

英 語

合図があるまでは絶対に中を開けないこと

英語の試験は初めにリスニング、次にリーディングの順序で行います。リーディングの指示は、リスニングが終わった後で行います。

リスニングの指示

1. リスニングには、PART I, II, III の3つがあります。
2. 各PARTが始まる前に、日本語で説明をします。注意して聞いて下さい。
3. 問題冊子には、問いと、4つの選択肢が与えられています。その中から最も適当と思われる答えを1つ選んで、解答カードの相当欄をマークして下さい。
4. 各PARTが終わったら、音声による指示があるまで、次のページを開けないで待っていて下さい。

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5. PART I では 10 の短い会話を聞きます。それぞれの会話についての問いに答えて下さい。
 6. PART II ではPART I より長い会話を 2 つ聞きます。それぞれの会話についての問いに答えて下さい。
 7. PART III では講義を 3 つ聞きます。講義の内容について、それぞれ 5 つの問いに答えて下さい。

「受験番号」を解答カードの定められたところに忘れずに書き入れること

(余 白)

次のページからの問題には、それぞれ a, b, c, d の選択肢が与えられています。
各問題につき、a, b, c, d の中から、最も適当と思われる答えを 1 つだけ選び、
解答カードの相当欄をマークして、あなたの答えを示して下さい。

例 (E)

☐ a ☐ b ☒ c ☐ d

PART I

Choose the best answer to each question.

Questions 1-10.

1. Based on the conversation, which statement is true?
 - a. The man and Sarah are good friends.
 - b. The woman didn't eat with a professor.
 - c. The woman is the same age as Sarah.
 - d. The man and Sarah were eating lunch.

2. What is the man most likely going to do?
 - a. go to the library
 - b. stay under a tree
 - c. go to the cafeteria
 - d. stay in the classroom

3. Which of the following can be inferred from the conversation?
 - a. The woman is currently in her junior year.
 - b. The woman has completed the required courses.
 - c. The man has almost completed his senior thesis.
 - d. The man is not as busy as other students.

4. What did the man know about the woman?
 - a. The man knew that she is familiar with the locale.
 - b. The man knew what her aunt likes to eat for dinner.
 - c. The man knew that she had eaten at Sakura before.
 - d. The man knew about her knowledge of the restaurant.

5. Based on the conversation, which statement is true?
 - a. The woman is going to take Economics 201 this term.
 - b. The textbook for Economics 101 and 201 is the same.
 - c. The textbook for Economics 101 is "Modern Economics".
 - d. The woman is going to buy "Contemporary Economics".

6. To which department does Dr. Mizuno most likely belong?
- a. Philosophy
 - b. Economics
 - c. Engineering
 - d. Sociology
7. Why does the woman suggest that the man come back during her office hours?
- a. The man doesn't have the assignment with him.
 - b. The woman doesn't have enough time now.
 - c. The woman needs time to think about the essay.
 - d. The man needs to introduce himself to the woman.
8. Which one of the following lessons should the woman learn?
- a. Check your alarm clock battery.
 - b. Apologize when you are late.
 - c. Charge your phone before bed.
 - d. Learn how to use an alarm.
9. Which of the following is most likely true?
- a. Ken has met James before on campus.
 - b. Ms. Saito informed James about Ken.
 - c. James was deep in thought when Ken entered.
 - d. Ken was surprised at what Ms. Saito said.
10. Which course is the woman most likely teaching?
- a. Developmental Studies
 - b. Urban and Regional Planning
 - c. Commercial Real Estate
 - d. History of Public Service

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PART II

Choose the best answer to each question.

Questions 11-12.

11. Why didn't the man find the woman's name on the schedule?
- a. because her name was spelled incorrectly
 - b. because he couldn't hear her name well
 - c. because she forgot to make an appointment
 - d. because he couldn't find the sign-up document
12. Why does the woman think she can take Biology 201 next term?
- a. because she has completed all the required courses
 - b. because she received an award in the Biology Olympiad
 - c. because she knows the biology professor well
 - d. because she already has enough knowledge in biology

Questions 13-14

13. Who are the man and the woman?
- a. The man works at the university library and the woman is a freshman.
 - b. The man is a sophomore and the woman is a freshman at university.
 - c. Both the man and the woman work at the university library.
 - d. Both the man and the woman are freshmen at university.
14. What does the man think about getting advice on books and papers?
- a. The man thinks that students should ask their professors first.
 - b. The man thinks that first-year students know where to get advice.
 - c. The man thinks that professors and librarians should be consulted.
 - d. The man thinks that the library is not offering enough orientations.

