KMF考满分
留学考生的在线课堂

Daily Homework 2~10

KMF考满分
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DAY2 真题练习

READING PASSAGE 3

You should spend about 20 minutes on **Questions 27-40**, which are based on Reading Passage 3 on the following pages.

Climate Change and the Inuit

The threat posed by climate change in the Arctic and the problems faced by Canada's Inuit people

A Unusual incidents are being reported across the Arctic. Inuit families going off on snowmobiles to prepare their summer hunting camps have found themselves cut off from home by a sea of mud, following early thaws. There are reports of igloos losing their insulating properties as the snow drips and refreezes, of lakes draining into the sea as permafrost melts, and sea ice breaking up earlier than usual, carrying seals beyond the reach of hunters. Climate change may still be a rather abstract idea to most of us, but in the Arctic it is already having dramatic effects - if summertime ice continues to shrink at its present rate, the Arctic Ocean could soon become virtually ice-free in summer. The knock-on effects are likely to include more warming, cloudier skies, increased precipitation and higher sea levels. Scientists are increasingly keen to find out what's going on because they consider the Arctic the 'canary in the mine' for global warming - a warning of what's in store for the rest of the world.

B For the Inuit the problem is urgent. They live in precarious balance with one of the toughest environments on earth. Climate change, whatever its causes, is a direct threat to their way of life. Nobody knows the Arctic as well as the locals, which is why they are not content simply to stand back and let outside experts tell them what's happening. In Canada, where the Inuit people are jealously guarding their hard-won autonomy in the country's newest territory, Nunavut, they believe their best hope of survival in this changing environment lies in combining their ancestral knowledge with the best of modern science. This is a challenge in itself.

C The Canadian Arctic is a vast, treeless polar desert that's covered with snow for most of the year. Venture into this terrain and you get some idea of the hardships facing anyone who calls this home. Farming is out of the question and nature offers meagre pickings. Humans first settled in the Arctic a mere 4,500 years ago, surviving by exploiting sea mammals and fish. The environment tested them to the limits: sometimes the colonists were successful, sometimes they failed and vanished. But around a thousand years ago, one group emerged that was uniquely well adapted to cope with the Arctic environment. These Thule people moved in from Alaska, bringing kayaks, sleds, dogs, pottery and iron tools. They are the ancestors of today's Inuit people.

D Life for the descendants of the Thule people is still harsh. Nunavut is 1. 9 million square kilometres of rock and ice, and a handful of islands around the North Pole. It's currently home to 2,500 people, all but a handful of them indigenous Inuit. Over the past 40 years, most have abandoned their nomadic ways and settled in the territory's 28 isolated communities, but they still rely heavily on nature to provide food and clothing. Provisions available in local shops have to be flown into Nunavut on one of the most costly air networks in the world, or brought by supply ship during the few ice-free weeks of summer. It would cost a family around f7,000 a year to replace meat they obtained themselves through hunting with imported meat. Economic opportunities are

scarce, and for many people state benefits are their only income.

E While the Inuit may not actually starve if hunting and trapping are curtailed by climate change, there has certainly been an impact on people's health. Obesity, heart disease and diabetes are beginning to appear in a people for whom these have never before been problems. There has been a crisis of identity as the traditional skills of hunting, trapping and preparing skins have begun to disappear. In Nunavut's 'igloo and email' society, where adults who were born in igloos have children who may never have been out on the land, there's a high incidence of depression.

F With so much at stake, the Inuit are determined to play a key role in teasing out the mysteries of climate change in the Arctic. Having survived there for centuries, they believe their wealth of traditional knowledge is vital to the task. And Western scientists are starting to draw on this wisdom, increasingly referred to as 'Inuit Qaujimajatuqangit', or IQ. 'In the early days scientists ignored us when they came up here to study anything. They just figured these people don't know very much so we won't ask them,' says John Amagoalik, an Inuit leader and politician. 'But in recent years IQ has had much more credibility and weight.' In fact it is now a requirement for anyone hoping to get permission to do research that they consult the communities, who are helping to set the research agenda to reflect their most important concerns. They can turn down applications from scientists they believe will work against their interests, or research projects that will impinge too much on their daily lives and traditional activities.

G Some scientists doubt the value of traditional knowledge because the occupation of the Arctic doesn't go back far enough. Others, however, point out that the first weather stations in the far north date back just 50 years. There are still huge gaps in our environmental knowledge, and despite the scientific onslaught, many predictions are no more than best guesses. IQ could help to bridge the gap and resolve the tremendous uncertainty about how much of what we're seeing is

natural capriciousness and how much is the consequence of human activity.

Questions 33-40

Complete the summary of paragraphs C and D below.

Choose **NO MORE THAN TWO WORDS** from paragraphs C and D for each answer.

Write your answers in boxes 33-40 on your answer sheet.

If you visit the Canadian Arctic, you immediately appreciate the problems faced by people for whom this is home. It would clearly be impossible for the people to engage in 33…..... as a means of supporting themselves. For thousands of years they have had to rely on catching 34…..... and 35…..... as a means of sustenance.

The harsh surroundings saw many who tried to settle there pushed to their limits, although some were successful. The 36…..... people were an example of the latter and for them the environment did not prove unmanageable. For the present inhabitants, life continues to be a struggle. The territory of Nunavut consists of little more than ice, rock and a few 37…..... In recent years, many of them have been obliged to give up their 38…..... lifestyle, but they continue to depend mainly on 39…..... for their food and clothes. 40…..... produce is particularly expensive.

READING PASSAGE 3

You should spend about 20 minutes on **Questions 27-40**, which are based on Reading Passage 3 on the following pages.

Persistent bullying is one of the worst experiences a child can face. How can it be prevented? Peter Smith, Professor of Psychology at the University of Sheffield, directed the Sheffield Anti-Bullying Intervention Project, funded by the Department for Education. Here he reports on his findings.

A Bullying can take a variety of forms, from the verbal - being taunted or called hurtful names - to the physical - being kicked or shoved - as well as indirect forms, such as being excluded from social groups. A survey I conducted with Irene Whitney found that in British primary schools up to a quarter of pupils reported experience of bullying, which in about one in ten cases was persistent. There was less bullying in secondary schools, with about one in twenty-five suffering persistent bullying, but these cases may be particularly recalcitrant.

B Bullying is clearly unpleasant, and can make the child experiencing it feel unworthy and depressed. In extreme cases it can even lead to suicide, though this is thankfully rare. Victimised pupils are more likely to experience difficulties with interpersonal relationships as adults, while children who persistently bully are more likely to grow up to be physically violent, and convicted of anti-social offences.

C Until recently, not much was known about the topic, and little help was available to teachers to deal with bullying. Perhaps as a consequence, schools would often deny the problem. 'There is no bullying at this school' has been a common refrain,

almost certainly untrue. Fortunately more schools are now saying: 'There is not much bullying here, but when it occurs we have a clear policy for dealing with it. '

D Three factors are involved in this change. First is an awareness of the severity of the problem. Second, a number of resources to help tackle bullying have become available in Britain. For example, the Scottish Council for Research in Education produced a package of materials, Action Against Bullying, circulated to all schools in England and Wales as well as in Scotland in summer 1992, with a second pack, Supporting Schools Against Bullying, produced the following year. In Ireland, Guidelines on Countering Bullying Behaviour in Post-Primary Schools was published in 1993. Third, there is evidence that these materials work, and that schools can achieve something. This comes from carefully conducted 'before and after' evaluations of interventions in schools, monitored by a research team. In Norway, after an intervention campaign was introduced nationally, an evaluation of forty-two schools suggested that, over a two-year period, bullying was halved. The Sheffield investigation, which involved sixteen primary schools and seven secondary schools, found that most schools succeeded in reducing bullying.

E Evidence suggests that a key step is to develop a policy on bullying, saying clearly what is meant by bullying, and giving explicit guidelines on what will be done if it occurs, what records will be kept, who will be informed, what sanctions will be employed. The policy should be developed through consultation, over a period of time - not just imposed from the head teacher's office ! Pupils, parents and staff should feel they have been involved in the policy, which needs to be disseminated and implemented effectively.

Other actions can be taken to back up the policy. There are ways of dealing with the topic through the curriculum, using video, drama and literature. These are useful for raising awareness, and can best be tied in to early phases of development, while the school is starting to discuss the issue of bullying. They are also useful in renewing the policy for new pupils, or revising it in the light of experience. But curriculum work alone may only have short-term effects; it should be an addition to policy work, not a substitute.

There are also ways of working with individual pupils, or in small groups. Assertiveness training for pupils who are liable to be victims is worthwhile, and certain approaches to group bullying such as ‘no blame', can be useful in changing the behaviour of bullying pupils without confronting them directly, although other sanctions may be needed for those who continue with persistent bullying.

Work in the playground is important, too. One helpful step is to train lunchtime supervisors to distinguish bullying from playful fighting, and help them break up conflicts. Another possibility is to improve the playground environment, so that pupils are less likely to be led into bullying from boredom or frustration. F With these developments, schools can expect that at least the most serious kinds of bullying can largely be prevented. The more effort put in and the wider the whole school involvement, the more substantial the results are likely to be. The reduction in bullying - and the consequent improvement in pupil happiness - is surely a worthwhile objective.

Questions 35-39

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 35-39 on your answer sheet.

What steps should schools take to reduce bullying?

The most important step is for the school authorities to produce a 35..... which makes the school's attitude towards bullying quite clear. It should include detailed 36..... as to how the school and its staff will react if bullying occurs.

In addition, action can be taken through the 37..... This is particularly useful in the early part of the process, as a way of raising awareness and encouraging discussion. On its own, however, it is insufficient to bring about a permanent solution.

Effective work can also be done with individual pupils and small groups. For example, potential 38..... of bullying can be trained to be more self-confident. Or again, in dealing with group bullying, a 'no blame' approach, which avoids confronting the offender too directly, is often effective.

Playground supervision will be more effective if members of staff are trained to recognise the difference between bullying and mere 39..... .

READING PASSAGE 2

You should spend about 20 minutes on **Questions 14-26**, which are based on Reading Passage 3 on the following pages.

A Internationally, 'giftedness' is most frequently determined by a score on a general intelligence test, known as an IQ test, which is above a chosen cutoff point, usually at around the top 2-5%. Children's educational environment contributes to the IQ score and the way intelligence is used. For example, a very close positive relationship was found when children's IQ scores were compared with their home educational provision (Freeman, 2010). The higher the children's IQ scores, especially over IQ 130, the better the quality of their educational backup, measured in terms of reported verbal interactions with parents, number of books and activities in their home etc. Because IQ tests are decidedly influenced by what the child has learned, they are to some extent measures of current achievement based on age-norms; that is, how well the children have learned to manipulate their knowledge and know-how within the terms of the test. The vocabulary aspect, for example, is dependent on having heard those words. But IQ tests can neither identify the processes of learning and thinking nor predict creativity.

B Excellence does not emerge without appropriate help. To reach an exceptionally high standard in any area very able children need the means to learn, which includes material to work with and focused challenging tuition – and the encouragement to follow their dream. There appears to be a qualitative difference in the way the intellectually highly able think, compared with more average-ability or older pupils, for whom external regulation by the teacher often compensates for lack of internal

regulation. To be at their most effective in their self-regulation, all children can be helped to identify their own ways of learning – metacognition – which will include strategies of planning, monitoring, evaluation, and choice of what to learn. Emotional awareness is also part of metacognition, so children should be helped to be aware of their feelings around the area to be learned, feelings of curiosity or confidence, for example.

C High achievers have been found to use self-regulatory learning strategies more often and more effectively than lower achievers, and are better able to transfer these strategies to deal with unfamiliar tasks. This happens to such a high degree in some children that they appear to be demonstrating talent in particular areas. Overviewing research on the thinking process of highly able children, (Shore and Kanevsky, 1993) put the instructor's problem succinctly: 'If they [the gifted] merely think more quickly, then we need only teach more quickly. If they merely make fewer errors, then we can shorten the practice'. But of course, this is not entirely the case; adjustments have to be made in methods of learning and teaching, to take account of the many ways individuals think.

D Yet in order to learn by themselves, the gifted do need some support from their teachers. Conversely, teachers who have a tendency to 'overdirect' can diminish their gifted pupils' learning autonomy. Although 'spoon-feeding' can produce extremely high examination results, these are not always followed by equally impressive life successes. Too much dependence on the teacher risks loss of autonomy and motivation to discover. However, when teachers help pupils to reflect on their own learning and thinking activities, they increase their pupils' self-regulation. For a young child, it may

be just the simple question 'What have you learned today?' which helps them to recognize what they are doing. Given that a fundamental goal of education is to transfer to control of learning from teachers to pupils, improving pupils' learning to learn techniques should be a major outcome of the school experience, especially for the highly competent. There are quite a number of new methods which can help, such as child-initiated learning, ability-peer tutoring, etc. Such practices have been found to be particularly useful for bright children from deprived areas.

E But scientific progress is not all theoretical, knowledge is also vital to outstanding performance: individuals who know a great deal about a specific domain will achieve at a higher level than those who do not (Elshout, 1995). Research with creative scientists by Simonton (1988) brought him to the conclusion that above a certain high level, characteristics such as independence seemed to contribute more to reaching the highest levels of expertise than intellectual skills, due to the great demands of effort and time needed for learning and practice. Creativity in all forms can be seen as expertise mixed with a high level of motivation (Weisberg, 1993).

F To sum up, learning is affected by emotions of both the individual and significant others. Positive emotions facilitate the creative aspects of learning and negative emotions inhibit it. Fear, for example, can limit the development of curiosity, which is a strong force in scientific advance, because it motivates problem-solving behaviour. In Boekaerts' (1991) review of emotion in the learning of very high IQ and highly achieving children, she found emotional forces in harness. They were not only curious, but often had a strong desire to control their environment, improve their learning efficiency, and increase their own learning resources.

Questions 23-26

Complete the sentences below.

Choose NO MORE THAN TWO WORDS from the passage for each answer.

Write your answers in boxes 23-26 on your answer sheet.

