

英語 I (選択)

次の文章に関して、空欄補充問題と読解問題の二つがあります。まず、[31]から[40]の空所を埋めるのに、文脈的に最も適切な語を 1 から 3 の中から選び、その番号を解答欄 (31) から (40) にマークしなさい。次に、内容に関する[41]から[45]の設問には、1 から 4 の選択肢が付されています。そのうち、文章の内容からみて最も適切なものを選び、その番号を解答欄 (41) から (45) にマークしなさい。

- 1 “We shall escape the absurdity of growing a whole chicken in order to eat the breast or wing, by growing these parts separately under a suitable medium,” predicted famed British politician Winston Churchill in a 1932 essay titled *Fifty Years Hence*. Although off by a few decades, Churchill’s prophecy may finally be coming to eerie fruition.
- 2 The process of growing meat in a lab, while nascent and sure to encounter obstacles and complications, is nonetheless [31](1. burdened 2. rife 3. discharged) with potential to profoundly change the way humans produce and consume protein. Cultured meat (also known as synthetic meat, in vitro meat, or clean meat) has recently become possible because of advances in stem cell research and tissue engineering. The process of growing tissue outside the body in a lab involves self-replicating cells, food, hormones, and other factors that allow original cells to grow and [32](1. deteriorate 2. evaporate 3. proliferate), eventually creating strips of synthetic animal muscle that are [33](1. essentially 2. scarcely 3. accidentally) meat.
- 3 Although the thought of this may bring a knee-jerk stank-face to many, the potential benefits that cultured meat may provide may be worth getting over any negative reactions. [34](1. For one 2. In contrast 3. At last), the world population is already dealing with a major protein crisis that only figures to get worse. According to a 2012 United Nations report, the world’s population is expected to [35](1. suppress 2. surpass 3. supersede) nine billion by the year 2050, which means meat production (if our current consumption remains the same) would need to almost double. Producing this much meat using conventional methods could severely harm or even destroy the planet. The report states that current meat and dairy production [36](1. rely on 2. account for 3. result from) 19 percent of global greenhouse gas emissions, 38 percent of global land use, and 70 percent of global water use. And although cultured meat production would surely leave some sort of carbon footprint as well, the thought is that if it is done correctly and efficiently, it has the potential to be much less harmful to the environment.
- 4 Cultured meat could also [37](1. curb 2. pacify 3. sustain) or even completely end what many consider to be the barbaric practices involved in the raising and slaughtering of live animals for food. Would vegetarians eat it? From a health perspective, cultured meat also has the potential to be

[38](1. neglected 2. improvised 3. engineered) to be more nutritious, as well as cleaner and more free of disease than conventional meat.

5 In 2013, the world’s first lab-grown burger was produced from living cow stem cells by scientists, led by Professor Mark Post. He is now involved in a cultured meat startup company called Mosa Meat. There is also a San Francisco-based startup called Memphis Meats that recently released its versions of lab-grown fried chicken, beef meatballs, and duck a l’orange. Other startups are working on developing similar products—even Tyson Foods, America’s largest meat company, launched a venture capital fund intended on investing in innovative approaches for protein production. There are also several research institutes [39](1. navigating 2. advocating 3. mitigating) for and working on the development of cultured meat, and even government regulatory organizations are getting involved and working to establish guidelines.

6 Outside the lab, one obstacle is mass public acceptance. [40](1. Portability 2. Profitability 3. Palatability) will go a long way toward potentially changing this negative ingrained mindset. Tasters of cultured meat products have generally said that the flavor and texture are similar to that of the real thing, although not exactly the same. Companies would need to work on creating close enough facsimiles that would hold their own in blind taste tests. This may be especially difficult for products like hamburgers and steaks that have significant fat content, which contribute to their natural taste and texture. Producing lab-grown fat would involve a separate and similarly complicated biogenic process.

7 Another major hurdle is reducing the production cost of cultured meat to bring it up to par with conventional prices. Although this may take a while, history has shown us that when a technology’s time has come, it is only a matter of time before costs come down to a point where it goes mainstream.

—Based on Steingrube, A. (2017). “Cultured Meat Is Here, And That Might Be a Good Thing.” *GoodTimes*.

[41] What does the author suggest about Churchill's prediction?

1. It was ahead of its time and is now beginning to be realized.
2. It was exaggerated and people were repulsed by the idea of fake meat.
3. It was imaginative but has remained unrealized despite later progress.
4. It was unrealistic then and is still unlikely to succeed.

[42] What does the author imply about the environmental benefits of cultured meat in paragraph 3?