15. 問題削除

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PART III

Questions 16-20.

Listen to the lecture.

16. Which of the following does NOT illustrate “post-truth” thinking?
 - a. ignoring expert knowledge
 - b. disregarding scientific facts
 - c. accepting research findings
 - d. believing anecdotal evidence

17. According to the lecture, since 2008, which one of the following factors has led to people’s emotions becoming more easily inflamed?
 - a. a decrease in social inequality
 - b. an increase in the inflation rate
 - c. a decrease in economic growth
 - d. an increase in the income gap

18. Which of the following is the best description of an “echo chamber”?
 - a. an environment in which people share similar beliefs
 - b. an environment in which people communicate online
 - c. an environment in which people express new ideas
 - d. an environment in which people repeat alternative opinions

19. Why does the lecturer use the example of global warming?
 - a. to give an example of an issue which people generally agree on
 - b. to illustrate that human activity can have serious consequences
 - c. to give an example of a problem which experts often overlook
 - d. to illustrate that some people are willing to reject evidence

20. At the end of the lecture, what is suggested we do in order to be more objective?
 - a. study more about Nietzsche’s philosophy
 - b. gain exposure to more contrasting views
 - c. communicate with more like-minded people
 - d. learn more about our own perspectives

Questions 21-25.

Listen to the lecture.

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21. According to the lecture, how many refugees were from Afghanistan in 2017?
- a. 1.4 million
 - b. 2.5 million
 - c. 5.5 million
 - d. 22.5 million
22. According to the lecture, what prevents some refugees from obtaining a job in their new environment?
- a. a lack of awareness of the cultural values in the new environment
 - b. a lack of sufficient education in their home country
 - c. a lack of necessary professional work experience
 - d. a lack of proficiency in the language used in their host country
23. Which of the following is true about the project called Startup Refugees?
- a. Certain refugees arriving in Finland can receive about 33 euros per year.
 - b. Certain refugees arriving in Finland can receive about 400 euros per year.
 - c. The project provides all refugees in Finland with about 33 euros a month.
 - d. The project provides all refugees in Finland with about 400 euros a month.
24. According to the lecture, what is distinctive about the organization called Refugee Action?
- a. It assists both the refugees and their extended families.
 - b. It shares details about refugees with other organizations.
 - c. It helps other organizations offer better aid to refugees.
 - d. It identifies the potential abilities and needs of refugees.
25. How does the speaker conclude the lecture?
- a. by asking us to consider our reaction to this issue
 - b. by questioning the current refugee aid framework
 - c. by asking us to evaluate the various initiatives
 - d. by questioning the effectiveness of the response

Questions 26-30.

Listen to the lecture.

26. Approximately how many galaxies are there in the universe?
- a. 100 billion
 - b. 400 billion
 - c. 100 billion billion
 - d. 400 billion billion
27. Which of the following best describes the Fermi Paradox?
- a. Although alien contact has been made, we aren't aware of it.
 - b. Although there are many planets, there is little life.
 - c. Although alien contact is probable, there is no sign of it.
 - d. Although there is evidence of aliens, few people believe it.
28. What do the zoo hypothesis and the anthill scenario have in common?
- a. We are trapped by aliens.
 - b. Aliens are all around us.
 - c. Aliens are uninterested in us.
 - d. We are being watched by aliens.
29. What is the likely consequence of the cosmic risk explanation?
- a. Alien civilizations will never be aware of one another.
 - b. Contact with aliens will be made after a cosmic event.
 - c. Asteroids and solar flares will become more uncommon.
 - d. Mass extinctions will become increasingly frequent.
30. What are the closing remarks?
- a. a realization
 - b. a prediction
 - c. an interpretation
 - d. a speculation

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リーディングの指示

1. リーディングには、PART I と PART II の 2 つがあります。
 2. 解答時間は、PART I、PART II を合わせて 60 分です。どちらの PART、どの問いから始めてもかまいません。
 3. 各問いには 4 つの選択肢が与えられています。その中から最も適当と思われる答えを 1 つ選んで、解答カードの相当欄をマークして下さい。
 4. 終了の指示があったら直ちに鉛筆を置いて、問題冊子と解答カードを試験監督が集め終わるまで待っていて下さい。
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5. PART I では、3 つの文章をよく読んで、それぞれの文章についての 8 つの問いに答えて下さい。文章はくりかえし読んでもかまいません。
 6. PART II では、文章中の 12 の空欄を埋めて、意味が通るように文章を完成させて下さい。PART II の解答指示は 24 ページにありますので、それに従って下さい。