23 One study found a strong connection between children's IQ and the availability of ..... and ..... at home.

24 Children of average ability seem to need more direction from teachers because they do not have .....

25 Metacognition involves children understanding their own learning strategies, as well as developing .....

26 Teachers who rely on what is known as ..... often produce sets of impressive grades in class tests.

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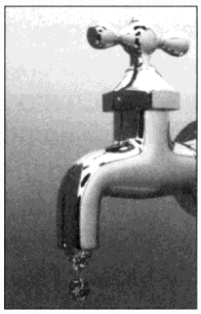
DAY3 真题练习

READING PASSAGE 3

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 on the following pages.

MAKING EVERYDROP COUNT



A The history of human civilisation is entwined with the history of the ways we have learned to manipulate water resources. As towns gradually expanded, water was brought from increasingly remote sources, leading to sophisticated engineering efforts such as dams and aqueducts. At the height of the Roman Empire, nine major systems, with an innovative layout of pipes and well-built sewers, supplied the occupants of Rome with as much water per person as is provided in many parts of the industrial world today.

B During the industrial revolution and population explosion of the 19th and 20th centuries, the demand for water rose dramatically. Unprecedented construction of tens of thousands of monumental engineering projects designed to control floods, protect clean water supplies, and provide water for irrigation and hydropower brought great benefits to hundreds of millions of people. Food production has kept pace with soaring populations mainly because of the expansion of

artificial irrigation systems that make possible the growth of 40 % of the world's food. Nearly one fifth of all the electricity generated worldwide is produced by turbines spun by the power of falling water.

C Yet there is a dark side to this picture: despite our progress, half of the world's population still suffers, with water services inferior to those available to the ancient Greeks and Romans. As the United Nations report on access to water reiterated in November 2001, more than one billion people lack access to clean drinking water some two and a half billion do not have adequate sanitation services. Preventable water-related diseases kill an estimated 10,000 to 20,000 children every day, and the latest evidence suggests that we are falling behind in efforts to solve these problems.

D The consequences of our water policies extend beyond jeopardising human health. Tens of millions of people have been forced to move from their homes - often with little warning or compensation - to make way for the reservoirs behind dams. More than 20 % of all freshwater fish species are now threatened or endangered because dams and water withdrawals have destroyed the free-flowing river ecosystems where they thrive. Certain irrigation practices degrade soil quality and reduce agricultural productivity. Groundwater aquifers* are being pumped down faster than they are naturally replenished in parts of India, China, the USA and elsewhere. And disputes over shared water resources have led to violence and continue to raise local, national and even international tensions.

* underground stores of water

E At the outset of the new millennium, however, the way resource planners think about water is beginning to change. The focus is slowly shifting back to the provision of basic human and

environmental needs as top priority - ensuring 'some for all,' instead of 'more for some'. Some water experts are now demanding that existing infrastructure be used in smarter ways rather than building new facilities, which is increasingly considered the option of last, not first, resort. This shift in philosophy has not been universally accepted, and it comes with strong opposition from some established water organisations. Nevertheless, it may be the only way to address successfully the pressing problems of providing everyone with clean water to drink, adequate water to grow food and a life free from preventable water-related illness.

F Fortunately - and unexpectedly - the demand for water is not rising as rapidly as some predicted. As a result, the pressure to build new water infrastructures has diminished over the past two decades. Although population, industrial output and economic productivity have continued to soar in developed nations, the rate at which people withdraw water from aquifers, rivers and lakes has slowed. And in a few parts of the world, demand has actually fallen.

G What explains this remarkable turn of events? Two factors: people have figured out how to use water more efficiently, and communities are rethinking their priorities for water use. Throughout the first three-quarters of the 20th century, the quantity of freshwater consumed per person doubled on average; in the USA, water withdrawals increased tenfold while the population quadrupled. But since 1980, the amount of water consumed per person has actually decreased, thanks to a range of new technologies that help to conserve water in homes and industry. In 1965, for instance, Japan used approximately 13 million gallons* of water to produce $1 million of commercial output; by 1989 this had dropped to 3. 5 million gallons (even accounting for inflation) - almost a quadrupling of water productivity. In the USA, water withdrawals have fallen by more than 20 % from their peak in 1980.

H On the other hand, dams, aqueducts and other kinds of infrastructure will still have to be

built, particularly in developing countries where basic human needs have not been met. But such projects must be built to higher specifications and with more accountability to local people and their environment than in the past. And even in regions where new projects seem warranted, we must find ways to meet demands with fewer resources, respecting ecological criteria and to a smaller budget.

* 1 gallon: 4. 546 litres

Questions 21-26

Do the following statements agree with the information given in Reading Passage 2?

In boxes 21-26 on your answer sheet, write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

21 Water use per person is higher in the industrial world than it was in Ancient Rome.

22 Feeding increasing populations is possible due primarily to improved irrigation systems.

23 Modern water systems imitate those of the ancient Greeks and Romans.

24 Industrial growth is increasing the overall demand for water.

25 Modern technologies have led to a reduction in domestic water consumption.

26 In the future, governments should maintain ownership of water infrastructures.

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

A neuroscientist reveals how to think differently

In the last decade a revolution has occurred in the way that scientists think about the brain. We now know that the decisions humans make can be traced to the firing patterns of neurons in specific parts of the brain. These discoveries have led to the field known as neuroeconomics, which studies the brain's secrets to success in an economic environment that demands innovation and being able to do things differently from competitors. A brain that can do this is an iconoclastic one. Briefly, an iconoclast is a person who does something that others say can't be done.

This definition implies that iconoclasts are different from other people, but more precisely, it is their brains that are different in three distinct ways: perception, fear response, and social intelligence. Each of these three functions utilizes a different circuit in the brain. Naysayers might suggest that the brain is irrelevant, that thinking in an original, even revolutionary, way is more a matter of personality than brain function. But the field of neuroeconomics was born out of the realization that the physical workings of the brain place limitations on the way we make decisions. By understanding these constraints, we begin to understand why some people march to a different drumbeat.

The first thing to realize is that the brain suffers from limited resources. It has a fixed energy budget, about the same as a 40 watt light bulb, so it has evolved to work as efficiently as possible. This is where most people are impeded from being an iconoclast. For example, when confronted with information streaming from the eyes, the brain will interpret this information in the quickest way possible. Thus it will draw on both past experience and any other source of information, such as what other people say, to make sense of what it is seeing. This happens all the time. The brain takes

shortcuts that work so well we are hardly ever aware of them. We think our perceptions of the world are real, but they are only biological and electrical rumblings. Perception is not simply a product of what your eyes or ears transmit to your brain. More than the physical reality of photons or sound waves, perception is a product of the brain.

Perception is central to iconoclasm. Iconoclasts see things differently to other people. Their brains do not fall into efficiency pitfalls as much as the average person's brain. Iconoclasts, either because they were born that way or through learning, have found ways to work around the perceptual shortcuts that plague most people. Perception is not something that is hardwired into the brain. It is a learned process, which is both a curse and an opportunity for change. The brain faces the fundamental problem of interpreting physical stimuli from the senses. Everything the brain sees, hears, or touches has multiple interpretations. The one that is ultimately chosen is simply the brain's best theory. In technical terms, these conjectures have their basis in the statistical likelihood of one interpretation over another and are heavily influenced by past experience and, importantly for potential iconoclasts, what other people say.

The best way to see things differently to other people is to bombard the brain with things it has never encountered before. Novelty releases the perceptual process from the chains of past experience and forces the brain to make new judgments. Successful iconoclasts have an extraordinary willingness to be exposed to what is fresh and different. Observation of iconoclasts shows that they embrace novelty while most people avoid things that are different.

The problem with novelty, however, is that it tends to trigger the brain's fear system. Fear is a major impediment to thinking like an iconoclast and stops the average person in his tracks. There are many types of fear, but the two that inhibit iconoclastic thinking and people generally find difficult to deal with are fear of uncertainty and fear of public ridicule. These may seem like trivial phobias. But fear

of public speaking, which everyone must do from time to time, afflicts one-third of the population. This makes it too common to be considered a mental disorder. It is simply a common variant of human nature, one which iconoclasts do not let inhibit their reactions.

Finally, to be successful iconoclasts, individuals must sell their ideas to other people. This is where social intelligence comes in. Social intelligence is the ability to understand and manage people in a business setting. In the last decade there has been an explosion of knowledge about the social brain and how the brain works when groups coordinate decision making. Neuroscience has revealed which brain circuits are responsible for functions like understanding what other people think, empathy, fairness, and social identity. These brain regions play key roles in whether people convince others of their ideas. Perception is important in social cognition too. The perception of someone's enthusiasm, or reputation, can make or break a deal. Understanding how perception becomes intertwined with social decision making shows why successful iconoclasts are so rare.

Iconoclasts create new opportunities in every area from artistic expression to technology to business. They supply creativity and innovation not easily accomplished by committees. Rules aren't important to them. Iconoclasts face alienation and failure, but can also be a major asset to any organization. It is crucial for success in any field to understand how the iconoclastic mind works.

Questions 32-37

Do the following statements agree with the claims of the writer in Reading Passage 3?

In boxes 32-37 on your answer sheet, write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

32 Exposure to different events forces the brain to think differently.

33 Iconoclasts are unusually receptive to new experiences.

34 Most people are too shy to try different things.

35 If you think in an iconoclastic way, you can easily overcome fear.

36 When concern about embarrassment matters less, other fears become irrelevant.

37 Fear of public speaking is a psychological illness.

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

Neuroaesthetics

An emerging discipline called neuroaesthetics is seeking to bring scientific objectivity to the study of art, and has already given us a better understanding of many masterpieces. The blurred imagery of Impressionist paintings seems to stimulate the brain's amygdala, for instance. Since the amygdala plays a crucial role in our feelings, that finding might explain why many people find these pieces so moving.

Could the same approach also shed light on abstract twentieth-century pieces, from Mondrian's geometrical blocks of colour, to Pollock's seemingly haphazard arrangements of splashed paint on canvas? Sceptics believe that people claim to like such works simply because they are famous. We certainly do have an inclination to follow the crowd. When asked to make simple perceptual decisions such as matching a shape to its rotated image, for example, people often choose a definitively wrong answer if they see others doing the same. It is easy to imagine that this mentality would have even more impact on a fuzzy concept like art appreciation, where there is no right or wrong answer.

Angelina Hawley-Dolan, of Boston College, Massachusetts, responded to this debate by asking volunteers to view pairs of paintings - either the creations of famous abstract artists or the doodles of infants, chimps and elephants. They then had to judge which they preferred. A third of the paintings were given no captions, while many were labelled incorrectly - volunteers might think they were viewing a chimp's messy

brushstrokes when they were actually seeing an acclaimed masterpiece. In each set of trials, volunteers generally preferred the work of renowned artists, even when they believed it was by an animal or a child. It seems that the viewer can sense the artist's vision in paintings, even if they can't explain why.

Robert Pepperell, an artist based at Cardiff University, creates ambiguous works that are neither entirely abstract nor dearly representational. In one study, Pepperell and his collaborators asked volunteers to decide how 'powerful' they considered an artwork to be, and whether they saw anything familiar in the piece. The longer they took to answer these questions, the more highly they rated the piece under scrutiny, and the greater their neural activity. It would seem that the brain sees these images as puzzles, and the harder it is to decipher the meaning, the more rewarding is the moment of recognition.

And what about artists such as Mondrian, whose paintings consist exclusively of horizontal and vertical lines encasing blocks of colour? Mondrian's works are deceptively simple, but eye-tracking studies confirm that they are meticulously composed, and that simply rotating a piece radically changes the way we view it. With the originals, volunteers' eyes tended to stay longer on certain places in the image, but with the altered versions they would fit across a piece more rapidly. As a result, the volunteers considered the altered versions less pleasurable when they later rated the work.

In a similar study, Oshin Vartanian of Toronto University asked volunteers to compare original paintings with ones which he had altered by moving objects around within the frame. He found that almost everyone preferred the original, whether it was a Van Gogh still life or an abstract by Miró. Vartanian also found that changing the composition of

the paintings reduced activation in those brain areas linked with meaning and interpretation.

In another experiment, Alex Forsythe of the University of Liverpool analysed the visual intricacy of different pieces of art, and her results suggest that many artists use a key level of detail to please the brain. Too little and the work is boring, but too much results in a kind of 'perceptual overload', according to Forsythe. What's more, appealing pieces both abstract and representational, show signs of 'fractals'- repeated motifs recurring in different scales. Fractals are common throughout nature, for example in the shapes of mountain peaks or the branches of trees. It is possible that our visual system, which evolved in the great outdoors, finds it easier to process such patterns.

It is also intriguing that the brain appears to process movement when we see a handwritten letter, as if we are replaying the writer's moment of creation. This has led some to wonder whether Pollock's works feel so dynamic because the brain reconstructs the energetic actions the artist used as he painted. This may be down to our brain's 'mirror neurons', which are known to mimic others' actions. The hypothesis will need to be thoroughly tested, however. It might even be the case that we could use neuroaesthetic studies to understand the longevity of some pieces of artwork. While the fashions of the time might shape what is currently popular, works that are best adapted to our visual system may be the most likely to linger once the trends of previous generations have been forgotten.

It's still early days for the field of neuroaesthetics - and these studies are probably only a taste of what is to come. It would, however, be foolish to reduce art appreciation to a set of scientific laws. We shouldn't underestimate the importance of the style of a

particular artist, their place in history and the artistic environment of their time. Abstract art offers both a challenge and the freedom to play with different interpretations. In some ways, it's not so different to science, where we are constantly looking for systems and decoding meaning so that we can view and appreciate the world in a new way.

Questions 34-39

Do the following statements agree with the views of the writer in Reading Passage 3?

