

Before 21 JAN 2026

Reading

Time: 35 min

^{*}Answer key can be found at the bottom of page 15

Task 1

[1] Archaeology—the study of human activity through the recovery and analysis of material culture—when did it all begin? We could point to Nabonidus, the last King of Babylon, who excavated and restored the temple of the moon god Sin at Harran and the temple of the sun god Shamash at Sippar in the mid-6th century BCE. We could consider the work of antiquarians like William Stukeley, who conducted detailed investigations and excavations at Stonehenge and Avebury in the early 18th century, or Thomas Jefferson, sometimes named the 'Father of Archaeology' for his systematic excavation and recording of burial mounds in the US, although that accolade is now more often given to others, as his motives were less the understanding of Native American culture than its extinction. The fact is that there are many contributors who helped shift the amateur study of the past, which in some cases was little more than treasurehunting, into the scientific discipline it is today, but none more than Flinders Petrie, who developed archaeological methods and techniques that are still in use today, including detailed recording and stratigraphic excavation. The word 'archaeologist' didn't appear in the OED until 1824, and it took advances in geology and religious thinking by Charles Lyell and Charles Darwin and the acceptance of the tripartite system of human development (Stone Age, Bronze Age, and Iron Age) by Christian Jürgensen Thomsen for the discipline to gain professional status.

1. According to the first paragraph, how did archaeology become a recognized discipline?

- A. Through the history of excavations beginning in ancient Babylon, which sought to investigate and restore ancient sites.
- *B.* Through the methodical excavation and recording of people like William Stukeley at Stonehenge.
- C. Through the development of digging techniques and recording methods by Flinders Petrie.
- D. Through the inclusion of the word 'archaeologist' in the OED.

2. What can be inferred from paragraph 1 about the development of modern archaeology?

- A. Geology and Archaeology developed simultaneously.
- B. Ethical considerations have diminished Jefferson's role.
- C. It relied on the ability to take precise measurements.
- D. Changes in religious thinking were key to its acceptance.

3. In paragraph 1, why does the author include the information that the word 'archaeologist' didn't appear in the OED until 1824?

- A. To provide evidence of the late development of archaeology as a discipline.
- B. To provide the date when archaeology started to be considered a professional field.
- C. To suggest that the transition from hobby to profession took a long time.
- D. To explain how a new word came into common use in the 19th century.

[2] When people think of archaeology, they immediately think of excavation, but excavation is inherently destructive since the archaeological record is non-renewable. Mistakes made during excavation cannot be reversed or corrected; what is unearthed cannot be put back as it was, so modern archaeologists reserve excavation for situations where it is the only viable option to gather essential data. They are costly in terms of time and money and can vary in scale from one-meter square test pits to entire villages. The scale depends on the research questions being addressed. Initial excavations might answer some questions, prompting changes in the scale or nature of subsequent ones. One method, vertical excavation, uses trenches or test pits to explore the chronological depth of the archaeological record, examining stratigraphic profiles and artifacts to determine cultural changes over time. Horizontal excavation, on the other hand, involves exposing a broad, shallow area to study site configuration and function, typically focusing on regional differences in environmental usage. Such choices can vary based on archaeologists' training and regional practices. For instance, the Wheeler box grid method, which leaves intact walls between grid squares, is common internationally but less so in the United States, where open area excavation without balks is more prevalent. In either case, square excavation units are preferred for ease of calculating artifact density and ensuring precision using the Pythagorean Theorem.

4. According to paragraph 2, all of the following are true of excavation EXCEPT

- A. It is a non-reversible and destructive process.
- B. Excavation size is dependent on the answers sought.
- C. It is the preferred method of data collection.
- D. Depth is often determined by location.