PART I

Text 1

1. Music occupies a significant place in our lives, but the origin of music is not fully understood. Music has generally been regarded as a product of human culture, but recently, there has been a resurgence of interest among scholars in evolutionary musicology, the study of the origin of music.
2. Almost 150 years ago, Darwin suggested the adaptive nature of music and posited that music evolved through natural selection. That is to say, musical capacity is the result of evolutionary adaptation; it is in our genes. On the other hand, some have argued that music serves no purpose in how we adapt. In fact, in 1997, Steven Pinker, a leading experimental cognitive psychologist at Harvard University, said that music is the result of general learning, shaped by our environment; it is not in our genes. He argued that music is merely a by-product of language, just as cheesecake is a by-product of our desire for sugars and fats. He wrote that compared with language, music is useless.
3. Pinker's radical perspective led to an increased interest in understanding if music is biological or cultural within various disciplines such as psychology, anthropology, biology, linguistics, and musicology. The theoretical positions in these fields generally lie between the dichotomous extremes proposed by Darwin and Pinker.
4. Many scientists who take the position that music is in our DNA have proposed possible functions of music for adaptation. One of them is sexual selection. Darwin noted that our human ancestors acquired musical skills for attracting the opposite sex. He suggested that our ancestors probably first used their voices to produce "true musical cadences" in a way that is homologous to the songs of gibbons. This early music, called protolanguage, was devoid of propositional meaning*. While there has been no clear evidence to prove this supposition, researchers recently made interesting findings in observations of non-human animals. For example, it is notable that all the primate species that duet have a monogamous social structure, even though monogamy is uncommon in primates. This suggests that individuals who can make music are able to find and keep a stable mate in order to raise their offspring together, ensuring their genes survive, which might be what happened with our earlier ancestors.

5. Another possible adaptive function of music is its role in increasing group solidarity. Robin Dunbar, a British anthropologist and evolutionary psychologist, suggested that music emerged in early humans from the necessity to maintain group harmony as these groups increased in size as they evolved. Most primates maintain their social bonds by grooming. Dunbar hypothesized that when the size of a social group of humans reached beyond the capacity of grooming, it was replaced by “vocal grooming”. In vocal grooming, one singer can form social bonds with multiple individuals at the same time without the need to use their hands. He supposed that this vocal grooming evolved into language. Yet, he confirmed that vocal grooming in its earliest stage was more comparable to song than to speech because it was deficient in propositional meaning. This feature is consistent with Darwin’s music-like protolanguage. A group with strong bonds might have been more successful in surviving and producing their next generation.
6. A third possible function of music for adaptation is its role in parent-offspring communication. From an evolutionary standpoint, for humans, there is a great importance placed on children due to lengthy birth intervals and their long childhood. As it is one of the most primitive social bonds, and is crucial for humans, the mother-infant relationship is particularly important. The success of a mother’s song in keeping her children calm and quiet, or playful and happy, could be relevant to their survival. Sandra Trehub, a developmental psychologist, revealed that six-month-old infants who watched their mothers on videotapes showed more sustained attention to their mothers’ singing than to their speaking. This finding suggests that human infants might be predisposed to music. Moreover, this caregiver hypothesis is compatible with the vocal grooming hypothesis in that the power of music in social bonding could have originated from the bonding between mothers and their infants.
7. Do these functions for adaptation debunk Pinker’s hypothesis? Today, for homo sapiens, music may not be as essential as food, but research suggests that anthropoids and protohumans might have used music for survival. This research is encouraging for proponents of the genetic basis of music. Revealing the truth underlying the origin of music might shed further light on the nature of humanity.

*propositional meaning : 命題の意味

31. According to the text, which of the following ideas would Pinker support?
 - a. Musical skills are innate in every human being.
 - b. Musical skills are processed by dedicated parts of our brains.
 - c. Musical skills are developed by cultural trial and error.
 - d. Musical skills are independent of our cultural experiences.

