雅思阅读带练团

Omar 雅思

第一阶段

基础长难句学习

【day1】 经典长难句 1–15
【day2】经典长难句 16–30
【day3】经典长难句 31–45
【day4】经典长难句 46–60
【day5】经典长难句 61–75

此阶段具体要求如下：

前2–3天可以直接听视频后再独立完成句子机构划分/主干翻译，后2天可先自己理解再听讲解，暴露问题，有目的性听效果更佳；

【视频带练】建议边听边思考，要暂停做笔记，看完omar视频讲解后，需自己再重新做一遍，自测是否搞透所学内容，将老师所教转为自身能力。

1. His talent and devotion to the subject was perceived by his teacher, Thomas Hall, who encouraged him to attend a series of lectures given by the eminent scientist Michael Faraday at the Royal Institution.

单词：devotion 奉献　　perceive 感知　　eminent 杰出的

主干翻译：_____

_____

2. In addition to the reptiles, birds, mammals and insects which we see all around us, other groups that have succeeded out of water include scorpions, snails, crustaceans such as woodlice and land crabs, millipedes and centipedes, spiders and various worms.

单词：in addition to除…之外　　scorpion 蝎子　　crab蟹

主干翻译：_____

_____

3. In other words, the life form we are looking for may well have two green heads and seven fingers, but it will nevertheless resemble us in that it should communicate with its fellows, be interested in the Universe, live on a planet orbiting a star like our Sun, and perhaps most restrictively, have a chemistry, like us, based on carbon and water.

单词：nevertheless 然而　　resemble 像…　　orbit 绕轨道运行　　restrictively 限制性地

主干翻译：_____

_____

4. It is even possible that the older civilization may pass on the benefits of their experience in dealing with threats to survival such as nuclear war and global pollution, and other threats that we haven't yet discovered.

单词：threat 威胁　　civilization文明

主干翻译：_____

_____

5. In common with all mammals, reptiles and birds, their remote ancestors were marine fish and before that various more or less worm-like creatures stretching back, still in the sea, to the primeval bacteria.

单词：in common with 与…一样　　stretch back to追溯到　　primeval 原始的

主干翻译：_____

_____

6. Hearing impairment or other auditory function deficit in young children can have a major impact on their development of speech and communication, resulting in a detrimental effect on their ability to learn at school.

单词：　impairment 损害　　auditory 听觉的　　deficit 缺陷　　detrimental 有害的

主干翻译：_____

_____

7. Modern teaching practices, the organization of desks in the classroom, poor classroom acoustics, and mechanical means of ventilation such as air–conditioning units all contribute to the number of children unable to comprehend the teacher's voice.

单词：　acoustics 音响效果　　mechanical means 机械装置　　ventilation 通风设备
　　comprehend 理解

主干翻译：_____

_____

8. The International Institute Of Noise Control Engineering (I–INCE), on the advice of the World Health Organization, has established an international working party, which includes New Zealand, to evaluate noise and reverberation control for school rooms.

单词：　on the advice of 依照…的建议　　evaluate 评价，估计　　reverberation control 回响控制

主干翻译：_____

_____

9. While the detrimental effects of noise in classroom situations are not limited to children experiencing disability, those with a disability that affects their processing of speech and verbal communication could be extremely vulnerable.

单词：detrimental effect 有害作用　　verbal 口头的　　vulnerable 易受伤的，脆弱的

主干翻译：_____

_____

10. The attention deficit disorders are indicators of neurological and genetic disorders and are characterized by difficulties with sustaining attention, effort and persistence, organization skills and disinhibition.

单词：　disorder 混乱　　neurological 神经学的　　be characterized by 以…为特征
sustain 持续　　persistence 坚持　　disinhibition 去抑制；解除

主干翻译：_____

_____

11. Objective 3 of the New Zealand Disability Strategy is to "Provide The Best Education For Disabled People" by improving education so that all children, youth learners and adult learners will have equal opportunities to learn and develop within their already existing local school.

单词：　objective 目标　　strategy 策略　　existing 现存的

主干翻译：_____

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12. 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.

