break apart.
- C) Around 160 million years ago, a large moon (Chrysalis) came close enough to Saturn that tidal forces broke the moon apart; its debris then formed the planet's rings.
- D) First, researchers proposed that Saturn was orbited by a large moon (Chrysalis); next, they conducted simulations; and, finally, they formed a hypothesis.

#90

ID: 92dec236

While researching a topic, a student has taken the following notes:

- Maika'i Tubbs is a Native Hawaiian sculptor and installation artist.
- His work has been shown in the United States, Canada, Japan, and Germany, among other places.
- Many of his sculptures feature discarded objects.
- His work *Erasure* (2008) includes discarded audiocassette tapes and magnets.
- His work *Home Grown* (2009) includes discarded pushpins, plastic plates and forks, and wood.

The student wants to emphasize a similarity between the two works. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) *Erasure* (2008) uses discarded objects such as audiocassette tapes and magnets; *Home Grown* (2009), however, includes pushpins, plastic plates and forks, and wood.
- B) Tubbs's work, which often features discarded objects, has been shown both within the United States and abroad.
- C) Like many of Tubbs's sculptures, both *Erasure* and *Home Grown* include discarded objects: *Erasure* uses audiocassette tapes, and *Home Grown* uses plastic forks.
- D) Tubbs completed *Erasure* in 2008 and *Home Grown* in 2009.