1. They would be negligible compared to ongoing traditional systems.
2. They would be on an equal footing with conventional meat.
3. They would depend on how effectively production is carried out.
4. They would depend on the UN's report on world population.

[43] What does the mention of companies like Tyson Foods mainly illustrate?

1. Traditional meat companies are threatened by lab-grown meat producers.
2. Established meat producers are beginning to invest in new technologies.
3. The cultured meat industry is controlled entirely by large corporations.
4. Government funding is no longer needed for cultured meat research.

[44] Which research priority is most consistent with the author's analysis to improve the natural taste and texture of products in paragraph 6?

1. Focus on ground products and ignore fat replication to cut costs.
2. Abandon whole-cut analogs and pivot to plant-based substitutes.
3. Replace fat with non-caloric additives to simplify production.
4. Develop a parallel technology to cultivate human-made fat tissue.

[45] The author's overall tone toward cultured meat is best described as

1. unreservedly positive.
2. cautiously optimistic.
3. conservative and skeptical.
4. detached and indifferent.

英語Ⅱ

次の文章に関して、空欄補充問題と読解問題の二つがあります。まず、[46]から[55]の空所を埋めるのに、文脈的に最も適切な語を1から3の中から選び、その番号を解答欄(46)から(55)にマークしなさい。次に、内容に関する[56]から[60]の設問には、1から4の選択肢が付されています。そのうち、文章の内容からみて最も適切なものを選び、その番号を解答欄(56)から(60)にマークしなさい。

- 1 The public is ignoring the seemingly slow warming of the world, but it doesn't have to be that way. For a long time, many climate scientists and advocates held onto an optimistic belief: when the impacts of global warming became undeniable, people and governments would finally act decisively. Perhaps a devastating hurricane, heatwave or flood—or even a cascade of disasters—would make the severity of the problem impossible to ignore, [46](1. negating 2. precluding 3. spurring) large-scale action. Yet, even as disasters mount, climate change remains low on voters' priority lists and policy responses are [47](1. tepid 2. salacious 3. zealous).
- 2 This widespread inaction is often blamed on political or structural forces. But decades of psychological research suggest something deeper is at play: the human brain tends to [48](1. overlook 2. personalise 3. underscore) slow, creeping change. While many regions are facing severe climate extremes, for most of the world, climate change appears as a slow, gradual shift in daily weather.
- 3 This [49](1. scarcity 2. singularity 3. subtlety) is a problem. People judge the issue largely via personal experience: we are more worried on an unusually hot day, and less so when the weather feels normal. But as things gradually worsen, our sense of “normal” quietly shifts. This is known as the boiling frog effect—where subtle, incremental changes fail to trigger alarm, resulting in [50](1. apathy 2. antipathy 3. empathy) despite worsening conditions: like a frog in a pan of slowly warming water. In 2020, we were researching climate impacts in Princeton, New Jersey. The area doesn't face wildfires or droughts, but we realised it had lost something: winter ice skating. For decades, you could skate on Lake Carnegie every year. Now, it rarely freezes over.
- 4 Through conversations with long-term residents and digging into local newspaper archives, we discovered there had been a stark decline in ice skating on the lake over the past century, and a sense of loss over it. This interruption to a winter tradition suddenly made climate change in Princeton feel real and [51](1. esoteric 2. exuberant 3. tangible). That led us to ask: could binary climate data—yes-or-no indicators such as “lake froze” vs “no freeze”—make people sit [52](1. back 2. out 3. up) and take notice better than graphs showing gradual temperature rise?
- 5 We tested this idea in a series of experiments. Participants were shown one of two graphs: one displayed a fictional town's rising winter temperatures; the other showed whether its lake froze each

year. Importantly, both graphs captured the same [53](1. mirroring 2. paralysing 3. underlying) climate trend. But people’s responses were very different. People who saw the binary “froze or not” graphs consistently perceived climate change as having a greater impact than those who saw the temperature graphs. In follow-up studies with data from lakes in North America and Europe, we saw the same result. When climate impacts were presented in these kinds of black-and-white terms, people took them more seriously.

6 Why? We found that binary data creates an [54](1. illumination 2. illusion 3. illustration) of sudden shifts. When people saw a series of winters when the lake froze, followed by years when it didn’t, they perceived a clear “before” and “after”, even though the change was gradual. Climate change isn’t just a physical crisis. It is also a psychological problem. And unless we communicate it in ways that feel real, we risk [55](1. figuring 2. sorting 3. tuning) out the warning signs until it is too late.