单词：　inveigle 诱使　　a host of 大量　　bar code 条形码　　convey 传达

主干翻译：_____

_____

13. 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.

单词：　breakthrough 突破　　so-called 号称…的　　transmit 传输　　revolution 革命

主干翻译：_____

_____

14. Turning her attention to minerals, she found her interest drawn to pitchblende, a mineral whose radioactivity, superior to that of pure uranium, could be explained only by the presence in the ore of small quantities of an unknown substance of very high activity.

单词：　superior to 比…好　　ore 矿　　substance 物质

主干翻译：_____

_____

15. During World War I, Marie Curie, with the help of her daughter Irene, devoted herself to the development of the use of X–radiography, including the mobile units which came to be known as ‘ Little Curies’, used for the treatment of wounded soldiers.

单词： devote to 致力于 X–radiography X射线 wounded 受伤的

主干翻译：_____

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16. An accident that occurred in the skies over the Grand Canyon in 1956 resulted in the establishment of the Federal Aviation Administration (FAA) to regulate and oversee the operation of aircraft in the skies over the United States, which were becoming quite congested.

单词： accident 事故 result in 导致 regulate 管理
oversee 监督 congested 拥挤的

主干翻译：_____

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17. According to archaeological evidence, at least 5,000 years ago, and long before the advent of the Roman Empire, the Babylonians began to measure time, introducing calendars to co–ordinate communal activities, to plan the shipment of goods and, in particular, to regulate planting and harvesting.

单词： archaeological 考古学 advent 出现 measure 测量 coordinate 协调
communal activities 公共的活动 harvest 收获

主干翻译：_____

_____

18. The Commonwealth Institute of Biological Control (CIBC) in Bangalore, with its global network of research laboratories and field stations, is one of the most active, non–commercial research agencies engaged in pest control by setting natural predators against parasites.

单词： be engaged in 忙于 predator 捕食者 parasite 寄生虫

主干翻译：_____

_____

19. Those who are professionally engaged in the art of interpreting history are thus in a difficult position, as they must steer a narrow course between the demands of 'evidence' and 'attractiveness', especially given the increasing need in the heritage industry for income–generating activities.

单词： interpret 说明 steer 驾驶；控制 heritage 传统 given考虑到

主干翻译：_____

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20. They based their calendars on three natural cycles: the solar day, marked by the successive periods of light and darkness as the earth rotates on its axis; the lunar month, following the phases of the moon as it orbits the earth; and the solar year, defined by the changing seasons that accompany our planet's revolution around the sun.

单词： successive 连续的 rotate 旋转 axis 轴
phase 月相 orbit 绕…轨道而行 revolution 旋转

主干翻译：_____

_____

21. If a life span is a genetically determined biological characteristic, it is logically necessary to propose the existence of an internal clock, which in some way measures and controls the ageing process and which finally determines death as the last step in a fixed programme.

单词： logical 合逻辑的 propose 建议 ageing process 老化过程 determine 决定

主干翻译：_____

_____

22. In the face of the escalating perils from indiscriminate applications of pesticides, a more effective and ecologically sound strategy of biological control, involving the selective use of natural enemies of the pest population, is fast gaining popularity– though, as yet, it is a new field with limited potential.

单词： escalating 逐步升高的 peril 危险 indiscriminate 任意的
pesticide 杀虫剂 sound 合理的

主干翻译：_____

_____

23. But that their minds are not different from our own is demonstrated by the fact that the hard–won discoveries of scientists like Kepler or Einstein become the commonplace knowledge

of schoolchildren and the once outrageous shapes and colors of an artist like Paul Klee so soon appear on the fabrics we wear.

单词： demonstrate 证明 hard-won 来之不易的 commonplace 普遍的
outrageous 反常的; fabric 布料

主干翻译：_____

_____

24. We may envy their achievements and fame, but we should also recognize the price they may have paid in terms of perseverance, single-mindedness, dedication, restriction on their personal lives, the demands upon their energies and time, and how often they had to display great courage to preserve their integrity or to make their way to the top.