32. What was the direct effect of Pinker's hypothesis?
- a. Some researchers found conclusive evidence of music in our genes.
 - b. More scholars in various fields examined the origin of music.
 - c. Theories were classified into two distinct categories.
 - d. Music became a subject of study in one or two disciplines.
33. According to paragraph 4, which of the following statements is true about duetting primates?
- a. They produce more offspring.
 - b. They have stronger offspring.
 - c. They remain with one partner.
 - d. They have multiple partners.
34. According to Dunbar, which of the following is NOT true about "vocal grooming" in early humans?
- a. It is more comparable to speech than song.
 - b. It lacks propositional meaning.
 - c. It is possible without the use of hands.
 - d. It eventually replaced grooming.
35. Which one of the following reflects the caregiver hypothesis from paragraph 6?
- a. Parents use songs to make their partners laugh.
 - b. Parents use lullabies to soothe infants to sleep.
 - c. Mothers use music to relieve their stress from caregiving.
 - d. Mothers use a high-pitched voice to talk to their babies.
36. Which of the following is the best definition of the word "debunk" underlined in paragraph 7?
- a. to disagree with an opposing argument
 - b. to cite evidence in support of an idea or theory
 - c. to show the truth of something by using logic
 - d. to expose the falseness of an idea or theory
37. Which of the following is the best title for this text?
- a. The Role of Music from an Evolutionary Perspective
 - b. Cross-Cultural Evidence in Evolutionary Musicology
 - c. Confusion in the Theory of Evolutionary Music
 - d. The Evolutionary Features of Music in Prothumans
38. What is the author's likely stance on this topic?
- a. mostly supportive of Pinker's position
 - b. mostly supportive of Darwin's position
 - c. neutral towards both Pinker's and Darwin's positions
 - d. critical of both Pinker's and Darwin's positions

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1. Over the last several centuries one of the most profound developments in human history has been the adoption of capitalism. While this economic system has been praised for bringing modernity and innovation to all aspects of society in a relatively short period of time, some scholars have expressed concerns about the impact it can have on individuals and society. A German sociologist, Max Weber, offered an interesting critique in the early 20th century that is widely accepted today. Weber saw capitalism as a system of endless, calculated economic action, in which decisions are based on the principle of investment and return. In contrast to previous economic systems that emphasized acquiring wealth by force, capitalism rests on the expectation of profit and opportunity in the exchange of goods and services. The tenets of capitalism are entirely rational, built on logic and efficiency rather than morality and convention. With this in mind, Weber noticed the general tendency in modern society for its institutions and way of life to be transformed by the application of rationality. Weber called this process “rationalization”.
2. Rationalization overcomes beliefs based on superstition, emotion, or tradition, and replaces them with calculation. For instance, if consumers choose cars based on cost and fuel efficiency, they are using a rational approach. In contrast, if the same decision is based on a lucky color, they are using superstition to guide their choice. This process explains why modern societies are centered on technology, efficiency, and rational forms of administration as opposed to religion, morality, and tradition. Older forms of social organization, whether political, economic, or military, have difficulty competing with the more efficient styles of rational organization.
3. Modern food consumption epitomizes the process of rationalization. Food preparation in traditional societies is a laborious and technically inefficient process. However, modern society has transformed the process by delivering food with speed and precision. Fast-food restaurants, aiming at increasing profits, have adopted a model of total efficiency since their inception. A strict level of efficiency has been accomplished by several factors which include exerting greater control over working conditions and replacing more intricate methods with faster, less complex ones. Conditions are controlled by dividing tasks among several workers and placing them at stations which limit their movement. Efficiency is also added with new machines that rotate food, mix sauces, and stir shakes. Using simple numbering systems for menu items such as value meals, and offering a drive-through service are other innovations that have increased efficiency.