7 We hope these results ignite policy-makers, journalists and educators to take action. Highlight the concrete losses people can relate to: winters without ice skating, harvests damaged by drought, summers filled with wildfire smoke. Use visuals that contrast “what we had” with “what we’ve lost”.

—Based on Liu, G. & Dubey R. (2025). “Why climate change fades into the background—and how to change that” *New Scientist*.

[56] What is the optimistic belief outlined in the opening paragraph?

1. People will be gradually educated about and conscious of the devastating global disasters.
2. People will be convinced that the solar temperature cycle will self-heal global warming.
3. People will eventually tackle the problem when it becomes obvious.
4. People will finally notice that natural disasters are exaggerated.

[57] Which statement best matches the authors' observations about global warming?

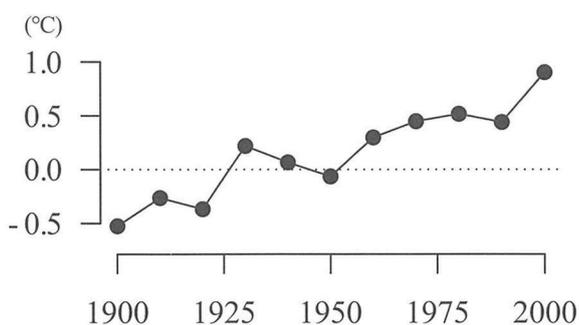
1. When presented with objective, scientific data, people become inquisitive about the changes in the surrounding climate.
2. Since policy-makers are unreliable, ordinary citizens should take action to prevent further climate changes.
3. Whenever people suffer from a devastating natural disaster, they tend to be forced into a response.
4. A build-up of small changes makes people less aware of the importance of big changes.

[58] What is a good example of the metaphor mentioned in paragraph 3?

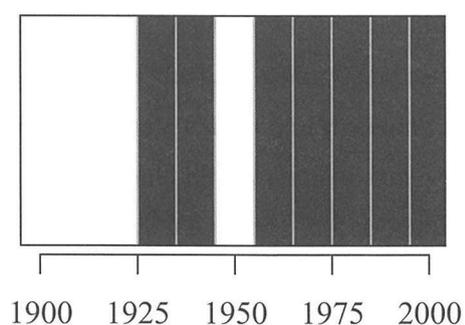
1. "I swore I'd never overeat again, but the moment cake is offered, I just can't resist."
2. "The fire alarm went off, but I thought it was just a drill, so I didn't evacuate."
3. "Work increased day by day, and before I knew it, I was regularly working overtime."
4. "Even if I have complaints, I can't bring myself to quit my job."

[59] Which of the following statements are the authors most likely to support regarding the graphs created from the same data as shown below?

1. A line graph presents chronological tendency more vividly as a time-series data set.
2. The use of anecdotes is more persuasive than the use of graphical representation.
3. The color selected for the graphs is important to convey accurate information.
4. Different figures based on identical information can give different impressions.



Graph A (winter temperature over time)



Graph B (black: "not frozen", white "frozen")

[60] Which of the following statements best reflects the main message of this article?

1. People tend to think and react in black and white terms when confronted with change.
2. Progress on climate issues requires insights from multiple academic disciplines.
3. Lawmakers should take responsibility for failing to implement effective policies.
4. Data may fail to persuade unless it is presented in a way that people can identify with.

英語Ⅲ

次の文章に関して、空欄補充問題と読解問題の二つがあります。まず、[61]から[80]の空所を埋めるのに、文脈的に最も適切な語を1から3の中から選び、その番号を解答欄(61)から(80)にマークしなさい。次に、内容に関する[81]から[90]の設問には、1から4の選択肢が付されています。そのうち、文章の内容からみて最も適切なものを選び、その番号を解答欄(81)から(90)にマークしなさい。