单词： perseverance 坚持不懈 single-minded 专心的 dedication 奉献
restriction 约束 integrity 正直

主干翻译：_____

_____

25. To archaeology, which studies all cultures and periods, whether with or without writing, the distinction between history and pre-history is a convenient dividing line that recognize the importance of the written word, but in no way lessens the importance of the useful information contained in oral histories.

单词： distinction 区别 in no way 绝不 lessen 减轻

主干翻译：_____

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26. The problem of how health-care resources should be allocated or apportioned, so that they are distributed in both the most just and most efficient way, is not a new one.

单词： allocate 分配 apportion 分配 distribute 分配

主干翻译：_____

_____

27. Every health system in an economically developed society is faced with the need to decide (either formally or informally) what proportion of the community's total resources should be spent on health-care; how resources are to be apportioned; what diseases and disabilities and which forms of treatment are to be given priority; which members of the community are to be

given special consideration in respect of their health needs; and which forms of treatment are the most cost–effective.

单词： priority 优先 considerable 相当大的 in respect of 关于；涉及
cost–effective 划算的

主干翻译：_____

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28. Such expansion, which was to take the English language west to America and east to India, was supported by scientific developments such as the discovery of magnetism (and hence the invention of the compass), improvements in cartography and – perhaps the most important scientific revolution of them all– the new theories of astronomy and the movement of the Earth in relation to the planets and stars, developed by Copernicus(1473–1543)

单词： expansion 扩大 magnetism磁性 compass 指南针
revolution 革命 astronomy 天文学

主干翻译：_____

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29. Thus, in the 1950s and 1960s, there emerged an awareness in Western societies that resources for the provision of fossil fuel energy were finite and exhaustible and that the capacity of nature or the environment to sustain economic development and population was also finite.

单词： emerge 出现 fossil fuel 化石燃料 exhaustible 可耗尽的
capacity 容量 sustain 维持 finite 有限的

主干翻译：_____

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30. All warm–blooded animals make constant tiny adjustments in arousal in response to external events, but humans, who have developed a much more complicated internal life as a result of language, respond emotionally not only to their surroundings, but to their own thoughts.

单词： tiny 极小的 adjustment 调整 complicated 复杂的
respond to 对…的反应 surroundings环境 arousal 唤醒；反应

主干翻译：_____

_____

31. Like education, political and legal process and institutions, public order, communication, transport and money supply, health–care came to be seen as one of the fundamental social facilities necessary for people to exercise their other rights as autonomous human beings.

单词：　institution 公共机构　　fundamental 基本的　　autonomous 自治的

主干翻译：_____

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32. The second set of more specific changes that have led to the present concern about the distribution of health–care resources stems from the dramatic rise in health costs in most OECD countries, accompanied by large–scale demographic and social changes which have meant, to take one example, that elderly people are now major (and relatively very expensive) consumers of health–care resources.

单词：　stem from 起源于　　demographic 人口统计学的

主干翻译：_____

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33. A few years ago, in one of the most fascinating and disturbing experiments in behavioural psychology, Stanley Milgram of Yale University tested 40 subjects from all walks of life for their willingness to obey instructions given by a leader in situation in which the subjects might feel a personal distaste for the actions they were called upon to perform.

单词：　subject 被试者　　disturbing 令人不安的　　instruction 命令,指示　　distaste 厌恶

主干翻译：_____

_____

34. By the age of three, the children in the programme were significantly more advanced in language development than their peers, had made greater strides in problem solving and other intellectual skills, and were further along in social development.

单词：　stride 进展　　intellectual 智力的

主干翻译：_____

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35. When hill–farmers, for example, can make more money in a few weeks working as porters for foreign trekkers than they can in a year working in their fields, it is not surprising that many of them give up their farm–work, which is thus left to other members of the family.

单词：　trekker 旅行者

主干翻译：_____

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36. While two fifths of the students provided the information that the rainforests provide oxygen, in some cases this response also embraced the misconception that rainforests destruction would reduce atmospheric oxygen, making the atmosphere incompatible with human life on Earth.