In boxes 34-39 on your answer sheet, write

YES the statement agrees with the views of the writer

NO the statement contradicts the views of the writer

NOT GIVEN if there is no information on this

34 Forsythe's findings contradicted previous beliefs on the function of fractals' in art.

35 Certain ideas regarding the link between ‘mirror neurons' and art appreciation require further verification.

36 People's taste in paintings depends entirely on the current artistic trends of the period.

37 Scientists should seek to define the precise rules which govern people's reactions to works of art.

38 A appreciation should always involve taking into consideration the cultural context in which an artist worked.

39 It is easier to find meaning in the field of science than in that of art.

G类

SECTION 1 Questions 1-14

Read the text below and answer Questions 1-8.

Consumer advice on buying shoes

If you have a problem with shoes you've recently bought, follow this four-step plan.

Step I

Go back to the shop with proof of purchase. If you return faulty shoes at once, you have a right to insist on a refund. It is also likely that you will get one if you change your mind about the shoes and take them back immediately. But, if you delay or you've had some use out of the shoes, the shop may not give you all your money back. It depends on the state of the shoes and how long you've had them.

If you are offered a credit note, you don't have to accept it. If you accept it, you will usually not be able to exchange it for cash later on. So, you may be left with an unwanted credit note, if you cannot find any other shoes you want from the shop.

The shop may want to send the shoes back to head office for inspection. This is fair and could help to sort things out. But don't be put off by the shop which claims that it's the manufacturer's responsibility. This isn't true. It's the shop's legal duty to put things right.

Step 2

If you don't seem to be getting anywhere, you can get help. Free advice is available from a Citizens Advice Bureau (get the address from your telephone book), or from a local Trading Standards Department. Again, consult the telephone directory under County, Regional or Borough Council. All these departments have people who can advise you about faulty goods and what to do with them.

Step 3

Most shops are covered by the Footwear Code of Practice. If the shop you are dealing with is covered, you can ask for the shoes to be sent to the Footwear Testing Centre for an independent opinion. The shop has to agree with whatever the resulting report says. There is a charge of £21. You pay £7 and the shop pays the rest (including postage).

Step 4

As a last resort, you can take your case to court. This is not as difficult as it sounds. The small claims procedure for amounts up to £I OOO (£750 in Scotland) is a cheap, easy and informal way of taking legal action.

The relevant forms are available from your nearest County Court or, in Scotland, the Sheriff Court. You can get advice and leaflets from the Citizens Advice Bureau. Alternatively, some bookshops sell advice packs which contain the relevant forms.

Questions 1-8

Do the following statements agree with the information given in the text on page 117?

In boxes 1-8 on your answer sheet, write

TRUE	if the statement agrees with the information
FALSE	if the statement contradicts the information
NOT GIVEN	if there is no information on this

1 If you return unwanted shoes straightaway, with a receipt, the shop will probably give you a refund.

2 You are advised to accept a credit note if you are offered one.

3 The factory is responsible for replacing unwanted shoes.

4 You can ask any shoe shop to send shoes to the Footwear Testing Centre.

5 Shops prefer to give a credit note rather than change shoes.

6 The customer contributes to the cost of having faulty shoes tested.

7 The procedure for making a legal claim is easier in Scotland.

8 Legal advice and forms can be bought from certain shops.

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DAY4 真题练习

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

Neuroaesthetics

An emerging discipline called neuroaesthetics is seeking to bring scientific objectivity to the study of art, and has already given us a better understanding of many masterpieces. The blurred imagery of Impressionist paintings seems to stimulate the brain's amygdala, for instance. Since the amygdala plays a crucial role in our feelings, that finding might explain why many people find these pieces so moving.

Could the same approach also shed light on abstract twentieth-century pieces, from Mondrian's geometrical blocks of colour, to Pollock's seemingly haphazard arrangements of splashed paint on canvas? Sceptics believe that people claim to like such works simply because they are famous. We certainly do have an inclination to follow the crowd. When asked to make simple perceptual decisions such as matching a shape to its rotated image, for example, people often choose a definitively wrong answer if they see others doing the same. It is easy to imagine that this mentality would have even more impact on a fuzzy concept like art appreciation, where there is no right or wrong answer.

Angelina Hawley-Dolan, of Boston College, Massachusetts, responded to this debate by asking volunteers to view pairs of paintings - either the creations of famous abstract artists or the doodles of infants, chimps and elephants. They then had to judge which

they preferred. A third of the paintings were given no captions, while many were labelled incorrectly - volunteers might think they were viewing a chimp's messy brushstrokes when they were actually seeing an acclaimed masterpiece. In each set of trials, volunteers generally preferred the work of renowned artists, even when they believed it was by an animal or a child. It seems that the viewer can sense the artist's vision in paintings, even if they can't explain why.

Robert Pepperell, an artist based at Cardiff University, creates ambiguous works that are neither entirely abstract nor dearly representational. In one study, Pepperell and his collaborators asked volunteers to decide how 'powerful' they considered an artwork to be, and whether they saw anything familiar in the piece. The longer they took to answer these questions, the more highly they rated the piece under scrutiny, and the greater their neural activity. It would seem that the brain sees these images as puzzles, and the harder it is to decipher the meaning, the more rewarding is the moment of recognition.

And what about artists such as Mondrian, whose paintings consist exclusively of horizontal and vertical lines encasing blocks of colour? Mondrian's works are deceptively simple, but eye-tracking studies confirm that they are meticulously composed, and that simply rotating a piece radically changes the way we view it. With the originals, volunteers' eyes tended to stay longer on certain places in the image, but with the altered versions they would fit across a piece more rapidly. As a result, the volunteers considered the altered versions less pleasurable when they later rated the work.

In a similar study, Oshin Vartanian of Toronto University asked volunteers to compare original paintings with ones which he had altered by moving objects around within the

frame. He found that almost everyone preferred the original, whether it was a Van Gogh still life or an abstract by Miró. Vartanian also found that changing the composition of the paintings reduced activation in those brain areas linked with meaning and interpretation.

In another experiment, Alex Forsythe of the University of Liverpool analysed the visual intricacy of different pieces of art, and her results suggest that many artists use a key level of detail to please the brain. Too little and the work is boring, but too much results in a kind of 'perceptual overload', according to Forsythe. What's more, appealing pieces both abstract and representational, show signs of 'fractals'- repeated motifs recurring in different scales. Fractals are common throughout nature, for example in the shapes of mountain peaks or the branches of trees. It is possible that our visual system, which evolved in the great outdoors, finds it easier to process such patterns.

It is also intriguing that the brain appears to process movement when we see a handwritten letter, as if we are replaying the writer's moment of creation. This has led some to wonder whether Pollock's works feel so dynamic because the brain reconstructs the energetic actions the artist used as he painted. This may be down to our brain's 'mirror neurons', which are known to mimic others' actions. The hypothesis will need to be thoroughly tested, however. It might even be the case that we could use neuroaesthetic studies to understand the longevity of some pieces of artwork. While the fashions of the time might shape what is currently popular, works that are best adapted to our visual system may be the most likely to linger once the trends of previous generations have been forgotten.

It's still early days for the field of neuroaesthetics - and these studies are probably only

a taste of what is to come. It would, however, be foolish to reduce art appreciation to a set of scientific laws. We shouldn't underestimate the importance of the style of a particular artist, their place in history and the artistic environment of their time. Abstract art offers both a challenge and the freedom to play with different interpretations. In some ways, it's not so different to science, where we are constantly looking for systems and decoding meaning so that we can view and appreciate the world in a new way.

Questions 27-30

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 27-30 on your answer sheet.

27 In the second paragraph, the writer refers to a shape-matching test in order to illustrate

A the subjective nature of art appreciation.

B the reliance of modern art on abstract forms.

C our tendency to be influenced by the opinions of others.

D a common problem encountered when processing visual data.

28 Angelina Hawley-Dolan's findings indicate that people

A mostly favour works of art which they know well.

B hold fixed ideas about what makes a good work of art.

C are often misled by their initial expectations of a work of art.

D have the ability to perceive the intention behind works of art.

29 Results of studies involving Robert Pepperell's pieces suggest that people

A can appreciate a painting without fully understanding it.

B find it satisfying to work out what a painting represents.

C vary widely in the time they spend looking at paintings.

D generally prefer representational art to abstract art.

30 What do the experiments described in the fifth paragraph suggest about the paintings of Mondrian?

A They are more carefully put together than they appear.

B They can be interpreted in a number of different ways.

C They challenge our assumptions about shape and colour.

D They are easier to appreciate than many other abstract works.

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 below.

An Introduction to Film Sound

Though we might think of film as an essentially visual experience, we really cannot afford to underestimate the importance of film sound. A meaningful sound track is often as complicated as the image on the screen, and is ultimately just as much the responsibility of the director. The entire sound track consists of three essential ingredients: the human voice, sound effects and music. These three tracks must be mixed and balanced so as to produce the necessary emphases which in turn create desired effects. Topics which essentially refer to the three previously mentioned tracks are discussed below. They include dialogue, synchronous and asynchronous sound effects, and music.

Let us start with dialogue. As is the case with stage drama, dialogue serves to tell the story and expresses feelings and motivations of characters as well. Often with film characterization the audience perceives little or no difference between the character and the actor. Thus, for example, the actor Humphrey Bogart is the character Sam Spade; film personality and life personality seem to merge. Perhaps this is because the very texture of a performer's voice supplies an element of character.

When voice textures fit the performer's physiognomy and gestures, a whole and very realistic persona emerges. The viewer sees not an actor working at his craft, but another human being struggling with life. It is interesting to note that how dialogue is used and the very amount of dialogue used varies widely among films. For example, in the highly successful science-fiction film 2001, little dialogue was evident, and most of it was banal and of little intrinsic interest. In this way the film-maker was able to portray what Thomas Sobochack and Vivian Sobochack call, in An Introduction to Film, the ‘inadequacy of human responses when compared with the magnificent technology created by man and the visual beauties of the universe'.

The comedy Bringing Up Baby, on the other hand, presents practically non-stop dialogue delivered at breakneck speed. This use of dialogue underscores not only the dizzy quality of the character played by Katherine Hepburn, but also the absurdity of the film itself and thus its humor. The audience is bounced from gag to gag and conversation to conversation; there is no time for audience reflection. The audience is caught up in a whirlwind of activity in simply managing to follow the plot. This film presents pure escapism - largely due to its frenetic dialogue.

Synchronous sound effects are those sounds which are synchronized or matched with what is viewed. For example, if the film portrays a character playing the piano, the sounds of the piano are projected. Synchronous sounds contribute to the realism of film and also help to create a particular

atmosphere. For example, the ‘click' of a door being opened may simply serve to convince the audience that the image portrayed is real, and the audience may only subconsciously note the expected sound. However, if the ‘click' of an opening door is part of an ominous action such as a burglary, the sound mixer may call attention to the ‘click' with an increase in volume; this helps to engage the audience in a moment of suspense.

Asynchronous sound effects, on the other hand, are not matched with a visible source of the sound on screen. Such sounds are included so as to provide an appropriate emotional nuance, and they may also add to the realism of the film. For example, a film-maker might opt to include the background sound of an ambulance's siren while the foreground sound and image portrays an arguing couple. The asynchronous ambulance siren underscores the psychic injury incurred in the argument; at the same time the noise of the siren adds to the realism of the film by acknowledging the film's city setting.

We are probably all familiar with background music in films, which has become so ubiquitous as to be noticeable in its absence. We are aware that it is used to add emotion and rhythm. Usually not meant to be noticeable, it often provides a tone or an emotional attitude toward the story and/or the characters depicted. In addition, background music often foreshadows a change in mood. For example, dissonant music may be used in film to indicate an approaching (but not yet visible) menace or disaster.

Background music may aid viewer understanding by linking scenes. For example, a particular musical theme associated with an individual character or situation may be repeated at various points in a film in order to remind the audience of salient motifs or ideas.

Film sound comprises conventions and innovations. We have come to expect an acceleration of music during car chases and creaky doors in horror films. Yet, it is important to note as well that

sound is often brilliantly conceived. The effects of sound are often largely subtle and often are noted by only our subconscious minds. We need to foster an awareness of film sound as well as film space so as to truly appreciate an art form that sprang to life during the twentieth century - the modern film.

Questions 14-18

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 14-18 on your answer sheet.

14 In the first paragraph, the writer makes a point that

A the director should plan the sound track at an early stage in filming.

B it would be wrong to overlook the contribution of sound to the artistry of films.

C the music industry can have a beneficial influence on sound in film.

D it is important for those working on the sound in a film to have sole responsibility for it.

15 One reason that the writer refers to Humphrey Bogart is to exemplify

A the importance of the actor and the character appearing to have similar personalities.

B the audience's wish that actors are visually appropriate for their roles.

C the value of the actor having had similar feelings to the character.

D the audience's preference for dialogue to be as authentic as possible.

16 In the third paragraph, the writer suggests that

A audiences are likely to be critical of film dialogue that does not reflect their own experience.

B film dialogue that appears to be dull may have a specific purpose.

C filmmakers vary considerably in the skill with which they handle dialogue.

D the most successful films are those with dialogue of a high quality.

17 What does the writer suggest about Bringing Up Baby?

A The plot suffers from the filmmaker's wish to focus on humorous dialogue.

B The dialogue helps to make it one of the best comedy films ever produced.

C There is a mismatch between the speed of the dialogue and the speed of actions.

D The nature of the dialogue emphasises key elements of the film.

18 The writer refers to the 'click' of a door to make the point that realistic sounds

A are often used to give the audience a false impression of events in the film.

B may be interpreted in different ways by different members of the audience.

C may be modified in order to manipulate the audience's response to the film.

D tend to be more significant in films presenting realistic situations.

G类

Read the text below and answer Questions 9-14.

LOST CARDS

If you discover that your credit card, cheque book, debit card or cash card is missing, telephone the credit card company or bank as soon as possible. Follow this up with a letter. If you suspect theft, tell the police as well. In most circumstances, provided you act quickly, you will not have to pay

any bills which a thief runs up on your account. Most home insurance policies will also cover you against even this limited risk.

