

spreads from property to property through its root systems underground and sap beetle migrations. A study reports that as a result of climate change, the southern Ontario, Canada, region may soon experience a costly and destructive invasion of this fungus.

Which of the following, if true, would most directly support the claim?

- (A) Development of a fungicide to treat oak wilt is showing promising results.
- (B) Insects carrying the oak wilt environmental DNA were found near the border between the United States and Canada.
- (C) Cutting down healthy trees that surround those with oak wilt is found to stall its spread.
- (D) Canadian law does not allow firewood to be brought into Canada to prevent pests from entering the country.

15. A literary historian writes an article for publication about the events leading to the first example of completed English prose, called “Handbook” (A.D. 887) under the leadership of King Alfred. In her article, she claims that these events,—for example, putting English into written form so that everyone could gain an English education,—served to save the English individualized kingdoms from falling into the hands of the Danes; and they gave the English people a sense of national pride and unity that significantly contributed to England becoming one nation.

Which finding, if true, would most directly undermine the historian’s claim?

- (A) King Alfred consolidated the people on the basis of their “Englishness” by emphasizing the English language they all spoke, collecting it and putting English into writing.
- (B) An English educational system was developed exclusively for children of nobility.
- (C) Latin books were translated into English, allowing English-speaking people to read them.

- (D) English chronicles were written to give the people a sense of national history.
16. The French author Alexis de Tocqueville, in *Democracy in America* (translated from French into English by Henry Reeve and originally published in 1835), discusses his views on laws and social power as they were emerging in the democratic institutions of the United States. In his discussion, he claims that he is not alarmed by America's excessive liberty but is concerned about the "inadequate securities which one finds there against tyranny."

Which quotation from *Democracy in America* most effectively illustrates the claim?

- (A) "If an individual or a party is wronged in the United States, to whom can he apply for redress? If to public opinion, public opinion constitutes the majority . . . legislature represents the majority . . . the executive power is appointed by the majority. . . ."
- (B) "I do not think that, for the sake of preserving liberty, it is possible to combine several principles in the same government so as really to oppose them to one another."
- (C) "Men do not change their characters by uniting with one another. . . ."
- (D) "England in the eighteenth century . . . was essentially an aristocratic state, . . ."
17. Anthropologists have been studying "Melungeons," a triracial people first identified living near Newman's Ridge in Hancock/Hawkins County, Tennessee, around the turn of the nineteenth century. They are the subject of many mysterious Appalachian legends, and their true origins have been difficult to determine. Some researchers claim that the term "Melungeons" has been overused, and its use should be limited to those who lived on Newman's Ridge for half a century before 1844.

Which finding, if true, would directly undermine the researchers' claim?

- (A) Several mixed-race groups have been found along the Atlantic coast; however, their DNA provides no connection to the Melungeons of Tennessee.
- (B) An internet craze in the 1990s had amateur family historians attempting to identify their own families as Melungeon with little, if any, proof other than surnames sometimes associated the Melungeon culture.
- (C) Records were found that showed some of the Newman's Ridge Melungeons migrated away to other areas after 1944.
- (D) The term "Melungeon" was used politically to insult members of the opposition party during the post-Civil War years.
18. In a book written in 1968, the authors describe the Yahgans, who once lived in the regions of Cape Horn and lived mostly from food caught or hunted in the waters of Tierra del Fuego. The area is very cold, and their work put them out in the frigid Antarctic winds; however, they generally were naked or half-clothed and lived in noninsulated shelters of skins or branches. After western civilization reached the Yahgans, their tribal numbers began to diminish from 3,000 in 1832 to 40 in 1933. The authors claim that the extinction of this tribe by the middle of the twentieth century is due in part to clothing. Because the western culture values clothing as a societal norm, the tribe began wearing clothing to work in the cold waters. The clothing would get wet, and the fires they kept on their canoes were inadequate to dry their clothing. By wearing wet clothing in the cold Antarctic winds, they fell victim to such respiratory diseases as influenza and pneumonia brought to them by the explorers.

Which finding, if true, would most directly support the claim of the authors?

- (A) Soaking your feet in hot water containing Epsom salt at the end of the day has been found to mitigate the effects of cold exposure during extreme work hours.
- (B) A 2021 study found that cold-air exposure improved the driving performance of drivers who were sleepy due to extreme sleep deprivation.

- (C) In a research study conducted in 2022, scientists discovered that sustained exposure to cold weather increases the likelihood of contracting viruses because extreme cold temperatures can dry out our mucous membranes and allow influenza type A virus penetration.
- (D) Twenty-first century scientists studying human longevity discovered that exposure to extreme temperatures, such as in a cold shower or a sauna, act as stressors that can help the body develop healthy resilience by reducing inflammation and stress resistance.

19. As toll roads continue to be built to ease traffic congestion in urban areas and to facilitate mass transit options, controversies arise over what speed limits should be enforced on toll roads. Some states have allowed speeds of 80 miles per hour, considered by many to be too fast. Opponents to high speed limits claim that this trend may cost more lives.

Which finding, if true, would most directly support the opponents' claim?