- 1 The term ‘ecology’ was coined in the mid-nineteenth century by the German naturalist Ernst Haeckel in his book *General Morphology of Organisms*. ‘By ecology,’ wrote Haeckel, ‘we mean the whole science of the relations of the organism to the environment including, in the broad sense, all the conditions of existence.’ The term derives from the Greek *ekos*, meaning house or environment; in a footnote Haeckel also referenced the Greek *hora*, meaning ‘dwelling place’. Ecology is not merely the study of where we find ourselves, but of everything which surrounds us and allows us to live.
- 2 Haeckel was an early [61](1. skeptic 2. plagiariser 3. proponent) of the work of Charles Darwin. In particular, he supported Darwin’s belief that the full import of his theories was to be found not in the way in which individual species developed, but in the relationships between species. In the famous final paragraph of *On the Origin of Species*, Darwin provided a proto-description of ecology, describing an ‘**entangled bank**’, wherein plants of many kinds, birds, insects and other ‘elaborately constructed forms, so different from one another’ were produced by the complex forces of evolution, yet depended utterly on one another.
- 3 Perhaps the briefest but most [62](1. resonant 2. monotonous 3. flimsy) description of ecological thought is that given in 1911 by John Muir, the Scottish-American naturalist, outdoorsman, and father of the US National Park system. Reflecting on the [63](1. banality 2. isolation 3. abundance) of complex life he encountered while writing his book *My First Summer in the Sierra*, he wrote simply: ‘When we try to pick out anything by itself, we find it hitched to everything else in the Universe.’ Ecology is the study of these interrelationships: those unbreakable [64](1. cords 2. ledgers 3. oaths) which tie everything to everything else. Crucially, those relationships extend to *things* as well as *beings*: ecology is just as interested in how the availability of nesting materials affects bird populations, or how urban planning shapes the spread of diseases, as it is in how honeybees pollinate marigolds and cleaner wrasses delouse surgeonfish. And that’s just biological ecology. Ecology is fundamentally different to the other sciences in that it [65](1. describes 2. mentions 3. clarifies) a scope and an attitude of study, rather than a field. There is an ecology—and ecologists—of mathematics, behaviour, economics, physics, history, art, linguistics, psychology, warfare, and almost any other discipline that you can think of.

4 There is also ecological politics, which has the potential not merely to explain worlds, but to change them. It was as an ecologist that the marine biologist Rachel Carson approached the environment, [66](1. deflecting 2. culminating 3. faltering) in her immensely influential *Silent Spring* of 1962, her ecological understanding enabling her to link pesticides in the rivers and oceans to devastating effects on animal and human health. Her work led directly to bans on toxins such as DDT, and the birth of the global environmental movement. Since then, ecological thought has hitched itself to politics and law, in order to shift public awareness and social practice towards less damaging forms of relationships with the natural world.

5 Ecological thought, once unleashed, [67](1. permeates 2. fragments 3. nullifies) everything. It is as much movement as science, with all the motive, restless energy that word connotes. Every discipline discovers its own ecology in time, as it shifts inexorably from the **walled gardens of specialized research** towards a greater engagement with the wider world. As we expand our field of view, we come to realize that everything impacts everything else—and we find meaning in these interrelationships.

6 Technology is the last field of study to discover its ecology. Ecology is the study of the place we find ourselves in, and the relationships between its inhabitants, while technology is the study of what we do there: *techne*, or craft. Putting it that way makes them sound like natural bedfellows, but the history of technology is largely one of willful blindness to the context and consequences of its enactment. What counts as technology is also much debated. I like the definition given by the science fiction writer Ursula Le Guin, in a [68](1. nod 2. rebuff 3. surrender) to critics who accused her of not including enough of it in her work. ‘Technology’, she wrote, ‘is the active human interface with the material world.’ Its definition, for Le Guin, wasn’t limited to ‘high’ technology, like computers and jet bombers; rather, it referred to anything that was produced by human [69](1. infatuation 2. ingenuity 3. inferiority). That included fire, clothing, wheels, knives, clocks, combine harvesters—and paperclips.

7 Technology, understood as our interface with the material world, is that human practice which most closely ties us to our context and our environment. It [70](1. exemplifies 2. curtails 3. purifies) and performs the most central characteristics of ecology: complexity, interrelatedness, interdependence, distribution of control and agency, even a closeness to the earth and the sky; on, under and out of which we [71](1. accessorise 2. fashion 3. display) our tools.

8 An ecology of technology, then, is concerned with the interrelationships between technology and the world, its meaning and materiality, its impact and uses, beyond the everyday, deterministic fact of its own existence. We will start to construct such an ecology by examining many of the assumptions and biases that are built into our ways of thinking, and which are subsequently

[72](1. embedded 2. allocated 3. harvested) in the tools we use every day so deeply that we rarely think to question them. The most powerful of these is the idea that human intelligence is unique, and uniquely significant, in the world. Yet there are in fact many ways of doing intelligence, because intelligence is an active process, not just a mental capacity. By rethinking intelligence, and the forms in which it appears in other beings, we will begin to [73](1. build up 2. phase in 3. break down) some of the barriers and false hierarchies that separate us from other species and the world. In doing so, we will be in a position to [74](1. mediate 2. forge 3. reinforce) new relationships based on mutual recognition and respect.