Because plastic money is now so common, central registration schemes such as Credit Card Shield and Card Protection System exist to help customers whose cards are lost or stolen. Under the schemes you file details of all your cards - including cash cards and account cards issued by shops - with a central registry, for a small annual fee. Then, if any or all of your cards are stolen, you need to make only one phone call to the registry, which is open around the clock 365 days a year. As soon as you have called, your responsibility for any bills run up by the thief ends and the scheme's staff make sure that all the companies whose cards you had are notified.

What you stand to lose on a stolen card

CREDIT CARD You will not have to pay more than £50 of the bills a thief runs up with your card. If you report the loss before the card is used, you will not have to pay anything.

CHEQUES AND GUARANTEE CARD Unless you have been careless - by signing blank cheques, say - you will not have to pay for any forged cheques a thief uses. The bank or shop that accepts them will have to bear the loss.

DEBIT CARD (Switch or Visa Delta) The banks operate a system similar to that for credit cards, in that you are liable for bills up to £50.

If your cash card is stolen

Legally, you can be made to pay back any sums a thief withdraws using your card, but only up to the time you report the loss and up to £50, unless the bank can prove gross negligence, such as writing your personal identification number on your card.

• Never keep your card and a note of your personal number (which does not appear on the card) together.

• Memorise your personal number if possible. If you must make a note of it, disguise it as something else - a telephone number, say.

• The same rules and precautions apply to a credit card used as a cash card.

Questions 9-14

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 9-14 on your answer sheet.

9 What should you do first if you lose a credit card?

A contact your insurance company

B write a letter

C contact the police

D make a phone call

10 Credit Card Shield is

A an insurance company which deals with card theft.

B a system for registering people's card details.

C an emergency telephone answering service.

D an agency for finding lost or stolen cards.

11 When contacted, the Card Protection System company will

A inform the police about the loss of the card.

B get in touch with the relevant credit card companies.

C ensure that lost cards are replaced.

D give details about the loss of the card to shops.

12 You are fully covered by both banks and shops if you lose

A a cheque that is signed but not otherwise completed.

B a blank unsigned cheque.

C a Switch card.

D a credit card.

13 If you have written your personal number on a stolen card, you may have to

A join a different credit card protection scheme.

B pay up to £50 for any loss incurred.

C pay for anything the thief buys on it.

D change your account to a different bank.

14 What happens if your cash card is stolen?

A You arrange for the card to be returned.

B The bank stops you withdrawing money.

C You may have to pay up to £50 of any stolen money.

D You cannot use a cash card in future.

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DAY5 真题练习

READING PASSAGE 1

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage 1 below.

Attitudes to language

It is not easy to be systematic and objective about language study. Popular linguistic debate regularly deteriorates into invective and polemic. Language belongs to everyone, so most people feel they have a right to hold an opinion about it. And when opinions differ, emotions can run high. Arguments can start as easily over minor points of usage as over major policies of linguistic education.

Language, moreover, is a very public behaviour, so it is easy for different usages to be noted and criticised. No part of society or social behaviour is exempt: linguistic factors influence how we judge personality, intelligence, social status, educational standards, job aptitude, and many other areas of identity and social survival. As a result, it is easy to hurt, and to be hurt, when language use is unfeelingly attacked.

In its most general sense, prescriptivism is the view that one variety of language has an inherently higher value than others, and that this ought to be imposed on the whole of the speech community. The view is propounded especially in relation to grammar and vocabulary, and frequently with reference to pronunciation. The variety which is favoured, in this account, is usually a version of the 'standard' written language, especially as encountered in literature, or in the formal spoken language which most closely reflects this style. Adherents to this variety are said to speak or write 'correctly'; deviations from it are said to be 'incorrect'.

All the main languages have been studied prescriptively, especially in the 18th century approach to the writing of grammars and dictionaries. The aims of these early grammarians were threefold: (a) they wanted to codify the principles of their languages, to show that there was a system beneath the apparent chaos of usage, (b) they wanted a means of settling disputes over usage, and (c) they wanted to point out what they felt to be common errors, in order to 'improve' the language. The authoritarian nature of the approach is best characterised by its reliance on 'rules' of grammar. Some usages are 'prescribed; to be learnt and followed accurately; others are 'proscribed; to be avoided. In this early period, there were no half-measures: usage was either right or wrong, and it was the task of the grammarian not simply to record alternatives, but to pronounce judgement upon them.

These attitudes are still with us, and they motivate a widespread concern that linguistic standards should be maintained. Nevertheless, there is an alternative point of view that is concerned less with standards than with the facts of linguistic usage. This approach is summarised in the statement that it is the task of the grammarian to describe, not prescribe - to record the facts oflinguistic diversity, and not to attempt the impossible tasks of evaluating language variation or halting language change. In the second half of the 18th century, we already find advocates of this view, such as Joseph Priestley, whose Rudiments of English Grammar (1761) insists that 'the custom of speaking is the original and only just standard of any language'. Linguistic issues, it is argued, cannot be solved by logic and legislation. And this view has become the tenet of the modern linguistic approach to grammatical analysis.

In our own time, the opposition between 'descriptivists' and 'prescriptivists' has often become extreme, with both sides painting unreal pictures of the other. Descriptive

grammarians have been presented as people who do not care about standards, because of the way they see all forms of usage as equally valid. Prescriptive grammarians have been presented as blind adherents to a historical tradition. The opposition has even been presented in quasi-political terms - of radical liberalism vs elitist conservatism.

Questions 1-8

Do the following statements agree with the claims of the writer in Reading Passage 1?

In boxes 1-8 on your answer sheet, write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

1 There are understandable reasons why arguments occur about language.

2 People feel more strongly about language education than about small differences in language usage.

3 Our assessment of a person's intelligence is affected by the way he or she uses language.

4 Prescriptive grammar books cost a lot of money to buy in the 18th century.

5 Prescriptivism still exists today.

6 According to descriptivists it is pointless to try to stop language change.

7 Descriptivism only appeared after the 18th century.

8 Both descriptivists and prescriptivists have been misrepresented.

Questions 9-12

Complete the summary using the list of words, A-I, below.

Write the correct letter, A-I, in boxes 9-12 on your answer sheet.

The language debate

According to 9 ..... , there is only one correct form of language. Linguists who take this approach to language place great importance on grammatical 10 ..... . Conversely, the view of 11 ..... , such as Joseph Priestley, is that grammar should be based on 12 ..... .

A descriptivists	B language experts	C popular speech
D formal language	E evaluation	F rules
G modern linguists	H prescriptivists	I change

Question 13

Choose the correct letter, A, B, C or D.

Write the correct letter in box 13 on your answer sheet.

What is the writer's purpose in Reading Passage 1?

A to argue in favour of a particular approach to writing dictionaries and grammar books

B to present a historical account of differing views of language

C to describe the differences between spoken and written language

D to show how a certain view of language has been discredited

READING PASSAGE 1

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage 1 below.

Research using twins

To biomedical researchers all over the world, twins offer a precious opportunity to untangle the influence of genes and the environment - of nature and nurture. Because identical twins come from a single fertilized egg that splits into two, they share virtually the same genetic code. Any differences between them - one twin having younger looking skin, for example - must be due to environmental factors such as less time spent in the sun.

Alternatively, by comparing the experiences of identical twins with those of fraternal twins, who come from separate eggs and share on average half their DNA, researchers can quantify the extent to which our genes affect our lives. If identical twins are more similar to each other with respect to an ailment than fraternal twins are, then vulnerability to the disease must be rooted at least in part in heredity.

These two lines of research - studying the differences between identical twins to pinpoint the influence of environment, and comparing identical twins with fraternal ones to measure the role of inheritance - have been crucial to understanding the interplay of nature and nurture in determining our personalities, behavior, and vulnerability to disease.

The idea of using twins to measure the influence of heredity dates back to 1875, when the English scientist Francis Galton first suggested the approach (and coined the phrase ‘nature and nurture'). But twin studies took a surprising twist in the 1980s, with the arrival of studies into identical twins who had been separated at birth and reunited as adults. Over two decades 137 sets of twins eventually visited Thomas Bouchard's lab in what became known as the Minnesota Study of Twins

Reared Apart. Numerous tests were carried out on the twins, and they were each asked more than 15,000 questions.

Bouchard and his colleagues used this mountain of data to identify how far twins were affected by their genetic makeup. The key to their approach was a statistical concept called heritability. In broad terms, the heritability of a trait measures the extent to which differences among members of a population can be explained by differences in their genetics. And wherever Bouchard and other scientists looked, it seemed, they found the invisible hand of genetic influence helping to shape our lives.

Lately, however, twin studies have helped lead scientists to a radical new conclusion: that nature and nurture are not the only elemental forces at work. According to a recent field called epigenetics, there is a third factor also in play, one that in some cases serves as a bridge between the environment and our genes, and in others operates on its own to shape who we are.

Epigenetic processes are chemical reactions tied to neither nature nor nurture but representing what researchers have called a 'third component'. These reactions influence how our genetic code is expressed: how each gene is strengthened or weakened, even turned on or off, to build our bones, brains and all the other parts of our bodies.

If you think of our DNA as an immense piano keyboard and our genes as the keys - each key symbolizing a segment of DNA responsible for a particular note, or trait, and all the keys combining to make us who we are - then epigenetic processes determine when and how each key can be struck, changing the tune being played.

One way the study of epigenetics is revolutionizing our understanding of biology is by revealing a mechanism by which the environment directly impacts on genes. Studies of animals, for example, have shown that when a rat experiences stress during pregnancy, it can cause epigenetic changes in

a fetus that lead to behavioral problems as the rodent grows up. Other epigenetic processes appear to occur randomly, while others are normal, such as those that guide embryonic cells as they become heart, brain, or liver cells for example.

Geneticist Danielle Reed has worked with many twins over the years and thought deeply about what twin studies have taught us. 'It's very clear when you look at twins that much of what they share is hardwired 'she says. 'Many things about them are absolutely the same and unalterable. But it also clear, when you get to know them, that other things about them are different. Epigenetics is the origin of a lot of those differences, in my view.'

Reed credits Thomas Bouchard's work for today's surge in twin studies. 'He was the trailblazer,' she says. 'We forget that 50 years ago things like heart disease were thought to be caused entirely by lifestyle. Schizophrenia was thought to be due to poor mothering. Twin studies have allowed us to be more reflective about what people are actually born with and what's caused by experience.'

Having said that, Reed adds, the latest work in epigenetics promises to take our understanding even further. 'What I like to say is that nature writes some things in pencil and some things in pen 'she says. 'Things written in pen you can't change. That's DNA. But things written in pencil you can. That's epigenetics. Now that we're actually able to look at the DNA and see where the pencil writings are, it's sort of a whole new world.'

Questions 1-4

Do the following statements agree with the information given in Reading Passage 1?

In boxes 1-4 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1 There may be genetic causes for the differences in how young the skin of identical twins looks.

2 Twins are at greater risk of developing certain illnesses than non-twins.

3 Bouchard advertised in newspapers for twins who had been separated at birth.

4 Epigenetic processes are different from both genetic and environmental processes.

Questions 10-13

Complete the summary using the list of words, A-F, below.

Write the correct letter, A-F, in boxes 10-13 on your answer sheet.

Epigenetic processes

In epigenetic processes10_____influence the activity of our genes, for example in creating our internal 11_____. The study of epigenetic processes is uncovering a way in which our genes can be affected by our 12_____. One example is that if a pregnant rat suffers stress, the new-born rat may later show problems in its 13_____.

A nurture	B organs	C code
D chemicals	E environment	F behaviour/behavior

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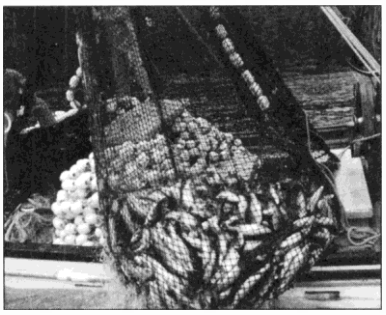
DAY6 真题练习

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2below.

Endless Harvest



More than two hundred years ago, Russian explorers and fur hunters landed on the Aleutian Islands, a volcanic archipelago in the North Pacific, and learned of a land mass that lay farther to the north. The islands' native inhabitants called this land mass Aleyska, the ‘Great Land'; today, we know it as Alaska.

The forty-ninth state to join the United States of America (in 1959), Alaska is fully one-fifth the size of the mainland 48states combined. It shares, with Canada, the second longest river system in North America and has over half the coastline of the United States. The rivers feed into the Bering Sea and Gulf of Alaska - cold, nutrient-rich waters which support tens of millions of seabirds, and over 400 species of fish, shellfish, crustaceans, and molluscs. Taking advantage of this rich bounty, Alaska's commercial fisheries have developed into some of the largest in the world.

According to the Alaska Department of Fish and Game (ADF&G), Alaska's commercial

fisheries landed hundreds of thousands of tonnes of shellfish and herring, and well over a million tonnes of groundfish (cod, sole, perch and pollock) in 2000. The true cultural heart and soul of Alaska's fisheries, however, is salmon. 'Salmon,' notes writer Susan Ewing in The Great Alaska Nature Factbook, 'pump through Alaska like blood through a heart, bringing rhythmic, circulating nourishment to land, animals and people.' The 'predictable abundance of salmon allowed some native cultures to flourish,' and 'dying spawners* feed bears, eagles, other animals, and ultimately the soil itself.' All five species of Pacific salmon - chinook, or king; chum, or dog; coho, or silver; sockeye, or red; and pink, or humpback - spawn** in Alaskan waters, and 90% of all Pacific salmon commercially caught in North America are produced there. Indeed, if Alaska was an independent nation, it would be the largest producer of wild salmon in the world. During 2000, commercial catches of Pacific salmon in Alaska exceeded 320,000 tonnes, with an ex-vessel value of over $US260 million.

Catches have not always been so healthy. Between 1940 and 1959, overfishing led to crashes in salmon populations so severe that in 1953 Alaska was declared a federal disaster area. With the onset of statehood, however, the State of Alaska took over management of its own fisheries, guided by a state constitution which mandates that Alaska's natural resources be managed on a sustainable basis. At that time, statewide harvests totalled around 25 million salmon. Over the next few decades average catches steadily increased as a result of this policy of sustainable management, until, during the 1990s, annual harvests were well in excess of 100 million, and on several occasions over 200 million fish.