单词：　embrace 包含　　misconception 误解　　incompatible 不相容的

主干翻译：_____

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37. These observations are generally consistent with our previous studies of pupils' view about the use and consideration of rainforests, in which girls were shown to be more sympathetic to animals and expressed views which seem to place an intrinsic value on non–human animal life.

单词：　consistent 一致的　　sympathetic 同情的　　intrinsic 内在的　　instinct 直觉

主干翻译：_____

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38. His thesis works relatively well when applied to discrimination against Blacks in the United States, but his definition of racial prejudice as "racially–based negative prejudgments against a group generally accepted as a race in any given region of ethnic competition," can be interpreted as also including hostility toward such ethnic groups as the Chinese in California and the Jews in medieval Europe.

单词：　discrimination 歧视　　racial prejudice 种族偏见　　prejudgment 预判
ethnic 种族的　　interpret 解释　　hostility 敌意

主干翻译：_____

_____

39. 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 organizations and others.

单词：　appoint 任命　　committee 委员会　　a panel of 一组　　representative 代表

主干翻译：_____

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40. There are several steps that can be taken, of which the chief one is to demand of all the organizations that exist with the declared objectives of safeguarding the interests of animals that they should declare clearly where they stand on violence towards people.

单词：　chief 主要的　　declare 宣布;声明　　objective 目标
　　subjective 主观的　　safeguard 保护

主干翻译：_____

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41. During the nineteenth century, she argues, the concept of the 'useful' child who contributed to the family economy gave way gradually to the present day notion of the'useless' child who, though producing no income for, and indeed extremely costly to its parents, is yet considered emotionally'priceless'.

单词：　contribute to 有助于　　notion 概念　　give way to 给…让路

主干翻译：_____

_____

42. With the Cooperative Research Centre for Micro Technology in Melbourne, they are developing unobtrusive sensors that will be embedded in an athlete's clothes or running shoes to monitor heart rate, sweating, heat production or any other factor that might have an impact on an athlete's ability to run.

单词：　unobtrusive 不明显的　　embed 嵌入　　sweat 发汗

主干翻译：_____

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43. The numeration system of the Tsimshian language in British Columbia contains seven distinct sets of words for numbers according to the class of items being accounted: for accounting flat objects and animals, for round objects and time, for people, for long objects and trees, for canoes, for measures, and for counting when no particular object is being numerated.

单词：　numeration 计算　　distinct 有区别的　　canoe 独木舟

主干翻译：_____

_____

44. Eliminating the secrecy surrounding pay by openly communicating everyone's remuneration, publicizing performance bonuses and allocating annual salary increase in a lump sum rather than

spreading them out over an entire year are examples of actions that will make rewards more visible and potentially more motivating.

单词： eliminate 消除 remuneration 报酬 bonus 奖金
allocate 分配 a lump sum 一整笔钱 reward奖赏

主干翻译：_____

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45. During the period, researchers from the Liverpool School of Tropical Medicine, the Central American Institute of Health in Nicaragua, the National Autonomous University of Nicaragua and the Costa Rican Institute of Health interviewed nearly 3,000 women, some of whom had learnt to read as children, some during the literacy crusade and some who had never learnt at all.

单词： literacy 读写能力 literate 受过教育的 illiterate 文盲 crusade 改革运动
主干翻译：_____

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46. 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 behavior of bullying pupils without confronting them directly, although other sanctions may be needed for those who continue with persistent bullying.

单词： assertive 坚定的 be liable to 有…倾向的 victim 受害人
worthwhile 值得的 bullying 欺凌 persistent 持续的 sanction处罚

主干翻译：_____

_____

47. 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.

单词： explicit 明确的 guideline 指导方针

主干翻译：_____

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48. It would have been easy to criticize the MIRTP for using the early phase a 'top–down' approach, in which decisions were made by experts and officials before being handed down to communities, but it was necessary to start the process from the level of the governmental authorities of the district.