- **5.** The word **record** in paragraph 2 is closest in meaning to
- A. data
- B. detail
- C. profile
- D. evidence
- 6. The word viable in paragraph 2 is closest in meaning to
- A. economic
- B. possible
- C. practical
- D. logical
- [3] Stratigraphic data, which refers to information gathered from analyzing soil and sediment layers, help archaeologists contextualize the archaeological record, providing relative dating for the site and its contents and offering insights into natural processes occurred after it was abandoned. ■ (1) Two assumptions, based on the work of 17th-century geologist Nicolaus Steno, underlie stratigraphy: the Law of Horizontality, which suggests that soils accumulate in layers parallel to the Earth's surface, and the Law of Superposition, which states that older soils are generally found beneath younger ones. These principles enable archaeologists to understand soil accumulation and use layers to tell time. ■ (2) As each excavation level is completed, archaeologists measure depth, ensuring uniform excavation. The depth of excavation is determined in advance, either based on the natural layers of soil or rock (strata) found at the site or set at arbitrary intervals, typically 10 or 20 centimeters. ■ (3) Recording the data involves drawing sketches, taking photographs, and documenting soil characteristics and the stratigraphic profile. • (4) This process continues until data collection is complete or something halts the excavation, such as hitting the water table. Before backfilling, archaeologists sometimes leave a modern marker at the excavation's deepest point to aid future researchers.
- 7. Two assumptions, based on the work of 17th-century geologist Nicolaus Steno, underlie stratigraphy: the Law of Horizontality, which suggests that soils accumulate in layers parallel to the Earth's surface, and the Law of Superposition, which states that older soils are generally found beneath younger ones.
- A. Stratigraphy is based on two theories from the geologist Steno, that soil deposition runs parallel to the surface of the Earth and that newer deposits overlie earlier ones.

- B. Nicolaus Steno was responsible for developing the principles of stratigraphy in the 17th century based on the laws of physics and his understanding of geology.
- C. The Laws of Horizontality and Superposition support the notion of stratigraphy, first suggested by a 17th-century geologist, Nicolaus Steno.
- *D.* Stratigraphy assumes two laws apply: the Law of Superposition (that older soils are buried by newer ones) and the Law of Horizontality (that soils accumulate evenly across the Earth's surface).
- 8. Look at the four squares [**■**] in paragraph 3 that indicate where the following sentence can be added to the passage. Where would the sentence below best fit?

Marker horizons, such as distinct layers of ash within clay, are used to determine excavation depth and provide additional context in stratigraphic profiles.

- A. Square 1
- B. Square 2
- C. Square 3
- D. Square 4

[4] Excavated material is sorted through screens to separate artifacts from soil. Screen size and method (wet or dry) vary depending on the surrounding materials and anticipated finds. Flotation, a water screening process, is used for recovering light materials like pollen, while wet screening with water hoses helps with dense or wet soil like clay. The choice significantly impacts artifact recovery and preservation. Finds are bagged with their provenance data and later recorded in a field catalog. Post-excavation work, often more time-consuming than fieldwork, involves cataloging and analyzing finds in the lab. As technology advances, new tools arise to aid in the analysis and interpretation of artifacts, enabling archaeologists to revisit previous finds, akin to reopening a cold case. In the last fifty years, DNA profiling, dendrochronology, and photoluminescence have all enabled archaeologists to refine notions of the past, showing relationships between populations and shedding new light on cultural exchange occurring thousands of years ago.

- 9. According to the fourth paragraph, the choice of how finds are separated from the soil is dependent upon which factor?
- A. The size of the screen used
- B. The density of the materials
- C. The nature of the materials
- D. The availability of running water
- 10. Select the 3 answer choices that express the most important ideas in the passage.

Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

This question is worth 2 points.

- A. Archaeology's transition from amateur to scientific discipline owes much to figures like Flinders Petrie, who pioneered enduring excavation techniques.
- B. Excavation is time-consuming, costly, and inherently destructive, but frequently it is the only way to gather any information about the past.
- C. Stratigraphy, based on geological principles, is an essential tool in dating sites and understanding cultural changes over time
- D. Excavation levels are recorded meticulously, with depths measured to ensure consistency across a site.
- E. Post-excavation analysis involves classifying artifacts through methods like wet or dry screening and their careful storage.
- F. New technology is constantly helping to reshape our view of the past.