- (A) Proponents of high speeds on toll roads maintain that when all drivers are collectively driving at the same speed, accidents are avoided.
- (B) Statistics have shown that driving at high speeds increases the amount of time needed to slow down for road hazards and that high-speed accidents result in greater injuries.
- (C) Some drivers think that it is permissible to drive a little over the posted speed limit.
- (D) People who drive on toll roads are advised to keep their vehicles in top performance condition.

20. The United States Senate has approved a bill that, if enacted, will make Daylight Savings Time (DST) permanent on November 20, 2023. This measure has met with much debate. The supporters of DST point out that it benefits us in the areas of public safety, the general economy, and healthy lifestyle choices. Wait just a minute, counter the

opponents to this governmental move. DST has some serious downsides, such as it is bad for our health and it causes workers to be sleep-deprived.

Which finding, if true, would most directly undermine the objections of the opponents to DST becoming permanent?

- (A) Heart attack numbers reportedly increase by 10% on the Monday and Tuesday following a change to DST.
- (B) A study found that an additional 3% of the general population moved away from their television sets and began participating in outdoor activities as a result of DST.
- (C) A study found that DST causes disruption of the human body's circadian clock, making people tired and less productive.
- (D) In 2007, the Air Transport Association cited a cost of almost 150 million U.S. dollars to the industry because of conflicting time schedules with countries that do not adhere to DST.

21. With 2,340 passengers onboard the *Titanic* on its maiden voyage, why the ship's captain did not reduce speed to more safely navigate the icy waters or change course to the south to avoid any possible icebergs are questions that have hovered over the story for years. Some historians believe that the blame should be placed on the faulty idea that the ship was unsinkable, meaning that collisions would pose little threat.

Which finding, if true, would most directly support this claim?

- (A) Captain Edward Smith, with 40 years of experience, was also captain of the *Titanic*'s sister ship, the *Olympic*, which had collided with a warship but was able to sail home to port safely.
- (B) The crew of the *Titanic* was known to be inexperienced and consequently did not perform any safety drills.
- (C) The emphasis, historians came to conclude, was not on the voyage such as is the case on luxury ships today but rather on the ship being a means of speedy transportation, with emphasis on getting to the destination.
- (D) The cabins were sealed shut with steel doors that prevented hundreds of people from escaping the ship.

22. The first automatic transmission was invented in 1921 by a Canadian. This early transmission system required air pressure rather than hydraulic fluid and had no reverse. But once automatic transmissions became available to the general public, there was no reversing drivers' addiction to the sheer convenience they offer. However, there are those who maintain that the old stick shifts simply make a car more fun to drive. That conclusion, of course, rests with the individual driver. Yet there are claims being made that stick shifts provide better fuel economy and are even safer due to allowing for more control of the vehicle.

Which finding, if true, would most directly undermine the claim?

- (A) Research shows that a stick shift improves gas mileage by as much as 5 miles per gallon over automatics.
  - (B) A survey of car dealerships found that vehicles with stick shifts on average cost up to 1,000 dollars less than vehicles with automatic transmissions.
  - (C) Because of their lack of popularity, vehicles with stick shifts are not produced in large numbers and varieties, meaning sometimes they are less comfortable than those with manual transmissions.
  - (D) The Governors Highway Safety Association (GHSA) has issued a statement that encourages first-time drivers to emphasize safety by postponing the complexities of learning stick shift driving until they have mastered automatics.
23. In the late 1700s, Franz Joseph Gall attempted to make a correlation between brain function and the cranial bumps on the head. He was joined by J. G. Spurzheim, and the two anatomists began emphasizing the significance of the areas of the brain, especially the cortex, in relation to mental functions. They believed that the larger the cranial bump, the better the brain functions, and that the brain is not a single mass that lacks form as believed by scientists of the era, but rather it consists of different locations for different functions. This field of study became known as "phrenology" and was largely discounted many years ago as what many scientists would call nonsense. However, in the late 1990s, brain researchers, in efforts to study

relationships between the brain and the mind, have seen some of Gall's work as foundational to what is known today.

Which finding, if true, would most directly support this claim?

- (A) Modern brain researchers have found that where Gall thought the brain center for parental love is located is actually part of our visual functions.
- (B) In mapping out the bump-brain correlations, Gall's assigned brain functions have been found to be arbitrarily designated.
- (C) In a written treatise, Gall states that if a part of the brain is not used, it will shrink and the cranial bump will flatten.
- (D) Modern brain researchers identify the cerebral cortex as being instrumental in high-level function, such as memory, reason, and language, for example.

24. An atmospheric water generator (AWG) is a machine that can pull potable water from the air. These machines, according to the Environmental Protection Agency, work along the same lines as a home air conditioner. They form water through a condensation process using coils and fans. Concerns were expressed by some scientists that although an AWG creates clean water, the system may have the potential for microbial contamination from air contaminants as well as the possibility of mold growth in the condensation unit itself, especially when being used as an emergency water source in unfavorable conditions. To evaluate whether these concerns were justified, researchers conducted a three-month test, running an AWG continuously without any sterilization procedures in place.