单词：criticize 评论　　phase 阶段　　authority 权威　　district 区域

主干翻译：_____

_____

49. A natural predator indigenous to India, Neodumetiasangawani, was found useful in controlling the Rhodes grass–scale insect that was devouring forage grass in many parts of the US.

单词：predator 捕食者　　prey 捕食　　indigenous 本土的
devour 毁灭　　forage grass 饲草

主干翻译：_____

_____

50. In a related development, the sharp distinction between museum and heritage sites on the one hand, and theme park on the other, is evaporating.

单词：distinction 区别　　heritage 遗产　　evaporate 蒸发

主干翻译：_____

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51. 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.

单词：known as 以…而著称　　refer to as＝be called = be known as 把…称作
innovation 创新

主干翻译：_____

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52. 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 on, say a crumpled bag of crisp.

单词：bar code 条形码　　detect 发现　　crumpled 弄皱的

主干翻译：_____

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53. This has been seen by many to be the aspect of the self which is most influenced by social elements, since it is made of social roles (such as student, brother, colleague) and

characteristics which derive their meaning from comparison or interaction with other people (such as trustworthiness, shyness, sporting ability).

单词： comparison 比较 interaction 互动 derive from 来自 trustworthy 可靠的

主干翻译：_____

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54. Research with creative scientists by Simonton brought him to the conclusion that above a certain high level, characteristics such as independence seemed to contribute more to reaching the highest level of expertise than intellectual skills, due to the great demands of effort and time needed for learning and practice.

单词： contribute to 有助于 expertise 专业技能 intellectual 智力的

主干翻译：_____

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55. For Britain, the year as a whole is likely to be the warmest ever recorded, but despite the high temperature record on 10 August, the summer itself– defined as the June, July and August period– still come behind 1976 and 1995, when there were longer periods of intense heat.

单词： likely 可能 likelihood＝possibility 可能性 intense 强烈的

主干翻译：_____

_____

56. It is considered so exceptional that Professor Phil Jones, the CRU's director, is prepared to say openly– in a way few scientists have done before– that the 2003 extreme may be directly attributed, not to natural climate variability, but to global warming caused by human actions.

单词： exceptional 杰出的 attributed to 归因于 variability变化

主干翻译：_____

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57. Based on this approach, Brenda Milner and the late Theodore Rasmussen of the Montrel Neurological Institute published a major study in 1975 that confirmed the theory that country doctor Dax had formulated nearly 140 years earlier: in 96 percent of right–handed people, language is processed much more intensely in the left hemisphere.

单词： confirm 证实 formulate 构想 process 处理 hemisphere 半球

主干翻译：_____

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58. This system, however, did not apply to construction or seasonal occupations, which followed a six–day week, or to factories or mines which had to close regularly for maintenance: they also have a six–day week, whether interrupted (with the same day off for everyone) or continuous.

单词：occupation 工作　　maintenance 维护　　interrupt 打断　　continuous 连续的

主干翻译：_____

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59. Both nursery rhymes, selected by James Orchard Halliwell for a folklore society in 1842, and collection of fairy–stories by the scholarly Grimm brothers, swiftly translated into English in 1823, soon rocket to popularity with the young, quickly leading to new editions, each one more child–centered than the last.

单词：nursery rhyme 童谣,儿歌　　folklore 民间传说;民俗　　fairy story 神话　　rocket 极速上升

主干翻译：_____

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60. That writers of these works are now often recommended to the attentions of adults as well as child readers echoes the 19th–century belief that children's literature can be shared by the generations, rather than being a defensive barrier between childhood and the necessary growth towards adult understanding.

单词：recommend 推荐　　echo 效仿　　defensive 防御的　　barrier 障碍

主干翻译：_____

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61. Workplace environment can affect which communication style is most effective.

单词：workplace 工作场所

主干翻译：_____

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62. The monkey projects demonstrate that, compared with control animals that eat normally, caloric–restricted monkeys have lower body temperatures and levels of the pancreatic hormone insulin, and they retain more youthful levels of certain hormones that tend to fall with age.