* spawners: fish that have released eggs

** spawn: release eggs

The primary reason for such increases is what is known as 'In-Season Abundance-Based Management'. There are biologists throughout the state constantly monitoring adult fish as they show up to spawn. The biologists sit in streamside counting towers, study sonar, watch from aeroplanes, and talk to fishermen. The salmon season in Alaska is not pre-set. The fishermen know the approximate time of year when they will be allowed to fish, but on any given day, one or more field biologists in a particular area can put a halt to fishing. Even sport fishing can be brought to a halt. It is this management mechanism that has allowed Alaska salmon stocks - and, accordingly, Alaska salmon fisheries - to prosper, even as salmon populations in the rest of the United States are increasingly considered threatened or even endangered.

In 1999, the Marine Stewardship Council (MSC)*** commissioned a review of the Alaska salmon fishery. The Council, which was founded in 1996, certifies fisheries that meet high environmental standards, enabling them to use a label that recognises their environmental responsibility. The MSC has established a set of criteria by which commercial fisheries can be judged. Recognising the potential benefits of being identified as environmentally responsible, fisheries approach the Council requesting to undergo the certification process. The MSC then appoints a certification committee, composed of a panel of fisheries experts, which gathers information and opinions from fishermen, biologists, government officials, industry representatives, non-governmental organisations and others.

Some observers thought the Alaska salmon fisheries would not have any chance of certification when, in the months leading up to MSC's final decision, salmon runs throughout western Alaska completely collapsed. In the Yukon and Kuskokwim rivers, chinook and chum runs were probably the poorest since statehood; subsistence communities throughout the region, who normally have priority over commercial fishing, were devastated.

The crisis was completely unexpected, but researchers believe it had nothing to do with impacts of fisheries. Rather, they contend, it was almost certainly the result of climatic shifts, prompted in part by cumulative effects of the el niño / la niña phenomenon on Pacific Ocean temperatures, culminating in a harsh winter in which huge numbers of salmon eggs were frozen. It could have meant the end as far as the certification process was concerned. However, the state reacted quickly, closing down all fisheries, even those necessary for subsistence purposes.

In September 2000, MSC announced that the Alaska salmon fisheries qualified for certification. Seven companies producing Alaska salmon were immediately granted permission to display the MSC logo on their products. Certification is for an initial period of five years, with an annual review to ensure that the fishery is continuing to meet the required standards.

*** MSC: a joint venture between WWF (World Wildlife Fund) and Unilever, a Dutch-based multi-national

Questions 14-20

Do the following statements agree with the information given in Reading Passage 2?

In boxes 14-20 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

14 The inhabitants of the Aleutian islands renamed their islands 'Aleyska'.

15 Alaska's fisheries are owned by some of the world's largest companies.

16 Life in Alaska is dependent on salmon.

17 Ninety per cent of all Pacific salmon caught are sockeye or pink salmon.

18 More than 320,000 tonnes of salmon were caught in Alaska in 2000.

19 Between 1940 and 1959, there was a sharp decrease in Alaska's salmon population.

20 During the 1990s, the average number of salmon caught each year was 100 million.

Questions 21-26

Complete each sentence with the correct ending, A-K, below.

Write the correct letter, A-K, in boxes 21-26 on your answer sheet.

21 In Alaska, biologists keep a check on adult fish

22 Biologists have the authority

23 In-Season Abundance-Based Management has allowed the Alaska salmon fisheries

24 The Marine Stewardship Council (MSC) was established

25 As a result of the collapse of the salmon runs in 1999, the state decided

26 In September 2000, the MSC allowed seven Alaska salmon companies

A to recognise fisheries that care for the environment.

B to be successful.

C to stop fish from spawning.

D to set up environmental protection laws.

E to stop people fishing for sport.

F to label their products using the MSC logo.

G to ensure that fish numbers are sufficient to permit fishing.

H to assist the subsistence communities in the region.

I to freeze a huge number of salmon eggs.

J to deny certification to the Alaska fisheries.

K to close down all fisheries.

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

When evolution runs backwards

Evolution isn't supposed to run backwards – yet an increasing number of examples show that it does and that it can sometimes represent the future of a species

The description of any animal as an 'evolutionary throwback' is controversial. For the better part of a century, most biologists have been reluctant to use those words, mindful of a principle of evolution that says 'evolution cannot run backwards'. But as more and more examples come to light and

modern genetics enters the scene, that principle is having to be rewritten. Not only are evolutionary throwbacks possible, they sometimes play an important role in the forward march of evolution.

The technical term for an evolutionary throwback is an 'atavism', from the Latin atavus, meaning forefather. The word has ugly connotation thanks largely to Cesare Lombroso, a 19th-century Italian medic who argued that criminals were born not made and could be identified by certain physical features that were throwbacks to primitive, sub-human state.

While Lombroso was measuring criminals, a Belgian palaeontologist called Louis Dollo was studying fossil records and coming to the opposite conclusion. In 1890 he proposed that evolution was irreversible: that 'an organism is unable to return, even partially, to a previous stage already realized in the ranks of its ancestors'. Early 20th-century biologists came to a similar conclusion, though they qualified it in terms of probability, stating that there is no reason why evolution cannot run backwards – it is just very unlikely. And so the idea of irreversibility in evolution stuck and came to be known as 'Dollo's law'.

If Dollo's law is right, atavisms should occur only very rarely, if at all. Yet almost since the idea took root, exceptions have been cropping up. In 1919, for example, a humpback whale with a pair of leg-like appendages over a metre long, complete with a full set of limb bones, was caught off Vancouver Island in Canada. Explorer Roy Chapman Andrews argued at the time that the whale must be a throwback to a land-living ancestor. 'I can see no other explanation,' he wrote in 1921.

Since then, so many other examples have been discovered that it no longer makes sense to say that evolution is as good as irreversible. And this poses a puzzle: how can characteristics that disappeared millions of years ago suddenly reappear? In 1994, Rudolf Raff and colleagues at Indiana University in the USA decided to use genetics to put a number on the probability of evolution going into reverse. They reasoned that while some evolutionary changes involve the loss of genes and are therefore

irreversible, others may be the result of genes being switched off. If these silent genes are somehow switched back on, they argued, long-lost traits could reappear.

Raff's team went on to calculate the likelihood of it happening. Silent genes accumulate random mutations, they reasoned, eventually rendering them useless. So how long can a gene survive in a species if it is no longer used? The team calculated that there is a good chance of silent genes surviving for up to 6 million years in at least a few individuals in a population, and that some might survive as long as 10 million years. In other words, throwbacks are possible, but only to the relatively recent evolutionary past.

As a possible example, the team pointed to the mole salamanders of Mexico and California. Like most amphibians these begin life in a juvenile 'tadpole' state, then metamorphose into the adult form – except for one species, the axolotl, which famously lives its entire life as a juvenile. The simplest explanation for this is that the axolotl lineage alone lost the ability to metamorphose, while others retained it. From a detailed analysis of the salamanders' family tree, however, it is clear that the other lineages evolved from an ancestor that itself had lost the ability to metamorphose. In other words, metamorphosis in mole salamanders is an atavism. The salamander example fits with Raff's 10-million-year time frame.

More recently, however, examples have been reported that break the time limit, suggesting that silent genes may not be the whole story. In a paper published last year, biologist Gunter Wagner of Yale University reported some work on the evolutionary history of a group of South American lizards called Bachia. Many of these have minuscule limbs; some look more like snakes than lizards and a few have completely lost the toes on their hind limbs. Other species, however, sport up to four toes on their hind legs. The simplest explanation is that the toed lineages never lost their toes, but Wagner begs to differ. According to his analysis of the Bachia family tree, the toed species re-evolved toes

from toeless ancestors and, what is more, digit loss and gain has occurred on more than one occasion over tens of millions of years.

So what's going on? One possibility is that these traits are lost and then simply reappear, in much the same way that similar structures can independently arise in unrelated species, such as the dorsal fins of sharks and killer whales. Another more intriguing possibility is that the genetic information needed to make toes somehow survived for tens or perhaps hundreds of millions of years in the lizards and was reactivated. These atavistic traits provided an advantage and spread through the population, effectively reversing evolution.

But is silent genes degrade within 6 to 10 million years, how can long-lost traits be reactivated over longer timescales? The answer may lie in the womb. Early embryos of many species develop ancestral features. Snake embryos, for example, sprout hind limb buds. Later in development these features disappear thanks to developmental programs that say 'lose the leg'. If for any reason this does not happen, the ancestral feature may not disappear, leading to an atavism.

Questions 27-31

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 27-31 on your answer sheet.

27 When discussing the theory developed by Louis Dollo, the writer says that

A it was immediately referred to as Dollo's law.

B it supported the possibility of evolutionary throwbacks.

C it was modified by biologists in the early twentieth century.

D it was based on many years of research.

28 The humpback whale caught off Vancouver Island is mentioned because of

A the exceptional size of its body.

B the way it exemplifies Dollo's law.

C the amount of local controversy it caused.

D the reason given for its unusual features.

29 What is said about 'silent genes'?

A Their numbers vary according to species.

B Raff disagreed with the use of the term.

C They could lead to the re-emergency of certain characteristics.

D They can have an unlimited life span.

30 The writer mentions the mole salamander because

A it exemplifies what happens in the development of most amphibians.

B it suggests that Raff's theory is correct.

C it has lost and regained more than one ability.

D its ancestors have become the subject of extensive research.

31 Which of the following does Wagner claim?

A Members of the Bachia lizard family have lost and regained certain features several times.

B Evidence shows that the evolution of the Bachia lizard is due to the environment.

C His research into South American lizards supports Raff's assertions.

D His findings will apply to other species of South American lizards.

Questions 32-36

Complete each sentence with the correct ending, A-G, below.

Write the correct letter, A-G, in boxes 32-36 on your answer sheet.

32 For a long time biologists rejected

33 Opposing views on evolutionary throwbacks are represented by

34 Examples of evolutionary throwbacks have led to

35 The shark and killer whale are mentioned to exemplify

36 One explanation for the findings of Wagner's research is

A the question of how certain long-lost traits could reappear.

B the occurrence of a particular feature in different species.

C parallels drawn between behaviour and appearance.

D the continued existence of certain genetic information.

E the doubts felt about evolutionary throwbacks.

F the possibility of evolution being reversible.

G Dollo's findings and the convictions held by Lombroso.

Questions 37-40

Do the following statements agree with the claims of the writer in Reading Passage 3?

In boxes 37-40 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

37 Wagner was the first person to do research on South American lizards.

38 Wagner believes that Bachia lizards with toes had toeless ancestors.

39 The temporary occurrence of long-lost traits in embryos is rare.

40 Evolutionary throwbacks might be caused by developmental problems in the womb.

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DAY7 真题练习

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

EFFECTS OF NOISE

In general, it is plausible to suppose that we should prefer peace and quiet to noise. And yet most of us have had the experience of having to adjust to sleeping in the mountains or the countryside because it was initially 'too quiet', an experience that suggests that humans are capable of adapting to a wide range of noise levels. Research supports this view. For example, Glass and Singer (1972) exposed people to short bursts of very loud noise and then measured their ability to work out problems and their physiological reactions to the noise. The noise was quite disruptive at first, but after about four minutes the subjects were doing just as well on their tasks as control subjects who were not exposed to noise. Their physiological arousal also declined quickly to the same levels as those of the control subjects.

But there are limits to adaptation and loud noise becomes more troublesome if the person is required to concentrate on more than one task. For example, high noise levels interfered with the performance of subjects who were required to monitor three dials at a time, a task not unlike that of an aeroplane pilot or an air-traffic controller (Broadbent, 1957). Similarly, noise did not affect a subject's ability to track a moving line with a steering wheel, but it did interfere with the subject's ability to repeat numbers while tracking (Finkelman and Glass, 1970).

Probably the most significant finding from research on noise is that its predictability is more

important than how loud it is. We are much more able to 'tune out' chronic background noise, even if it is quite loud, than to work under circumstances with unexpected intrusions of noise. In the Glass and Singer study, in which subjects were exposed to bursts of noise as they worked on a task, some subjects heard loud bursts and others heard soft bursts. For some subjects, the bursts were spaced exactly one minute apart (predictable noise); others heard the same amount of noise overall, but the bursts occurred at random intervals (unpredictable noise). Subjects reported finding the predictable and unpredictable noise equally annoying, and all subjects performed at about the same level during the noise portion of the experiment. But the different noise conditions had quite different after-effects when the subjects were required to proofread written material under conditions of no noise. As shown in Table 1 the unpredictable noise produced more errors in the later proofreading task than predictable noise; and soft, unpredictable noise actually produced slightly more errors on this task than the loud, predictable noise.

	Unpredictable Noise	Predictable Noise	Average
Loud noise	40．1	31．8	35．9
Soft noise	36．7	27.4	32．1
Average	38.4	29．6	

Table 1: Proofreading Errors and Noise

Apparently, unpredictable noise produces more fatigue than predictable noise, but it takes a while for this fatigue to take its toll on performance.

Predictability is not the only variable that reduces or eliminates the negative effects of noise.

Another is control. If the individual knows that he or she can control the noise, this seems to eliminate both its negative effects at the time and its after-effects. This is true even if the individual never actually exercises his or her option to turn the noise off (Glass and Singer, 1972). Just the knowledge that one has control is sufficient.

The studies discussed so far exposed people to noise for only short periods and only transient effects were studied. But the major worry about noisy environments is that living day after day with chronic noise may produce serious, lasting effects. One study, suggesting that this worry is a realistic one, compared elementary school pupils who attended schools near Los Angeles's busiest airport with students who attended schools in quiet neighbourhoods (Cohen et al., 1980). It was found that children from the noisy schools had higher blood pressure and were more easily distracted than those who attended the quiet schools. Moreover, there was no evidence of adaptability to the noise. In fact, the longer the children had attended the noisy schools, the more distractible they became. The effects also seem to be long lasting. A follow-up study showed that children who were moved to less noisy classrooms still showed greater distractibility one year later than students who had always been in the quiet schools (Cohen et al, 1981). It should be noted that the two groups of children had been carefully matched by the investigators so that they were comparable in age, ethnicity, race, and social class.