Task 2

[1] Roads tend to fill up quickly after being built due to induced demand. ■ ① When new roads or additional lanes are added, the initial increase in capacity attracts more drivers who previously used alternate routes, public transport, or avoided trips. ■ ② Over time, extra capacity makes driving seem more accessible, encouraging people to drive more frequently or to move farther from urban centers, which increases overall traffic volume. ■ ③ The consequences include driver frustration, logistics delays, environmental damage, and urban sprawl. ■ ④

1. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

A well-known example is the Katy Freeway in Houston, Texas: despite being expanded to 26 lanes, it quickly became congested again—at levels worse than before.

- A. Square 1
- B. Square 2
- C. Square 3
- D. Square 4

[2] Quite often, when roads are close to capacity, delays are due to phantom traffic jams. These happen when a driver brakes suddenly or too hard, creating a shockwave that ripples backward through traffic. Drivers behind the one who brakes must react, often braking harder than necessary to maintain a safe distance. This cumulative effect causes a 'stop-and-go' wave that reduces the road's effective capacity. Even a minor braking event can cause significant slowdowns that persist long after the initial brake was applied, leading to the formation of a 'phantom traffic jam,' where cars slow or stop without an apparent reason; there is no accident or obstruction. These jams lead to increased fuel consumption and emissions, as vehicles are less efficient when frequently accelerating and decelerating.

2. According to Paragraph 2, all of the following statements are true of phantom traffic jams EXCEPT:

- A. They typically occur in dense, slow-moving traffic.
- B. They are wholly the result of driver behavior.
- *C.* They reduce the volume of traffic that can be carried.
- D. They contribute a disproportionate emissions load.

- [3] Phantom jams are purely a result of driver behavior and can take much longer to clear than to form. Traffic congestion and shockwave propagation follow nonlinear dynamics, meaning that although a jam may form quickly, clearing it takes longer because traffic must gradually regain **steady** flow. Research shows that traffic shockwaves often move backward at speeds around 10–12 mph. This backward movement means that even a brief braking event can affect miles of road within minutes, impacting thousands of vehicles in high-density conditions.
- 3. The word **steady** in paragraph 3 is closest in meaning to
- A. controlled
- B. undisturbed
- C. uniform
- D. continuous
- [4] In one famous experiment, Sugiyama's 2008 Phantom Jam study in Japan, researchers placed vehicles on a circular track and instructed drivers to maintain a constant speed. Despite the absence of external disruptions, tiny variations in speed caused vehicles to form a jam as the shockwave moved backward. It's challenging for different drivers and vehicles to maintain exact speeds and distances, which explains how even small fluctuations lead to congestion. Field studies and simulations suggest that a phantom jam may take two to three times longer to dissipate than it took to form. For instance, in dense traffic traveling at 30 mph, a single, brief braking event can trigger a phantom jam within 1–2 minutes, as each driver's reaction adds roughly a second in delay.

4. In paragraph 4, why does the author include the information about Sugiyama's 2008 Phantom Jam study?

- A. To explain that the phenomenon of phantom traffic jams is universal, and not confined to any one country.
- B. To support the claim that phantom jams can arise in a matter or minutes but take far longer to dissipate
- C. To provide evidence for the statement that phantom traffic jams are caused by driver behavior
- D. To illustrate how traffic can be disrupted even within a controlled environment.

[5] On multi-lane highways with traffic moving at higher speeds, the impact is even more dramatic. Vehicles are farther apart, so shockwaves from a braking event can travel backward at up to 20 mph as drivers overcompensate for the high speeds, often braking harder than necessary to avoid the vehicle in front. While some drivers may attempt to switch lanes to bypass the slowdown, this often spreads the congestion across all lanes as other drivers brake to accommodate merging traffic. In high-speed, high-density conditions on a three-lane highway, a phantom jam can form within a minute. Higher traffic density amplifies the effect, and once formed, such jams may take hours to clear completely.