4. Rationalization is also observable in retail. Traditional stores offering subjective benefits such as personalized experience, unique charm, and contribution to the local community, are being replaced by more modern stores, which draw consumers with benefits such as lower prices and a greater selection of goods. American multinational retailing corporation, Walmart, exemplifies this transition. In recent years, Walmart has faced criticism for forcing many traditional stores across the U.S. to shut down. However, these subjective values and concerns have not limited the expansion of the enterprise, particularly in more rationalized nations, due to the public's preference for lower prices over the benefits of more traditional stores.
5. Above all, Weber believed that when rationality begins to undermine the human values it was designed to serve, rationalization becomes irrational. When this occurs, rationality will ultimately have a harmful and dehumanizing effect on society. Rigid routines and strict adherence to performance-related goals have led to a more mechanized work environment. This can be seen in the emphasis on longer working hours and production of identical goods that are distributed to a large amount of people. Weber referred to the culmination of this kind of rationalized and efficient work environment as the "iron cage". This metaphor illustrates the irony in the process of rationalization, that is, individuals are trapped by the systems of efficiency that were designed to enhance the freedom of humanity. For example, longer work hours and more specialized work are supposed to help communities by offering better goods at cheaper prices. However, workers spend less time with their families and friends, and their work becomes mundane and tiresome. Escaping the cage seems impossible because efficient rational forms of organization have become indispensable. Even if a social revolution were to occur, Weber would likely doubt that the bureaucratic and organizational structures would be replaced. Modern society is now bound to the technical and economic conditions which today determine the lives of most individuals who are born into this world.
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39. According to paragraph 1, which of the following is true of capitalism?
- a. It is similar to previous economic systems that reward innovation.
 - b. It is based on making skilled financial decisions to accumulate wealth.
 - c. It increases opportunities for making people wealthy.
 - d. It forces people to provide new services at greater profits.
40. Which of the following is the best synonym of the underlined word "tenets" in paragraph 1?
- a. perspectives
 - b. policies
 - c. proposals
 - d. principles
41. What is the purpose of paragraph 2?
- a. to clarify the concept of rationalization and its relevance
 - b. to illustrate that rationalization is a purely modern concept
 - c. to contrast early forms of rationalization with modern ones
 - d. to indicate the prevalence of rationalization in social organizations

42. According to paragraph 3, which of the following best explains the effect rationalization has had on the modern food industry?
- a. Efficiency and practicality have become more valued than worker autonomy.
 - b. Division of tasks is less likely to occur due to the replacement of humans.
 - c. Labor and technology have become more expensive in traditional societies.
 - d. New services and machines are less important than working conditions.
43. What is the irony expressed about modern stores in paragraph 4?
- a. Although people prefer modern stores, they go to traditional stores more frequently.
 - b. Despite the recent expansion of modern stores, they employ fewer people.
 - c. Although modern stores have a variety of goods, their prices are actually higher.
 - d. Despite objections to modern stores, consumers prefer the savings they offer.
44. What does the “iron cage” metaphor described in paragraph 5 represent?
- a. a feeling of discontent among people in monotonous work environments
 - b. the indispensable role that rationalization plays in the work environment
 - c. humanity’s inability to overcome the contradictions of rationalization
 - d. the inescapable truth that people will never revolt against social injustices
45. Which of the following illustrates the idea of rationalization expressed in the text?
- a. remaining loyal to a store for its friendly service
 - b. buying a work of art for its aesthetic value
 - c. donating money to charity to pay less tax
 - d. empathizing with victims of financial crisis
46. Which of the following is the best title for this text?
- a. The Acceptance of Weber’s Theory of Rationalization
 - b. Understanding Rationalization and Its Impact on Society
 - c. The Application of Rationalization in Modern Society
 - d. Understanding Issues Surrounding Consumption and Capitalism