Questions 27-29

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 27-29 on your answer sheet.

27 The writer suggests that people may have difficulty sleeping in the mountains because

A humans do not prefer peace and quiet to noise.

B they may be exposed to short bursts of very strange sounds.

C humans prefer to hear a certain amount of noise while they sleep.

D they may have adapted to a higher noise level in the city.

28 In noise experiments, Glass and Singer found that

A problem-solving is much easier under quiet conditions.

B physiological arousal prevents the ability to work.

C bursts of noise do not seriously disrupt problem-solving in the long term.

D the physiological arousal of control subjects declined quickly.

29 Researchers discovered that high noise levels are not likely to interfere with the

A successful performance of a single task.

B tasks of pilots or air traffic controllers.

C ability to repeat numbers while tracking moving lines.

D ability to monitor three dials at once.

Questions 30-34

Complete the summary using the list of words and phrases, A-J, below.

Write the correct letter, A-J, in boxes 30-34 on your answer sheet.

NB You may use any letter more than once.

Glass and Singer (1972) showed that situations in which there is intense noise have less effect on performance than circumstances in which 30 …… noise occurs. Subjects were divided into groups to perform a task. Some heard loud bursts of noise, others soft. For some subjects, the noise was predictable, while for others its occurrence was random. All groups were exposed to 31 …… noise. The predictable noise group 32 …… the unpredictable noise group on this task.

In the second part of the experiment, the four groups were given a proofreading task to complete under conditions of no noise. They were required to check written material for errors. The group which had been exposed to unpredictable noise 33 …… the group which had been exposed to predictable noise. The group which had been exposed to loud predictable noise performed better than those who had heard soft, unpredictable bursts. The results suggest that 34 …… noise produces fatigue but that this manifests itself later.

A no control over

B unexpected

C intense

D the same amount of

E performed better than

F performed at about the same level as

G no

H showed more irritation than

I	made more mistakes than
J	different types of

Questions 35-40

Look at the following statements (Questions 35-40) and the list of researchers below.

Match each statement with the correct researcher(s),A-E.

Write the correct letter, 4-E, in boxes 35-40 on your answer sheet.

NB You may use any letter more than once.

35 Subjects exposed to noise find it difficult at first to concentrate on problem-solving tasks.

36 Long-term exposure to noise can produce changes in behaviour which can still be observed a year later.

37 The problems associated with exposure to noise do not arise if the subject knows they can make it stop.

38 Exposure to high-pitched noise results in more errors than exposure to low-pitched noise.

39 Subjects find it difficult to perform three tasks at the same time when exposed to noise.

40 Noise affects a subject's capacity to repeat numbers while carrying out another task.

List of Researchers

A Glass and Singer

B Broadbent

C Finkelman and Glass

D Cohen et al.

E None of the above

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 on pages 21 and 22.

Why being bored is stimulating — and useful, too

This most common of emotions is turning out to be more interesting than we thought

A We all know how it feels — it's impossible to keep your mind on anything, time stretches out, and all the things you could do seem equally unlikely to make you feel better. But defining boredom so that it can be studied in the lab has proved difficult. For a start, it can include a lot of other mental states, such as frustration, apathy, depression and indifference. There isn't even agreement over whether boredom is always a low-energy, flat kind of emotion or whether feeling agitated and

restless counts as boredom, too. In his book, Boredom: A Lively History, Peter Toohey at the University of Calgary, Canada, compares it to disgust - an emotion that motivates us to stay away from certain situations. 'If disgust protects humans from infection, boredom may protect them from "infectious" social situations,' he suggests.

B By asking people about their experiences of boredom, Thomas Goetz and his team at the University of Konstanz in Germany have recently identified five distinct types: indifferent, calibrating, searching, reactant and apathetic. These can be plotted on two axes - one running left to right, which measures low to high arousal, and the other from top to bottom, which measures how positive or negative the feeling is. Intriguingly, Goetz has found that while people experience all kinds of boredom, they tend to specialise in one. Of the five types, the most damaging is 'reactant, boredom with its explosive combination of high arousal and negative emotion. The most useful is what Goetz calls 'indifferent' boredom: someone isn't engaged in anything satisfying but still feels relaxed and calm. However, it remains to be seen whether there are any character traits that predict the kind of boredom each of us might be prone to.

C Psychologist Sandi Mann at the University of Central Lancashire, UK, goes further. 'All emotions are there for a reason, including boredom,' she says. Mann has found that being bored makes us more creative. 'We're all afraid of being bored but in actual fact it can lead to all kinds of amazing things,, she says. In experiments published last year, Mann found that people who had been made to feel bored by copying numbers out of the phone book for 15 minutes came up with more creative ideas about how to use a polystyrene cup than a control group. Mann concluded that a passive, boring activity is best for creativity because it allows the mind to wander. In fact, she goes so far as to suggest that we should seek out more boredom in our lives.

D Psychologist John Eastwood at York University in Toronto, Canada, isn't convinced. 'If you are in a state of mind-wandering you are not bored,' he says. 'In my view, by definition boredom is an undesirable state.' That doesn't necessarily mean that it isn't adaptive, he adds. 'Pain is adaptive — if we didn't have physical pain, bad things would happen to us. Does that mean that we should actively cause pain? No. But even if boredom has evolved to help us survive, it can still be toxic if allowed to fester.' For Eastwood, the central feature of boredom is a failure to put our 'attention system' into gear. This causes an inability to focus on anything, which makes time seem to go painfully slowly. What's more, your efforts to improve the situation can end up making you feel worse. 'People try to connect with the world and if they are not successful there's that frustration and irritability,' he says. Perhaps most worryingly, says Eastwood, repeatedly failing to engage attention can lead to a state where we don't know what to do any more, and no longer care.

E Eastwood's team is now trying to explore why the attention system fails. It's early days but they think that at least some of it comes down to personality. Boredom proneness has been linked with a variety of traits. People who are motivated by pleasure seem to suffer particularly badly. Other personality traits, such as curiosity, are associated with a high boredom threshold. More evidence that boredom has detrimental effects comes from studies of people who are more or less prone to boredom. It seems those who bore easily face poorer prospects in education, their career and even life in general. But of course, boredom itself cannot kill - it's the things we do to deal with it that may put us in danger. What can we do to alleviate it before it comes to that? Goetz's group has one suggestion. Working with teenagers, they found that those who 'approach' a boring situation - in other words, see that it's boring and get stuck in anyway - report less boredom than those who try to avoid it by using snacks, TV or social media for distraction.

F Psychologist Francoise Wemelsfelder speculates that our over-connected lifestyles might even be a new source of boredom. ‘In modern human society there is a lot of overstimulation but still a lot of problems finding meaning,， she says. So instead of seeking yet more mental stimulation, perhaps we should leave our phones alone, and use boredom to motivate us to engage with the world in a more meaningful way.

Questions 20-23

Look at the following people (Questions 20-23) and the list of ideas below.

Match each person with the correct idea, A-E.

Write the correct letter, A-E, in boxes 20-23 on your answer sheet.

20 Peter Toohey

21 Thomas Goetz

22 John Eastwood

23 Francoise Wemelsfelder

List of Ideas

A The way we live today may encourage boredom.

B One sort of boredom is worse than all the others.

C Levels of boredom may fall in the future.

D Trying to cope with boredom can increase its negative effects.

E Boredom may encourage us to avoid an unpleasant experience.

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DAY8 真题练习

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 on the following pages.

Questions 14-21

Reading Passage 2 has nine paragraphs, A-I.

Choose the correct heading for paragraphs A-E and G-I from the list of headings below.

Write the correct number, i-xi, in boxes 14-21 on your answer sheet.

List of Headings

i A fresh and important long-term goal

ii Charging for roads and improving other transport methods

iii Changes affecting the distances goods may be transported

iv Taking all the steps necessary to change transport patterns

v The environmental costs of road transport

vi The escalating cost of rail transport

vii The need to achieve transport rebalance

viii The rapid growth of private transport

ix Plans to develop major road networks

x Restricting road use through charging policies alone

xi Transport trends in countries awaiting EU admission

14	Paragraph A	19	Paragraph G
15	Paragraph B	20	Paragraph H
16	Paragraph C	21	Paragraph I
17	Paragraph D		
18	Paragraph E		

Example	Answer
Paragraph F	vii

EUROPEAN TRANSPORT SYSTEMS

1990-2010

What have been the trends and what are the prospects for European transport systems?

A It is difficult to conceive of vigorous economic growth without an efficient transport system. Although modern information technologies can reduce the demand for physical transport by facilitating teleworking and teleservices, the requirement for transport continues to increase. There are two key factors behind this trend. For passenger transport, the determining factor is the spectacular growth in car use. The number of cars on European Union (EU) roads saw an increase of three million cars each year from 1990 to 2010, and in the next decade the EU will see a further substantial increase in its fleet.

B As far as goods transport is concerned, growth is due to a large extent to changes in the European economy and its system of production. In the last 20 years, as internal frontiers have been abolished, the EU has moved from a 'stock' economy to a 'flow' economy. This phenomenon has been emphasised by the relocation of some industries, particularly those which are labour intensive, to reduce production costs, even though the production site is hundreds or even thousands of kilometres away from the final assembly plant or away from users.

C The strong economic growth expected in countries which are candidates for entry to the EU will also increase transport flows, in particular road haulage traffic. In 1998, some of these countries already exported more than twice their 1990 volumes and imported more than five times their 1990 volumes. And although many candidate countries inherited a transport system which encourages rail, the distribution between modes has tipped sharply in favour of road transport since the 1990s. Between 1990 and 1998, road haulage increased by 19.4%, while during the same period rail haulage decreased by 43.5%, although – and this could benefit the enlarged EU – it is still on average at a much higher level than in existing member states.

D However, a new imperative – sustainable development – offers an opportunity for adapting the EU's common transport policy. This objective, agree by the Gothenburg European Council, has to be achieved by integrating environmental considerations into Community policies, and shifting the balance between modes of transport lies at the heart of its strategy. The ambitious objective can only be fully achieved by 2020, but proposed measures are nonetheless a first essential step towards a sustainable transport system which will ideally be in place in 30 years' time, that is by 2040.

E In 1998, energy consumption is the transport sector was to blame for 28% of emissions of CO2, the leading greenhouse gas. According to the latest estimates, if nothing is done to reverse the traffic growth trend, CO2 emissions from transport can be expected to increase by around 50% to 1,113

billion tonnes by 2020, compared with the 739 billion tonnes recorded in 1990. Once again, road transport is the main culprit since it alone accounts for 84% of the CO2 emissions attributable to transport. Using alternative fuels and improving energy efficiency is thus both an ecological necessity and a technological challenge.

F At the same time greater efforts must be made to achieve a modal shift. Such a change cannot be achieved overnight, all the less so after over half a century of constant deterioration in favour of road. This has reached such a pitch that today rail freight services are facing marginalisation, with just 8% of market share, and with international goods trains struggling along at an average speed of 18km/h. Three possible options have emerged.

G The first approach would consist of focusing on road transport solely through pricing. This option would not be accompanied by complementary measures in the other modes of transport. In the short term it might curb the growth in road transport through the better loading ratio of goods vehicles and occupancy rates of passenger vehicles expected as a result of the increase in the price of transport. However, the lack of measures available to revitalise other modes of transport would make it impossible for more sustainable modes of transport to take up the baton.

H The second approach also concentrates on road transport pricing but is accompanied by measures to increase the efficiency of the other modes (better quality of services, logistics, technology). However, this approach does not include investment in new infrastructure, nor does it guarantee better regional cohesion. It could help to achieve greater uncoupling than the first approach, bust road transport would keep the lion's share of the market and continue to concentrate on saturated arteries, despite being the most polluting of the modes. It is therefore not enough to guarantee the necessary shift of the balance.

I The third approach, which is not new, comprises a series of measures ranging from pricing to revitalising alternative modes of transport and targeting investment in the trans-European network. This integrated approach would allow the market shares of the other mode to return to their 1998 levels and thus make a shift of balance. It is far more ambitious than it looks, bearing in mind the historical imbalance in favour of roads for the last fifty years, but would achieve a market break in the link between road transport growth and economic growth, without placing restrictions on the mobility of people and goods.

Questions 22-26

Do the following statements agree with the information given in Reading Passage 2?

In boxes 22-26 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

22 The need for transport is growing, despite technological developments.

23 To reduce production costs, some industries have been moved closer to their relevant consumers.

24 Cars are prohibitively expensive in some EU candidate countries.

25 The Gothenburg European Council was set up 30 years ago.

26 By the end of this decade, CO2 emissions from transport are predicted to reach 739 billion tonnes.

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 on the following pages.

Questions 14-20

Reading Passage 2 has seven paragraphs, A-G.

Choose the correct heading for each paragraph from the list of headings below.

Write the correct number, i-ix, in boxes 14-20 on your answer sheet.

List of Headings

i Evidence of innovative environment management practices

ii An undisputed answer to a question about the moai

iii The future of the moai statues

iv A theory which supports a local belief

v The future of Easter Island

vi Two opposing views about the Rapanui people

vii Destruction outside the inhabitants' control

viii How the statues made a situation worse

ix Diminishing food resources

14 Paragraph A

15 Paragraph B

16 Paragraph C

17 Paragraph D

18 Paragraph E

19 Paragraph F

20 Paragraph G

What destroyed the civilisation of Easter Island?