Which finding from the test, if true, most directly supports the basis of the researchers' concerns?

- (A) High microbial numbers were detected by heterotrophic plate counts.
- (B) No *Legionella* or *Mycobacterium* were found.
- (C) No fecal contamination was present in the test samples.
- (D) All other tests indicated that the water was potable.

25. Studies have shown that a vegetarian diet has many benefits to overall health; however, some studies suggest that a totally vegetarian diet can cause certain nutritional deficits if not carefully planned. Most of the diets associated with Blue Zone areas (places where people live healthy lives to 100 years old and sometimes beyond) are for the most part a variation of vegetarianism. A school district health counselor has proposed to change the district's school lunch program diet to be a plant-forward omnivorous whole-foods diet (consisting of such unprocessed foods as whole grains, fresh fruits and vegetables, modest portions of lean, pasture-raised organic meats, eggs, unsweetened dairy products, and wild-caught seafood) and is collecting data to present to the school board and parents.

Which finding, if true, would most directly support the counselor's efforts to initiate this dietary change into the school district's lunch program?

- (A) A Gallop poll found that 5% of Americans were vegetarian in 2019.
- (B) Many studies suggest that vegetarianism decreases an individual's chances of having cardiovascular disease, obesity, Type 2 diabetes, and some forms of cancer, as well as some forms of dementia, and results in a lower risk of all-cause mortality.
- (C) *Progress in Cardiovascular Diseases* published a review of existing studies emphasizing that vegans are at risk for nutritional deficiencies and that a diet that combines foods found in a healthy vegan diet with healthy animal foods is the more balanced approach for meeting nutritional needs.
- (D) *Psychology Today* reported studies conducted in 2018 that found not only are vegetarian men more depressed than meat eaters, but also vegetarians in general suffer more bad moods and have less meaning in life, compounded by lower self-esteem.

- (B)** Part of the historian's claim is that discriminatory laws and regulations in recent times result in a call to action for their overthrow or repeal. Choice (B) reveals that this clearly discriminatory law is being tolerated ("overlooked in practice"), with no mention of efforts to take it off the books.
- (D)** Choices (A) and (B) reveal the "see if I care" response of the speaker to cover obviously hurt feelings. Although "Love" is dying in choice (C), the speaker reveals in choice (D) that his lover can, at will, bring Love from death to life again, logically resulting in a reconciliation.
- (C)** The claim is that young Americans in the 1980s who lived for the moment did so because they had never experienced hardships and assumed the good life would never end or, in contrast, because they believed tomorrow would never come. The 1995 statistics, taken when the young people in question would be adults, support this idea because people who believe prosperity is endless would not strive to save for hard times and those who believe the world will end during their lifetimes would see no future value in saving money.
- (A)** The claim is that the physical communication of horses toward people can be observed, isolated, studied, and then applied to training the horses to be therapy animals. The observation that the horses used physical movements indicating that they recognized special-needs children would illustrate that the first step toward developing such a program is possible.
- (D)** The lesson is found in the full-circle moment at which the speaker points out that the weed that turned into a flower and was coveted by the people became so common that they once again viewed it as a weed. In the speaker's view, his style of poetry, original for the time, was criticized until it bloomed in full expression of his art, and then became the target of thieves whose attempts at his poetic style made it so common that it no longer had the attractive beauty of a rare flower.

6. **(B)** The claim is that owners of domestic rabbits may be unaware of how serious the threat of RHDV2 is and the importance of stopping its spread. The fact that it is spreading at a faster rate among domestic rabbits than it is spreading in the wild supports this idea.
7. **(B)** The claim is that owning a dog increases health and longevity. Bacterial halitosis is not a sign of good health.
8. **(C)** The claim is that fungi can help mitigate climate change. A key element of climate change is the large amounts of CO<sub>2</sub> released into the atmosphere. Consequently, the ability of the soil-food web to sequester large-scale amounts of CO<sub>2</sub> would help effect change.
9. **(A)** The poet's claim is that flint and feathers are hallmarks of Mohawk ancestry. A hallmark is a distinguishing characteristic or trait. Flint is often associated with the Native American arrowhead, a weapon of war. Feathers are generally thought to be soft and easily blown away by the wind. Johnson cleverly combines these two hallmarks by pointing out the contrasting elements of each within the Mohawk culture. The tip of a flint arrowhead represents Indian life and love; the feather rests upon the head of a warrior.
10. **(C)** The claim is that the play focuses on the resistance of landed gentry to the changes happening in a changing world. Loving everything that is old usually is an antithesis of the desired change, whereas dissatisfaction with the old often is the catalyst for change.
11. **(D)** This statement supports the claim by shifting the responsibility for securing voting rights for women to being the responsibility of the men who were denying women the means to accomplish this goal. Her biblical allusion in choice (D) likens women to the Apostle Paul and compares men to the jailor who took away his freedoms.
12. **(A)** The claim is that tiny homes provide a life that is simpler, more sustainable, economical, and environmentally conscious. No claims are made in this selection concerning privacy issues, storage