单词：　pancreatic 胰腺的　　hormone 激素　　insulin 胰岛素

主干翻译：_____

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63. We are not yet in a position to make even preliminary estimates of answers to such fundamental questions as the extent to which the sea and the coast affected human life in the past, what percentage of the population at any time lived within reach of the sea, or whether human settlements in coastal environments showed a distinct characteristic from those inland.

单词：　preliminary 初步的　　estimate 估计

主干翻译：_____

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64. Mr King Hubbert, a Shell geologist of legendary status among experts, forecast in 1956 that oil production in the United States would peak in the early 1970s and then slowly decline, in something resembling a bell-shaped curve.

单词：　legendary传奇的　　status 地位

主干翻译：_____

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65. Some people seek seeds for profit— hunters in the employ of biotechnology firms, pharmaceutical companies and private corporations on the lookout for species that will yield the drugs or crops of the future; others collect to conserve, working to halt the sad slide into extinction facing so many plant species.

单词：　pharmaceutical company 制药公司　　corporation 公司　　halt 停止　　slide 滑落

主干翻译：_____

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66. Another hypothesis suggests that decreased processing of glucose could indicate to cells that food is scarce (eve if it isn't) and induce them to shift into an anti-aging mode that emphasizes preservation of the organism over such 'luxuries' as growth and reproduction.

单词：　hypothesis 假说,假设　　glucose 葡萄糖　　scarce 缺乏的　　anti-aging 抗衰老

主干翻译：_____

_____

67. The encroachment of the sea, the loss of huge areas of land now under the North Sea and the English Channel, and especially the loss of the land bridge between England and France which finally made Britain an island, must have been immediately significant factors in the lives of our prehistoric ancestors.

单词：　encroachment 侵蚀

主干翻译：_____

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68. We're currently responsible for habitat destruction on an unprecedented scale, and during the past 400 years, plant species extinction rates have been about 70 times greater than those indicated by the geological record as being normal.

单词：　destruction 破坏　　unprecedented 空前的

主干翻译：_____

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69. The ants' achievement is remarkable— the biologist Edward O. Wilson has called it 'one of the major breakthroughs in animal evolution' — because it allows them to eat, courtesy of their mushroom's digestive powers, the otherwise poisoned harvest of tropical forests whose leaves are laden with terpenoids, alkaloids and other chemicals designed to sicken browsers.

单词：　breakthrough 突破　　courtesy 好意　　laden with 充满　　browser 吃嫩叶的动物

主干翻译：_____

_____

70. Countries still trade disproportionately with their geographic neighbours.

单词：　disproportionately 不成比例地

主干翻译：_____

_____

71. On the other hand, the aim to create a robot like a human being is spurred on by dehumanized ideas — by the sense that human companionship can be substituted by machines; that humans lose their humanity when they interact with technology; or that we are a little more than surface and ritual behaviors, that can be stimulated with metal and electrical circuits.

单词：　spur 激励　　dehumanize 使丧失人性　　humanity 人道;人性
　　ritual 仪式的　　circuit 电路

主干翻译：_____

_____

72. Despite the complicated dynamics of dune formation, Bagnold noted that a sand dune generally needs the following three things to form: a large amount of loose sand in an area with little vegetation—usually on the coast or in a dried-up river, lake or sea bed; a wind or breeze to move the grains of sand; and an obstacle, which could be as small as a rock or as big as a tree, that causes the sand to lose momentum and settle.

单词：dynamic 动态　　dune 沙丘　　loose 松的
vegetation 植物　　breeze 微风　　obstacle 障碍

主干翻译：_____

_____

73. Firefighters unions that then complained of dilapidated equipment, old fire engines, and insufficient blueprints for fire safety are now praising the state's commitment, noting that funding for firefighting has increased despite huge cuts in many other programs.

单词：firefighter 消防队员　　dilapidated 破旧的; 年久失修的　　blueprint 蓝图;计划

主干翻译：_____

_____

74. Later, the English botanist Sir Joseph Banks—who was the first director of the Royal Botanic Gardens at Kew and travelled with Captain James Cook on his voyages near the end of the 18th century— was so driven to expand his collections that he sent botanists around the world at his own expense.