A Easter Island, or Rapu Nui as it is known locally, is home to several hundred ancient human statues - the moai. After this remote Pacific island was settled by the Polynesians, it remained isolated for centuries. All the energy and resources that went into the moai - some of which are ten metres tall and weigh over 7,000 kilos - came from the island itself. Yet when Dutch explorers landed in 1722, they met a Stone Age culture. The moai were carved with stone tools, then transported for many kilometres, without the use of animals or wheels, to massive stone platforms. The identity of the moai builders was in doubt until well into the twentieth century. Thor Heyerdahl, the Norwegian ethnographer and adventurer, thought the statues had been created by pre-Inca peoples from Peru. Bestselling Swiss author Erich von Däniken believed they were built by stranded extraterrestrials. Modern science – linguistic, archaeological and genetic evidence - has definitively proved the moai builders were Polynesians, but not how they moved their creations. Local folklore maintains that the statues walked, while researchers have tended to assume the ancestors dragged the statues somehow, using ropes and logs.

B When the Europeans arrived, Rapa Nui was grassland, with only a few scrawny trees. In the 1970s and 1980s, though, researchers found pollen preserved in lake sediments, which proved the island had been covered in lush palm forests for thousands of years. Only after the Polynesians arrived did those forests disappear. US scientist Jared Diamond believes that the Rapanui people - descendants of Polynesian settlers - wrecked their own environment. They had unfortunately settled on an extremely fragile island – dry, cool, and too remote to be properly fertilised by windblown volcanic ash. When the islanders cleared the forests for firewood and farming, the forests didn't grow back. As trees became scarce and they could no longer construct wooden canoes for fishing, they ate birds. Soil erosion decreased their crop yields. Before Europeans arrived, the Rapanui had descended into civil war and cannibalism, he maintains. The collapse of their isolated civilisation, Diamond writes, is a ‘worst-case scenario for what may lie ahead of us in our own future'.

C The moai, he thinks, accelerated the self-destruction. Diamond interprets them as power displays by rival chieftains who, trapped on a remote little island, lacked other ways of asserting their dominance. They competed by building ever bigger figures. Diamond thinks they laid the moai on wooden sledges, hauled over log rails, but that required both a lot of wood and a lot of people. To feed the people, even more land had to be cleared. When the wood was gone and civil war began, the islanders began toppling the moai. By the nineteenth century none were standing.

D Archaeologists Terry Hunt of the University of Hawaii and Carl Lipo of California State University agree that Easter Island lost its lush forests and that it was an 'ecological catastrophe' - but they believe the islanders themselves weren't to blame. And the moai certainly weren't. Archaeological excavations indicate that the Rapanui went to heroic efforts to protect the resources of their wind-lashed, infertile fields. They built thousands of circular stone windbreaks and gardened inside them, and used broken volcanic rocks to keep the soil moist. In short, Hunt and Lipo argue, the prehistoric Rapanui were pioneers of sustainable farming.

E Hunt and Lipo contend that moai-building was an activity that helped keep the peace between islanders. They also believe that moving the moai required few people and no wood, because they were walked upright. On that issue, Hunt and Lipo say, archaeological evidence backs up Rapanui folklore. Recent experiments indicate that as few as 18 people could, with three strong ropes and a bit of practice, easily manoeuvre a 1,000 kg moai replica a few hundred metres. The figures' fat bellies tilted them forward, and a D-shaped base allowed handlers to roll and rock them side to side.

F Moreover, Hunt and Lipo are convinced that the settlers were not wholly responsible for the loss of the island's trees. Archaeological finds of nuts from the extinct Easter Island palm show tiny grooves, made by the teeth of Polynesian rats. The rats arrived along with the settlers, and in just a few years, Hunt and Lipo calculate, they would have overrun the island. They would have prevented the reseeding of the slow-growing palm trees and thereby doomed Rapa Nui's forest, even without the settlers' campaign of deforestation. No doubt the rats ate birds' eggs too. Hunt and Lipo also see no evidence that Rapanui civilisation collapsed when the palm forest did. They think its population grew rapidly and then remained more or less stable until the arrival of the Europeans, who introduced deadly diseases to which islanders had no immunity. Then in the nineteenth century slave traders decimated the population, which shrivelled to 111 people by 1877.

G Hunt and Lipo's vision, therefore, is one of an island populated by peaceful and ingenious moai builders and careful stewards of the land, rather than by reckless destroyers ruining their own environment and society. 'Rather than a case of abject failure, Rapu Nui is an unlikely story of success', they claim. Whichever is the case, there are surely some valuable lessons which the world at large can learn from the story of Rapa Nui.

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DAY9 真题练习

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

lnlonnaaon theorv - the bia idea

Information theory lies at the heart of everything - from DVD players and the genetic code of DNA to the physics of the universe at its most fundamental. It has been central to the development of the science of communication, which enables data to be sent electronically and has therefore had a major impact on our lives

A In April 2002 an event took place which demonstrated one of the many applications of information theory. The space probe, Voyager I, launched in 1977, had sent back spectacular images of Jupiter and Saturn and then soared out of the Solar System on a one-way mission to the stars. After 25 years of exposure to the freezing temperatures of deep space, the probe was beginning to show its age. Sensors and circuits were on the brink of failing and NASA experts realised that they had to do something or lose contact with their probe forever. The solution was to get a message to Voyager I to instruct it to use spares to change the failing parts. With the probe 12 billion kilometres from Earth, this was not an easy task. By means of a radio dish belonging to NASA's Deep Space Network, the message was sent out into the depths of space. Even travelling at the speed of light, it took over 11 hours to reach its target, far beyond the orbit of Pluto. Yet, incredibly, the little probe managed to hear the faint call from its home planet, and successfully made the switchover.

B It was the longest-distance repair job in history, and a triumph for the NASA engineers. But it also highlighted the astonishing power of the techniques developed by American communications

engineer Claude Shannon, who had died just a year earlier. Born in 1916 in Petoskey, Michigan, Shannon showed an early talent for maths and for building gadgets, and made breakthroughs in the foundations of computer technology when still a student. While at Bell Laboratories, Shannon developed information theory, but shunned the resulting acclaim. In the 1940s, he single-handedly created an entire science of communication which has since inveigled its way into a host of applications, from DVDs to satellite communications to bar codes - any area, in short, where data has to be conveyed rapidly yet accurately.

C This all seems light years away from the down-to-earth uses Shannon originally had for his work, which began when he was a 22-year-old graduate engineering student at the prestigious Massachusetts Institute of Technology in 1939. He set out with an apparently simple aim: to pin down the precise meaning of the concept of 'information'. The most basic form of information, Shannon argued, is whether something is true or false - which can be captured in the binary unit, or 'bit', of the form 1 or 0. Having identified this fundamental unit, Shannon set about defining otherwise vague ideas about information and how to transmit it from place to place. In the process he discovered something surprising: it is always possible to guarantee information will get through random interference - 'noise' - intact.

D Noise usually means unwanted sounds which interfere with genuine information. Information theory generalises this idea via theorems that capture the effects of noise with mathematical precision. In particular, Shannon showed that noise sets a limit on the rate at which information can pass along communication channels while remaining error-free. This rate depends on the relative strengths of the signal and noise travelling down the communication channel, and on its capacity (its 'bandwidth'). The resulting limit, given in units of bits per second, is the absolute maximum rate of error-free communication given signal strength and noise level. The trick, Shannon showed, is to

find ways of packaging up - 'coding' - information to cope with the ravages of noise, while staying within the information-carrying capacity - 'bandwidth' - of the communication system being used.

E Over the years scientists have devised many such coding methods, and they have proved crucial in many technological feats. The Voyager spacecraft transmitted data using codes which added one extra bit for every single bit of information; the result was an error rate of just one bit in 10,000 - and stunningly clear pictures of the planets. Other codes have become part of everyday life - such as the Universal Product Code, or bar code, which uses a simple error-detecting system that ensures supermarket check-out lasers can read the price even on, say, a crumpled bag of crisps. As recently as 1993, engineers made a major breakthrough by discovering so-called turbo codes - which come very close to Shannon's ultimate limit for the maximum rate that data can be transmitted reliably, and now play a key role in the mobile videophone revolution.

F Shannon also laid the foundations of more efficient ways of storing information, by stripping out superfluous ('redundant') bits from data which contributed little real information. As mobile phone text messages like 'I CN C U' show, it is often possible to leave out a lot of data without losing much meaning. As with error correction, however, there's a limit beyond which messages become too ambiguous. Shannon showed how to calculate this limit, opening the way to the design of compression methods that cram maximum information into the minimum space.

Questions 27-32

Reading Passage 3 has six paragraphs, A-F.

Which paragraph contains the following information?

Write the correct letter, A-F, in boxes 27-32 on your answer sheet.

27 an explanation of the factors affecting the transmission of information

28 an example of how unnecessary information can be omitted

29 a reference to Shannon's attitude to fame

30 details of a machine capable of interpreting incomplete information

31 a detailed account of an incident involving information theory

32 a reference to what Shannon initially intended to achieve in his research

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 below.

Oxytocin

The positive and negative effects of the chemical known as the 'love hormone'

A Oxytocin is a chemical, a hormone produced in the pituitary gland in the brain. It was through various studies focusing on animals that scientists first became aware of the influence of oxytocin. They discovered that it helps reinforce the bonds between prairie voles, which mate for life, and triggers the motherly behaviour that sheep show towards their newborn lambs. It is also released by

women in childbirth , strengthening the attachment between mother and baby. Few chemicals have as positive a reputation as oxytocin, which is sometimes referred to as the 'love hormone'. One sniff of it can, it is claimed , make a person more trusting , empathetic , generous and cooperative . It is time, however, to revise this wholly optimistic view. A new wave of studies has shown that its effects vary greatly depending on the person and the circumstances , and it can impact on our social interactions for worse as well as for better.

B Oxytocin 's role in human behaviour first em·erged in 2005 . In a groundbreaking experiment , Markus Heinrichs and his colleagues at the University of Freiburg , Germany , asked volunteers to do an activity in which they could invest money with an anonymous person who was not guaranteed to be honest. The team found that participants who had sniffed oxytocin via a nasal spray beforehand invested more money than those who received a placebo instead. The study was the start of research into the effects of oxytocin on human interactions . 'For eight years, it was quite a lonesome field,' Heinrichs recalls. 'Now, everyone is interested.' These follow-up studies have shown that after a sniff of the hormone, people become more charitable , better at reading emotions on others' faces and at communicating constructively in arguments . Together, the results fuelled the view that oxytocin universally enhanced the positive aspects of our social nature .

C Then, after a few years, contrasting findings began to emerge. Simone ShamayTsoory at the University of Haifa, Israel, found that when volunteers played a competitive game , those who inhaled the hormone showed more pleasure when they beat other players, and felt more envy when others won. What's more, administering oxytocin also has sharply contrasting outcomes depending on a person's disposition . Jennifer Bartz from Mount Sinai School of Medicine , New York, found that it improves people's ability to read emotions , but only if they are not very socially adept to begin with . Her research also shows that oxytocin in fact reduces cooperation in subjects who are particularly anxious or sensitive to rejection .

D Another discovery is that oxytocin's effects vary depending on who we are interacting with. Studies conducted by Carolyn DeClerck of the University of Antwerp , Belgium, revealed that people who had received a dose of oxytocin actually became less cooperative when dealing with complete strangers . Meanwhile , Carsten De Dreu at the University of Amsterdam in the Netherlands discovered that volunteers given oxytocin showed favouritism: Dutch men became quicker to associate positive words with Dutch names than with foreign ones, for example . According to De Dreu, oxytocin drives people to care for those in their social circles and defend them from outside dangers. So, it appears that oxytocin strengthens biases, rather than promoting general goodwill, as was previously thought.

E There were signs of these subtleties from the start. Bartz has recently shown that in almost half of the existing research results, oxytocin influenced only certain individuals or in certain circumstances . Where once researchers took no notice of such findings , now a more nuanced understanding of oxytocin's effects is propelling investigations down new lines. To Bartz, the key to understanding what the hormone does lies in pinpointing its core function rather than in cataloguing its seemingly endless effects. There are several hypotheses which are not mutually exclusive . Oxytocin could help to reduce anxiety and fear. Or it could simply motivate people to seek out social connections. She believes that oxytocin acts as a chemical spotlight that shines on social clues - a shift in posture, a flicker of the eyes, a dip in the voice - making people more attuned to their social environment. This would explain why it makes us more likely to look others in the eye and improves our ability to identify emotions . But it could also make things worse for people who are overly sensitive or prone to interpreting social cues in the worst light.

F Perhaps we should not be surprised that the oxytocin story has become more perplexing . The hormone is found in everything from octopuses to sheep, and its evolutionary roots stretch back half a billion years. 'It's a very simple and ancient molecule that has been co-opted for many different

functions ,' says Sue Carter at the University of Illinois, Chicago, USA. 'It affects primitive parts of the brain like the amygdala, so it's going to have many effects on just about everything .' Bartz agrees . 'Oxytocin probably does some very basic things, but once you add our higher-order thinking and social situations, these basic processes could manifest in different ways depending on individual differences and context.'

Questions 14-17

Reading Passage 2 has six paragraphs, A-F.

Which paragraph contains the following information?

Write the correct letter, A-F , in boxes 14-17 on your answer sheet.

NB You may use any letter more than once.

14 reference to research showing the beneficial effects of oxytocin on people

15 reasons why the effects of oxytocin are complex

16 mention of a period in which oxytocin attracted little scientific attention

17 reference to people ignoring certain aspects of their research data

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DAY10 模考

READING PASSAGE 1

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage 1 below.

Knighthoods

An ancient tradition

A Knighthoods are one of the oldest and most prestigious forms of honouring individual citizens in the United Kingdom. Although initially conferred upon members of the armed forces solely on the basis of their performance in combat, the award now recognises all contributions to national life. Some of the most notable knighthoods of recent times have been bestowed on musicians or entertainers such as Sir Elton John and Sir Paul McCartney, and the fields of finance, industry and education are also represented. Citizens of non-Commonwealth countries are eligible for an 'honorary' knighthood for which they are not permitted to use the titles 'Sir' or 'Dame'. Perceived to be a British tradition, the legacy of knighthoods actually dates back to ancient Rome, from where it spread throughout a number of European countries in the Middle Ages and acquired certain features. A would-be knight had to undergo strict military instruction from a young age, which included spending time as an assistant (known as an esquire) to an existing knight, and participating in battle. He had to learn how to equip his knight for battle, and to help him with putting on the heavy and cumbersome armour of the time. He was responsible for keeping this armour in good condition, polishing and cleaning it. He also had to demonstrate chivalrous behaviour such as generosity, selflessness, fearlessness and skill in battle. Finally, the potential knight also required

the financial means to purchase horses, weapons and armour for himself, and then make himself available to serve the ruling monarch for a minimum period each year.