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1. When Swiss engineer George de Mestral removed burrs from his dog's fur in 1941, his curiosity caused him to explore further. He discovered they clung to the fur with small hooks, and was inspired to create a new form of fastener, now known as Velcro. This is an example of biomimicry, which literally means "life imitation". In fact, there are many examples of scientists and engineers finding inspiration in the plants and animals around them.
2. There is one main reason scientists and engineers have turned to nature for ideas; compared to humans, nature has more experience with innovation and adaptation. Humans are relatively new to this 4.54-billion-year-old planet. If the history of the world resembled a 24-hour clock, the entire existence of homo sapiens would not transpire until the final second of the 24th hour. With billions of years of evolution, nature has been subtly adapting to planetary changes, solving each problem it encounters by completely integrating with its surroundings, and working as a cohesive unit to produce enduring results. In comparison, given the considerably shorter amount of time of our own existence, we seem to develop hasty solutions to problems, often disregarding the impact on our environment. As a result, we appear as a rogue species existing outside of nature, often creating short-term fixes at the expense of our surroundings, trampling all in our path to get ahead. The repercussions of our actions are increasing with each passing year. Noticing the damage being done, a discipline has emerged, one that has turned to nature as a mentor and model for safer and longer lasting solutions.
3. Scientists and engineers have deduced that nature adheres to fundamental rules, or laws, developed over billions of years of evolution, and have started to follow them. Some of these laws reveal that nature runs on sunlight, limits its energy use to what it needs, curbs excesses, recycles everything, cooperates with its surroundings, and fits form to function. By observing and attempting to understand these laws and how they are reflected in the life around us, we are slowly applying solutions to areas such as architecture, agriculture, communication, energy, medicine, and transportation.
4. Some designs derived from biomimicry are imitations of constructions found in nature. One such example that demonstrates energy efficiency and architectural ingenuity can be found in the Eastgate Building in Harare, Zimbabwe. Given the extreme temperatures of this African nation, ranging from 0°C at night to 40°C during the day, there is a pervasive need for climate control in buildings. Consequently, designers examined the ventilation system used in termite mounds for solutions. Small insects called termites use dirt to construct tall structures which maintain a constant internal temperature of 30°C, day and night. Building designers mimicked the mounds by varying the thickness of the Eastgate Building's walls, designing special hooded windows, and reducing heat absorption by utilizing light-coloured paints. This helps maintain a constant interior temperature without the need for expensive and eco-unfriendly air conditioning units. However, ideas in biomimicry are not limited to animal constructs.

5. Sometimes scientists and engineers are inspired by the creatures themselves for their biomimicry designs. An example in engineering is gecko tape, a new adhesive inspired by a gecko's ability to cling to walls and glass. Engineers established that geckos have tiny hairs on the bottom of their feet that generate microscopic electrodynamic adhesion. The designers imitated the hairs on a gecko's feet by using billions of tiny plastic fibres each less than a millimetre long. One square centimetre of gecko tape supports a kilogram of weight, is reusable multiple times, and is free of the harmful chemicals found in most adhesives. In addition, in the world of medical technology, engineers at Kansai University developed a needle that imitates the way the moving parts of a mosquito's mouth painlessly glide into skin. Thus far, their tests have produced encouraging, pain-free results. These examples illustrate that when ideas are borrowed from nature, they often influence different areas of design, solving problems cleanly, safely, and sustainably.
6. As people cultivate an appreciation of the genius of the natural world, they might be more inclined to protect it. Biomimicry represents a bright light in an increasingly dark situation. In a time when environmental warnings resonate across the globe, we can take hope in the fact that more resources and effort are being devoted to biomimicry. Using nature as a teacher might provide safer and cleaner solutions that help us integrate more seamlessly into our surrounding ecosystems. The more we consult nature for help, the more we can understand how important it is to safeguard it.
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47. What is the main function of paragraph 1?
- a. to introduce the reader to an interesting concept
 - b. to contrast two viewpoints on design ideas
 - c. to explain the effectiveness of a type of fastener
 - d. to endorse an innovative product to the reader
48. Why does the author use the 24-hour clock metaphor?
- a. to indicate that time moves more slowly for nature
 - b. to illustrate the relatively short history of humanity
 - c. to demonstrate nature's ability to evolve throughout history
 - d. to acknowledge that humans require more time to develop
49. The phrase "rogue species" underlined in paragraph 2 is closest in meaning to which of the following?
- a. a group of beings who are not fully integrated into their environment
 - b. a group of beings who look for lasting solutions to short-term problems
 - c. a group of beings who use ingenuity to overcome difficulties in the short-term
 - d. a group of beings who do not have the ability to co-exist with their own kind

50. What is the main idea of paragraph 3?
- a. Natural laws are modified by scientists and engineers.
 - b. Natural processes evolve slowly over time.
 - c. Scientists and engineers utilize principles found in nature.
 - d. Fundamental principles are observed in nature.
51. Which law of nature is the Eastgate Building following?
- a. Nature recycles everything.
 - b. Nature runs on sunlight.
 - c. Nature cooperates with its surroundings.
 - d. Nature fits form to function.
52. Which is NOT a characteristic of gecko tape?
- a. It can cling to glass surfaces and walls using electrodynamic adhesion.
 - b. It can support heavily weighted objects with a limited application.
 - c. It can stick to objects in the same way as tiny hairs on a gecko's feet.
 - d. It can be removed and reused numerous times with chemical adhesion.
53. According to the text, which scenario is the most likely to occur without the use of biomimicry?
- a. Life on earth will develop in a fashion never witnessed before.
 - b. Society will progress in a manner that is uncooperative with nature.
 - c. People will make use of their surroundings for solutions.
 - d. The environment will cease to issue warnings across the globe.
54. What is the main message of the text?
- a. Nature emulates its surroundings to solve complex problems.
 - b. Humans develop solutions in response to problems in nature.
 - c. Nature provides a basic template for inventive ideas.
 - d. Humans solve problems through research and development.