单词：　　botanist 植物学家　　botanic 植物的

主干翻译：_____

_____

75. Definitive proof of these new theories was obtained after an extraordinary series of experiments in Italy, where healthy people were introduced into malarial zones but kept free of mosquito bites---and remained well.

单词：　　malarial 患疟疾的

主干翻译：_____

_____

第二阶段

题型分类学习

【day6+7】判断正误--视频课+额外练习3--剑12T1P3➕剑12T2P3➕剑12T4P2
【day7+8】填空题+简答题--视频课+额外练习3---剑12T1P3➕剑12T2P3➕剑12T3P3
【day8+9】配对题--视频课+额外练习3---剑11T1P3➕剑12T2P1➕剑12T3P3
【day10+11】单选/多选题 --视频课+额外练习3---剑12T2P1➕剑12T3P3➕剑12T4P2
【day12+13】标题配对题--视频课+额外练习3---剑12T1P3➕剑12T2P2➕剑12T3P1
【day14+15】段落信息包含题--视频课+额外练习3---剑11T3P3➕剑12T2P1➕剑12T3P2

此阶段具体要求如下：

视频带练为经典题，额外练习为剑11/12高难度题，所有题目都是视频带练，讲清楚每一个细节/考点/单词/审题/解题/同义词反义词总结/举一反三延伸

【视频带练】建议边听边思考，看暂停，看完omar视频讲解后，需自己再重新做一遍，自测是否搞透所学内容，将老师所教转为自身能力。

【额外练习】建议先按上课所学方法自己先做题，带着疑惑听omar视频讲解，期间建议暂停自主思考，纠正错误学单词学语法学句子结构学出题套路学解题技巧，最后再重新做一遍，自测是否消化吸收搞透彻。

判断正误题

雅思阅读带练团强化段判断正误题

判断正误题解题注意事项

- 正误题都遵循顺序性原则，21 题一定在 22 题之后；
- 正误题碰到不确定的，建议先做下一题，前后夹击既省时间也提高正确率
- 正误题一定要看清楚是 TRUE/FALSE 还是 YES/NO，一般同一套题中两 种形式都会出现；
- TRUE/FALSE/YES/NO/NOT GIVEN 每个字母都是大写，不建议简写；
- 正误题切忌想太多推敲太多；
- 开始可以一道题一道题的做，然后两三道题一起做，最后练成一整块一起 做，提速关键对题目要有敏感度!
- 就跟着 omar 走，很容易做到全对!!

正误题解题步骤

- 先审题，把英语句子理解成中文，切忌太细节 •确定定位词和考点，定位词画圈考点划横线
- 找出对应原文，定位词化圈标记，一定是划一整句话一整句话
- 用“是不是”提问
- 自问自答，是---对;不是...而是错;不确定/不知道/不清楚---未提及

正误题高频考点 1

- 绝大部分题目考谓语，把“是不是”放在谓语动词前即可。
- 题:剑 6 第 73 页 28 题
- Studies show drugs available today can delay the process of growing old.
- 文：第一段第一句
- As researchers on aging noted recently, no treatment on the market today has been proved to slow human aging--the build-up of molecular and cellular damage that increases vulnerability to infirmity as we grow older.
- 题:剑 6 第 43 页 7 题
- Efficient cities can improve the quality of life for their inhabitants.
- 文：第二段最后一句
- Professor Peter Newman, ISTP Director, pointed out that these more efficient cities were able to put the difference into attracting industry and jobs or creating a better place to live.

正误题高频考点 2

以下考点，只有对或错，只有对或错，只有对或错！!!