5. Which of the following can be inferred from the paragraph about the Japanese experiment?

- A. Phantom traffic jams are unavoidable in certain traffic conditions because drivers are human beings.
- B. Phantom traffic jams will never be eradicated while vehicles are under the control of human operators.
- C. Real traffic jams take longer to clear than phantom traffic jams because there is a single identifiable cause.
- D. Both real traffic jams and phantom traffic jams are ultimately due to errors on the part of vehicle operators.

6. Which of the sentences below best expresses the essential information in the following sentence from paragraph 5?

Vehicles are farther apart, so shockwaves from a braking event can travel backward at up to 20 mph as drivers overcompensate for the high speeds, often braking harder than necessary to avoid the vehicle in front.

- A. Shockwaves from braking can move backward at up to 20 mph as drivers brake too hard to keep a safe distance.
- B. Drivers brake slightly harder than needed, creating shockwaves that travel backward at up to 20 mph.
- C. Shockwaves from sudden braking spread backward at up to 20 mph, as drivers overreact to high speeds by braking too hard.
- D. When vehicles are farther apart, drivers maintain safe distances without the need for sudden braking.

7. According to the text, why is lane-changing ineffective against avoiding shockwave propagation?

- A. Because the ripple effect caused by breaking follows non-linear dynamics making switching lanes fruitless.
- B. Because it merely shifts the pattern of braking to other lanes as cars shift between fast-moving traffic.
- C. Because sudden lane changes force drivers to slow down dramatically, leading to traffic jams in all lanes.
- *D.* Because in high-speed, high-density traffic, drivers are unable to maintain safe following distances when lane-switching occurs.

[6] Historically, the response to such congestion was to expand road capacity, but induced demand has shown this to be an ineffective and environmentally costly solution. An alternative approach known as a 'road diet' has proven more effective in some cases. For instance, Seattle's SR 99 Alaskan Way Viaduct was partially closed and eventually replaced by a reduced-capacity tunnel, which led to improved traffic flow. When lanes are removed traffic tends to 'evaporate.' Drivers find alternative routes, travel at different times, or reduce the number of journeys they make.

8. According to paragraph 6, which of the following is true?

- A. Building new roads has historically proven ineffective because phantom traffic jams quickly begin to form.
- B. A so-called 'road diet' involves restricting the amount of traffic allowed on a particular stretch of highway.
- C. Reducing the capacity of a road forces road users to find alternative routes or modes of transport.
- D. Replacing roads with lower-capacity tunnels can offer a viable solution to the issue of traffic congestion.

[7] However, to truly address congestion, cities need sustainable, integrated transport systems. Expanding public transit networks, developing safe cycling infrastructure, and encouraging walkable urban design are proving effective in reducing dependency on cars. Cities like London use congestion charging to discourage traffic, while in other places there are carpool incentives. By prioritizing multi-modal transit and smarter city planning, urban areas can reduce road congestion, lower emissions, and create more livable, efficient spaces that benefit both commuters and the environment.

9. The author suggests all of the following methods to reduce traffic congestion EXCEPT

- A. encouraging people to cycle or walk.
- B. improving the way cities are structured.
- C. imposing financial penalties on drivers.
- D. rethinking the necessity of commuting.

10. Traffic congestion is a global problem, particularly in urban areas and is affected by road capacity and driver behavior.

Choose 3 of the following sentences to complete a summary of the passage.

This question is worth 2 points.

- A. Expanding road capacity is not a long-term solution to overcrowded roads.
- B. Induced demand encourages people to use newly expanded roads or travel farther.
- C. Phantom traffic jams are the main cause of traffic disruption.
- D. Phantom jams are more dramatic on big, high-speed highways due to braking and laneswitching
- E. A 'road diet' approach is proven effective way of reducing congestion by rerouting traffic flows elsewhere.
- F. Better city planning and public transport are sustainable solutions to urban congestion.