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PART II

次の文章には12の空欄 (55-66) があり、25ページに各空欄に対する 4つの選択肢が与えられています。各空欄に最も適当と思われる答えを 1つ選び、解答用カードの相当欄をマークして下さい。

In order to study in a language other than your first, what kind of language proficiency is required? Is being fluent in conversation enough? Or are additional academic language skills required?

Jim Cummins, a linguist specializing in bilingualism, (55) _____ the progress of Swedish immigrants' English proficiency shortly after their arrival in the U.S. He noticed that although younger students sounded fluent, older Swedish children (56) _____ to be better at acquiring the English needed for learning school subjects. This observation led to the belief that surface fluency and academic proficiency are different.

Cummins eventually began to describe surface fluency as Basic Interpersonal Conversation Skills (BICS), while Cognitive Academic Language Proficiency (CALP) was used to explain higher level proficiency. BICS are language skills needed in day-to-day social situations such as making friends and joining in games; they help people to communicate socially with others. These social interactions are context embedded; however, the skills demanded in these situations are not specialized nor cognitively demanding. (57) _____, CALP refers to formal academic ability: the language skills needed to master course content. This level of language learning is essential for students to succeed in school. Part of the difficulty of academic language acquisition is that it includes more than merely understanding specialized vocabulary. Skills such as comparison, classification, synthesis, evaluation, and inference are also needed. This learning is less context (58) _____, and typically presented in academic settings. CALP is more challenging to develop than BICS because the language and concepts become more (59) _____ demanding in higher grades. For example, instructors at higher grades tend to focus on critical thinking and encourage students to reflect on social realities. Therefore, in order to perform well on academic tasks within the classroom and progress successfully through the grades, students need to acquire a (60) _____ of academic language and use it effectively.

Other patterns began to emerge as Cummins continued his work with bilingual children, helping to clarify the different stages in second language acquisition. One particularly significant study conducted in 1981 revealed a detailed (61) _____ for the development of BICS and CALP. Most students became fluent in BICS in English within two years of their arrival, whereas it took much longer, between five and seven years, for bilingual students to approach normal levels of CALP. This was a significant finding (62) _____ the language programs that were in place in the 1980s and 1990s. During this period, bilingual students were rushed through English as a second language or bilingual programs into (63) _____ academic programs, since educators mistakenly believed that language learners with proficient BICS levels had reached full mastery of the English language. (64) _____, many of the bilingual students did not receive sufficient support to help them understand instruction and continue to develop their English academic skills. Additionally, they

experienced academic difficulties in their regular classes, which (65) _____ their academic progress and therefore placed them at a disadvantage after graduation. Cummins attributed this problem to poor means of assessment that failed to distinguish between BICS and CALP. One of the greatest benefits of the BICS/CALP distinction was that it reduced the inappropriate use of standardized tests and helped educators to (66) _____ successfully to prevent improper labeling and placement of bilingual students.

According to Cummins, the BICS/CALP distinction was proposed as a very specific conceptual distinction that has important implications for policy and practice, not as an overall theory of language proficiency. Educators should help first and second language learners to develop CALP and assess their language proficiency not only in terms of basic interpersonal communication skills, but also cognitive academic language proficiency.

55	a. examined b. examines c. had examined d. is examining	56	a. appeared b. claimed c. tried d. wanted	57	a. In addition b. In contrast c. In particular d. In theory
58	a. dependent b. determined c. favorable d. referential	59	a. affectively b. cognitively c. logically d. profoundly	60	a. basis b. command c. proficiency d. skill
61	a. plan b. schedule c. tendency d. timeline	62	a. by considering b. consider c. considering d. to consider	63	a. acclaimed b. efficient c. fast-paced d. mainstream
64	a. All the same b. As a result c. In other words d. To sum up	65	a. decreased b. improved c. limited d. protected	66	a. inquire b. instruct c. interact d. intervene