9 Language, that most [75](1. tentative 2. evocative 3. abrasive) of human faculties, emerged from our direct experience of the world. As we heard and saw and felt the world—the [76](1. blubbling 2. babbling 3. boiling) of the brook, the flight of the bird, the rumbling of the storm—we shaped language to reflect these experiences, in order to better reflect it to itself, and thus to embody and come [77](1. across 2. through 3. into) communion with it. In the millennia since we first spoke to and of the world we have lost much of this sense of connection to it: technological progress is all too often accompanied by spiritual attenuation. But I argue that our contemporary, networked, computational technologies might yet be our fullest attempt since the development of language to draw ourselves closer to nature, however carelessly and unconsciously.

10 Changing our relationship with the world requires us to acknowledge this, and to [78](1. undercut 2. undermine 3. undertake) the task more carefully and consciously. This task is [79](1. paramount 2. inconsequential 3. verifiable) if we are to reconcile the vast scope, god-like power and material demands of our technology with our present situation. We are poisoning the soil and air, warming the atmosphere, acidifying the oceans, burning the forests, and murdering with unthinkable efficiency the numberless beings who share our planet, not to mention generations of humans alive and yet to come. The devastation we are visiting upon the earth has every likelihood of forcing our species back into the [80](1. limelight 2. caves 3. metaverse)—as does an unthinking critique of technological progress. If we do not wish to go there, and do not wish to render ourselves alone and abject on the face of the earth, we must rethink every aspect of our technological society and the ideas it is founded on, and we must do it fast.

—Based on Bridle, J. (2022). “Ways of Being: Animals, Plants, Machines: The Search for a Planetary Intelligence,”
Picador.

[81] What did Ernst Haeckel emphasize in his definition of ecology?

1. The various ways humans interact with and alter natural systems
2. The processes by which animals respond to environmental conditions
3. The full range of interactions between living things and their environment
4. The gradual development of species in isolated ecosystems over time

[82] Why does the author refer to Darwin's "*entangled bank*"?

1. To show how Darwin predicted modern ecological science
2. To give a critique of Darwin's focus on species classification
3. To illustrate a contradiction between Darwin's and Haeckel's ideas
4. To provide an explanation of the rise of botanical research in the 1800s

[83] What can be inferred from Muir's quote in paragraph 3?

1. He believed nature should be left untouched by human activity.
2. He thought strong connections were fostered by living organisms.
3. He recognized the connectivity of all components of nature.
4. He held a view based on spiritual belief rather than scientific reasoning.

[84] Which of the following statements is *not* mentioned in paragraph 4?

1. Ecological thinking has engaged with politics and law to promote change.
2. Political action is starting to outweigh scientific research on environmental issues.
3. Carson's approach helped her to connect pollutants in waterways with health impacts.
4. Carson's research contributed to the rise of worldwide environmental activism.

[85] What does the author mean by the phrase, "*walled gardens of specialized research*"?

1. Research areas that are closed off from other fields
2. Natural environments that are preserved for scientific study
3. Academic fields that have no practical applications
4. Scientific work that is conducted in outdoor settings

[86] If an ancient community designed a wind-powered mill using stone and wood, Ursula Le Guin would most likely classify this as

1. technology, because it is a human-made way of working with the physical world.
2. ecology, because it applies environmental forces to support humans in a specific setting.
3. both technology and ecology, because it enables humans to overcome the environment.
4. neither technology nor ecology, because it appeared before industrial development.

[87] Which of the following situations is most consistent with the author's point about pre-conceived ideas in paragraph 8?

1. A smartphone app automatically switches to the local language when the user travels, ensuring it can be used anywhere in the world without confusion.
2. A school principal installs solar panels on the roof to cut costs as a result of a study on renewable energy.
3. A national road system is built with wide lanes based on the designer's conviction that most vehicles are large.
4. A luxury watch brand uses waterproof materials so the product can be worn while swimming, but this adds significantly to the production cost.

[88] Why does the author discuss the early development of spoken language in paragraph 9?

1. To show that early communication once reflected a close link with nature
2. To claim that language was invented to inform each other of human achievements
3. To argue that speech evolved without influence from the environment
4. To suggest that early language reduced the need for ecological understanding

[89] In paragraph 10, the author is stating that

1. technology will fix environmental problems without the need for action.
2. action is needed to redesign technology within ecological boundaries.
3. environmental action should be delayed until technology advances further.
4. earlier technologies could be encouraged to promote stronger environmental action.

[90] Which of the following statements best reflects the author's central argument?

1. Ecology and technology can be connected, but their relationship has often been undervalued.
2. Applying ecological thinking can help guide the way technology is developed and applied.
3. Most technological change happens independently of environmental or social influence.
4. Ecological action helps us recognize the deep connection of all beings as interdependent networks.