B In modern times, the process is very different. Instead of relying on formalised military training or political patronage, a nominations system is used. This way, a person's name can be put forward for a knighthood by any institution such as a school or business, or even just a fellow member of society. After this, an advisory panel, acting on behalf of the sovereign, deliberates and selects the future knights and dames from the pool of applications. Those selected are contacted discreetly before announcements are made to ensure that they wish to accept the honour.

C In rare cases, knighthoods can be revoked through a process known as forfeiture. This most often occurs when the recipient is convicted of a criminal offense. Terry Lewis, a police officer in Queensland, Australia, was stripped of his knighthood after being implicated in a string of illegal activities that included accepting $700,000 worth of bribes from bookmakers and casinos, and forging the signature of an Australian politician on a police document in 1981. Lewis has repeatedly protested his innocence and suggested that he was falsely accused of these crimes, but his appeals failed in court. In a more serious incident, British art historian and intelligence officer, Anthony Blunt, lost his knighthood after it was discovered that he was working as a double agent and handing confidential material over to the Soviet Union.

D Knighthoods have also been forfeited for reasons of incompetence rather than outright illegality or treason. Having been knighted for 'services to banking' in 2004, CEO of the Royal Bank of Scotland, Fred Goodwin, presided over a 24-billion-pound loss at the bank just four years later. Although retaining a 16-million-pound pension, to which he was legally entitled, Goodwin had his knighthood annulled as the Queen's advisory panel deemed him 'the chief decision maker at the

time' Scandals such as these have contributed to spirited debates regarding the role and relevance of knighthoods in 21st-century society.

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1?

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1 The knighthood was first awarded only for military service.

2 Most knights now come from the arts and entertainment industries.

3 People from outside the Commonwealth cannot be awarded any type of knighthood.

4 The knighthood began in Great Britain.

5 Esquires, or trainee knights, were usually related to the knights they served.

6 An esquire needed money to buy his own equipment.

Questions 7— 10

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer

Knighthood Selection: Then and Now

The process of becoming a knight has changed over time. In the Middle Ages, people began training to become a knight at a 7…… They had to show they were brave and skilled fighters, and were

required to work for the 8…… for part of the year. Today, potential recipients of the knighthood are selected through a 9…… A final decision is made by an 10……

Questions 11— 13

Choose **THREE** letters, A— F.

Which **THREE** of the following are reasons given in the text for people losing their knighthoods?

A Punishing someone for a crime he or she did not commit

B Using another person 's name on an important paper

C Poor management of a company

D Wrongfully accepting pension payments

E Gambling on horseracing or card games

F Giving secret information to a foreign government

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26 , which are based on Reading Passage 2 below.

'Just do it!'

Or - the subtle art of procrastination

A Procrastination, a kind of chronic time-wasting, has long been dismissed as an innocuous human foible. Researchers are now beginning a more sober examination of this practice, however, and there may be good reason for doing so: twenty per cent of Americans now admit to suffering

from procrastination, a fifteen per cent jump from 1970. Researchers are bemused as to what explains this sharp rise in the figures, but there is no doubt that procrastination is wreaking havoc on people's lives. One side effect is perhaps the most predictable: procrastination hampers academic and work commitments as sufferers fail to meet deadlines or achieve their goals. But there are other costs too. In shifting burdens of responsibility onto others and reneging on their promises, procrastinators undermine relationships both in the workplace and in their private lives, all of which takes a toll on their well-being. In one study, over the course of a semester, procrastinating university students were noted to be suffering from notably weaker immune systems, more gastrointestinal problems, and higher occurrences of insomnia than their non-procrastinating peers.

B Is there hope for procrastinators? Everyone admits it 's a difficult demon to beat, but a few self-styled procrastination coaches have developed strategies to that end. Although evidence for their efficacy is largely anecdotal at this stage, some of these strategies at least offer promising avenues for future research.

C Career counsellor Amy Sykes focuses on the basics. Firstly, she says, embrace peer pressure. Many weight loss and self-help groups encourage individuals to hold themselves accountable to a wider circle of their peers, and Sykes believes this social safety net can be harnessed just as successfully by procrastinators. A change in perspective is also considered vital. 'When we want people to do something for us, we really sell it to them,' Sykes observes. 'But when we need to do it ourselves, we focus on all the reasons we don't want to.' Instead, she argues, we should pique our own interest and find ways to make our important projects more attractive — by turning them into little competitions or fact-finding missions, for example. If all else fails, Sykes believes we must recompense ourselves for our troubles, ideally with little treats upon finishing a task. 'It doesn't need to be big,' she says. 'Pancakes, a hot bath, or an episode of your favourite television show could all do the trick.'

D Though these tips may be a little too garden variety for some, others have thought up more cunning twists on the human psyche. One such approach was developed by the crime writer Raymond Chandler, who built his strategy on a basic yet critical observation: procrastinators rarely sit about completely inactively, but rather tend to engage themselves in useful but less pressing tasks: vacuuming behind the bed, cleaning out the fridge, washing the windows and so on. The result is that they 'cheat' themselves into experiencing feelings of productivity and satisfaction that offer further distraction from the original project. Chandler's method, which he successfully used to help himself write detective stories, involves setting aside a period of time in which the procrastinator may do one of two things: absolutely nothing or work on the project that he or she wishes to complete. Sitting still, without the satisfaction of busying himself with less urgent tasks, Chandler slowly felt the itch of tedious monotony sink in. Within five or ten minutes, this itch had become intolerable, and he felt compelled to begin writing his stories.

E Another procrastinator, professor of philosophy John Perry, developed his strategy against procrastination based on essentially the same insight as Chandler's — that procrastinators are actually quite good at doing 'marginally useful' tasks, just not the tasks they really ought to be doing. He thus surmised that the enemy of successful task completion is not, in fact, that great engine of productive activity - procrastination itself — but rather how we order our projects in the hierarchy of urgency. If a procrastinator needs to finish an assignment before 8 o'clock the following morning, for instance, he is likely to find himself sharpening pencils instead. 'But if all the procrastinator had left to do was to sharpen some pencils,' Perry observes, 'no force on earth could get him to do it.' The key to this approach is to rank one's priorities, then bump the most urgent tasks a little further down and place at the top some potentially daunting and important-sounding projects which are ultimately not all that essential. If the student with the essay deadline can convince himself he

absolutely must reorganise his email box, or finish reading that old, dusty novel he only got halfway through, then suddenly the essay deadline is going to seem a far superior option.

F If the Ancient Greeks struggled with it, and all the life coaches, counsellors and motivational speakers in the modern world are unable to erase it from our existence either, it seems unlikely that procrastination will ever truly be put to rest. As these procrastination gurus have shown, however, the right strategies have the potential to minimise its impact - if you ever get around to using them.

Questions 14-18

Do the following statements agree with the information given in Reading Passage 2?

In Boxes 14-18 on your answer sheet， write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

14 Procrastination has always been recognised as a serious problem.

15 The reason for the rise in procrastination is unknown.

16 Students are the most likely group to procrastinate.

17 A range of health problems have been linked to procrastination.

18 Most techniques to stop procrastination are based on scientific study.

Questions 19— 25

Look at the following statements (Questions 19- 25) and the list of people below.

Match each statement with the correct person, A, B or C .

19 Doing housework is a common way of avoiding important work.

20 Get support from other people.

21 Make a list of boring tasks before important ones.

22 Look for ways to make the work more interesting.

23 Lists are powerful tools for reducing procrastination.

24 Use boredom as motivation.

25 Use rewards when a task is completed.

List of People

A Amy Sykes

B Raymond Chandler

C John Perry

Question 26

Choose the correct letter A, B, C or D.

What is the writer 's conclusion?

A Some procrastination-reducing strategies have had proven success.

B Procrastination will never be completely eliminated.

C Procrastinators should employ a life coach to help them.

D Most procrastinators want to learn how to be more efficient.

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

When evolution works against us

A Life has changed in just about every way since small tribes of hunter-gatherers roamed the earth armed with nothing but spears and stone tools. We now buy our meat from the supermarket rather than stalking it through the jungle; houses and high-rises shelter us at night instead of caves. But despite these changes, some very basic responses linger on. The short, sharp feeling of heightened awareness that sweeps through us when a stranger passes in a dark alley is no different, physiologically speaking, from the sensation our ancestors experienced when they were walking through the bushes and heard a dry twig snap nearby. It's called the 'fight or flight' response, and it helps us to identify dangerous situations and act decisively by, as the name suggests, mustering our strength for a confrontation or running away as fast as we can.

B This shift to survival mode is often popularly described as a sudden unease, a sense that a situation is 'off' or 'not right'. However, the sense is actually the outcome of an incredibly complex mind-body process which involves the brain's 'fear centre', the hypothalamus, advising the sympathetic nervous system and the adrenal-cortical system to work, at first separately, and then together, to blend a potent mix of hormones and chemicals and secrete them into the bloodstream. Our heartbeat rises, along with our respiratory rate. Skin feels cold (hence the 'shiver' down the spine) as blood supply is redirected to the larger muscles required for a physical confrontation or a hasty retreat. The ability to concentrate on issues of minor importance also suffers, as the brain tends to prioritise 'big picture' thinking at this time.

C Without this instinctive response, the human race would never have survived, but at present it is often more of a hindrance than a help. Although instances of physical threats have decreased over the years, activation of the fight or flight response has actually increased, largely in response to mental frustrations. This poses a problem, however, because the fight or flight mechanism functions most helpfully as a response to something that can cause bodily harm, such as a falling tree or a wild animal, rather than in response to a fulminating boss, a traffic jam, or a spouse who has not returned a phone call. During these instances of mental distress, the physical manifestations of fight or flight, such as an inability to think rationally and calmly, can actually exacerbate the problem.

D A similar case of an evolutionary development overstaying its welcome is the example of 'mind chatter'. Mind chatter is the ceaseless train of scattered thoughts and self-talk that occupies our mind, ensuring we are always 'switched on', searching for danger and threats. This would have been a boon for a solitary caveman on a three-hour hunting expedition, but in a modern world already overloaded with sensory input, it causes us to fret about nonexistent predicaments and occasionally needlessly triggers the fight or flight response.

E These twin forces, mind chatter and the fight or flight response, have combined to wreak havoc on the modern psyche and have led to a spike in what some studies have suggested is a cause of up to eighty per cent of all illness today: stress. Stress, erroneously considered by many to be a mere feeling, is actually a physiological condition resulting from a cumulative accrual of certain hormones in the body, hormones that can help us in quick, sharp doses, but which are toxic if they are not properly metabolised. Metabolism of these potentially toxic hormones relies on physical exertion, which originally evolved as part of the fight or flight process — hormone release was usually followed by physical exertion (fighting or running), which returned the body to a state of balance. In present day encounters, however, the vital element of physical exertion is missing: a

resentful employee cannot punch his co-worker, for example, and a frustrated driver is unable to simply ram his way through a packed intersection.

F What can be done to restore the balance? Stress researcher Neil F. Neimarck, perhaps not surprisingly, recommends physical exercise as one useful strategy. Fortunately, the brain is not clever enough to realise that this exercise is completely unrelated to the original stress stimulus, and in this way we can effectively 'fool' our bodies into metabolising stress hormones by punching a boxing bag instead of the person who annoyed us in the first place. Another option is the 'relaxation response', discovered by Harvard cardiologist Herbert Benson. Benson found that certain behaviours, such as deep breathing, meditation, and the repetition of simple, affirmative phrases, acted as an antidote to mind chatter and the fight or flight responses, calming the nervous system and inducing a relaxed state of mind and body instead. Integrating these methods into our lives will be important if the cycle of stress accumulation that is so endemic in modern Western society is to be stopped.

Questions 27-32

Complete the summary using the list of words, A-O, below.

The fight or flight response

Modern man still has the 27…… that were needed in his distant past in the jungle. One of these, the 'fight or flight ' response, originally assisted humans to recognise 28…… and take action. Today, this same response manifests itself mostly as nothing more than a feeling of 29…… It is the result of the hypothalamus producing and releasing 30…… into the blood, with subsequent rises in heart rate and breathing, and the sensation of a 31…… in temperature as the blood is diverted to other

organs. Although this 32……was once essential to human survival, it now occurs as a result of perceived rather than actual threat

A plan	I powers
B strengths	J system
C substances	K anxiety
D strangers	L pressure
E warmth	M drop
F colors	N problems
G instincts	O rise
H threats	

Questions 33-36

Choose the correct letter，A，B，C or D.

33 When the fight or flight response is activated, it is difficult to

A increase breathing speed.

B focus on small problems.

C maintain body temperature.

D run for long periods of time.

34 The fight or flight response is less useful today because modern individuals

A encounter fewer physical threats.

B can easily manage small daily difficulties.

C are better at creative problem solving.

D do not need to hunt dangerous animals.

35 One disadvantage of 'mind chatter' is that people may

A talk too much and miss important information.

B spend too much time by themselves.

C become distracted from real threats.

D worry about problems that are not real:

36 The writer suggests stress is increasing because of

A a lack of physical release.

B an increase in the number of threats.

C more health problems.

D the loss of some hormones.

Questions 37— 40

Do the following statements agree with the views of the writer in Reading Passage 3?

In Boxes 37— 40 on your answer sheet , write

YES if the statement agrees with the views of the writer

NO if the statement contradicts the views of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

37 Stress is an emotion.

38 Fights in the workplace are increasing.

39 In order to metabolise hormones, exercise must be linked with the original cause of stress.

40 Saying positive words can reduce stress.