Writing

Time: 30 min

The TOEFL iBT test Writing section measures your ability to write in English in an academic setting, and to present your ideas in a clear, well-organized way.

There are two writing tasks:

- **Integrated writing task** (20 minutes) read a short passage and listen to a short lecture, then write in response to what you read and listened to.
- Writing for an Academic Discussion task (10 minutes) state and support an opinion in an online classroom discussion.

Writing Practice 1 (Integrated)

Reading Time: 3 minutes

In an effort to encourage ecologically sustainable forestry practices, an international organization started issuing certifications to wood companies that meet high ecological standards by conserving resources and recycling materials. Companies that receive this certification can attract customers by advertising their products as "Eco certified." Around the world, many wood companies have adopted new, ecologically friendly practices in order to receive Eco certification. However, it is unlikely that wood companies in the United States will do the same, for several reasons.

First, American consumers are exposed to so much advertising that they would not value or even pay attention to the Eco certification label. Because so many mediocre products are labeled "new" or "improved," American consumers do not place much trust in advertising claims in general.

Second, Eco certified wood will be more expensive than uncertified wood because in order to earn Eco certification, a wood company must pay to have its business examined by a certification agency. This additional cost gets passed on to consumers. American consumers tend to be strongly motivated by price, and therefore they are likely to choose cheaper uncertified wood products. Accordingly, American wood companies will prefer to keep their prices low rather than obtain Eco certification.

Third, although some people claim that it always makes good business sense for American companies to keep up with the developments in the rest of the world, this argument is not convincing. Pursuing certification would make sense for American wood companies only if they marketed most of their products abroad. But that is not the case—American wood businesses sell most of their products in the United States, catering to a very large customer base that is satisfied with the merchandise.

Directions:

Give yourself 20 minutes to plan and write your response. Your response is judged on the quality of the writing and on how well it presents the points in the lecture and their relationship to the reading passage. Typically, an effective response will be 150 to 225 words.

Writing Task:

Summarize the points made in the lecture, being sure to explain how they cast doubt on specific points made in the reading passage

Writing Practice 2 (Academic Discussion)

Your professor is teaching a class on political science. Write a post responding to the professor's question.

In your response you should:

- express and support your opinion
- make a contribution to the discussion

An effective response will contain at least **100 words**. You will have **10 minutes** to write it.

Dr. Smith

As I mentioned in class, governments make public policies to describe their responses to various problems that affect a community. Part of this process involves setting and defending priorities about which issues deserve the most attention and resources. For example, governments need to decide whether they should spend more money on education or on environmental protections. If you were a policy maker, which issue would you argue is more important—education or environmental protections? Why?

Kelly

We all live on planet Earth, and it is the only planet we have. Therefore, we must take care of it. Clearly, protecting the environment should be the government's priority over education. I think the REAL question is, which approach to protecting the environment—restricting pollution, regulating population, promoting clean energy, or something else—should be the government's priority.

Andrew

I disagree with Kelly that that the environment is more important than education. Education is actually the best way to protect the environment. Educated people can see how their decisions affect the world around them. Also, with better science and technology education, we can develop solutions to environmental problems. Therefore, I think the government should spend more money on education.



Speaking

The speaking section takes about 17 minutes to complete and includes four question types. In the TOEFL speaking section you'll get tasks that require to you to **read, listen** and **speak**.

Time: 16-17 minutes

4 tasks

- 1 independent task to express an opinion on a familiar topic
- 3 integrated tasks based on what is read and heard

Up to 30 seconds to prepare the response, up to 45 or 60 seconds to respond

Answer Key for the Reading Section

Part 1	Part 2
1. C	1. C
2. B	2. A
3. A	3. C
4. C	4. C
5. D	5. A
6. B	6. C
7. A	7. B
8. B	8. C
9. C	9. D
10. A/C/F	10. A/D/F