- 考上升下降　increase/decrease/climb/reduction .
- 考原因　due to/ because of/ result from/result in/because
- 考先后顺序　after/before
- 考数量多或少 few/a few/little/a little/many

正误题高频考点 3

- 考比较级 more useful/less important/higher than …
- 考最高级 the most important/the biggest
- 考绝对词 only/all/every
- 考两者都---both
- 考形式主语　it is adj ….to do
- 考是否一样　the same
- 副词绝对不用看　ly

考上升下降　increase/decrease/climb/reduction

- 题：剑 7-94 页第 19 题
- Between 1940 and 1959，there was a sharp decrease in Alaska' s salmon population.
- 文：第四段第一行
- Between 1940 and 1959，overfishing led to crashes in salmon populations so severe that in 1953 Alaska was declared a federal disaster area.

考先后顺序/时间前后：after/before

- 题：剑 8-25 页 21 题
- Air Traffic control started after the Grand canyon crash in 1956.
- 文：B 段首句
- Rudimentary air traffic control existed well before the Grand Canyon disaster.

考原因　due to/ because of/ result from/result in/because

• 题：剑 7- 23 页 22 题

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

• 文:第二段倒数第四行

• 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.

考数量多或少　few/a few/little/a little/many

• 题:九分达人 1-46 页第 11 题

• There are very few who question Mozart Effect.

• 文:F 段第一句

• If you are a little skeptical about the claims made by supporters of the Mozart Effect, you are not alone.

考比较级--more useful / less important / higher than …

• 题：剑 8- 96 页第 18 题

• Disease-spreading pests respond more quickly to pesticides than agricultural pests do.

• 文：B 段首句

• More than 300 species of agricultural pests have developed resistance to a wide range of potent chemicals. Not to be left behind are the disease-spreading pests, about 100 species of which have become immune to a variety of insecticides now in use.

考最高级 the most important/the biggest

• 题：剑 5-50 页第 36 题

• The most important scientific development of the Renaissance period was the discovery of magnetism.

• 文:第二段第八行

• Such expansion, which was to take the English language west to America and east to India, was supported by scientific developments such as the discovery of magnetism(and hence the invention of the compass), improvements in cartography and-perhaps the most important scientific revolution of them all- the new theories of astronomy and the movements of the Earth

in relation to the planets and stars, developed by Copernicus.

考绝对词 only/all/every

- 题:剑 6-51 页第 33 题
- Indigenous Tasmanians used only four terms to indicate numbers of objects.
- 文:第三段第二句
- The indigenous peoples of Tasmania were only able to count one, two, many ; those of South Africa counted one, two, two and one, two twos, two twos and one, and so on.
- 题:剑 6-51 页第 35 题
- All cultures have been able to express large numbers clearly.
- 文:第四段第一行
- The lack of ability of some cultures to deal with large numbers is not really surprising.
- 题:剑 6-51 页第 35 题
- The ISTP study examined public and private systems in every city of the world.
- 文:第一段
- A new study conducted for the World Bank by Murdoch University ‘s Institute for Science and Technology Policy (ISTP) has demonstrated that public transport is more efficient than cars. The study compared the proportion of wealth poured into transport by thirty-seven cities around the world. This included both the public and private costs of building, maintaining and using a transport system.

考两者都 both

- 题: 剑 6-51 页 39 题
- The Tsimshian language contains both older and newer systems of counting.
- 文:第六段倒数第二句
- It seems that the last is a later development while the first six groups show the relics of an older system.

考形式主语　it is adj ….to do

- 题：剑 6-88 页第 13 题
- It is legitimate for drug companies to make money.
- 文：G 段第四行
- In the end the fact remains that pharmaceutical companies have every right to make a profit and will continue to find new ways to increase sales.

考是否相同　the same

- 剑 6-51 页第 38 题
- 题：In the Tsimshian language, the number for long objects and canoes is the same world.
- 文：倒数第二段第二行
- The numeration system of Tsimshian language in British Columbia contains seven distinct sets of words for numbers according to the class of the item being counted : for counting flat objects and animals, for round objects and time, for people, for long objects and trees, for canoes, for measures and for counting when no particular object is being numerated.

副词绝对不用看---ly

- 题：剑 6-24 页第 21 题
- Most countries continue to prefer to trade with nearby nations.
- 文：D 段第一句
- Countries still trade disproportionately with their geographic neighbors.

剑 7 Page 25

Making Every Drop 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 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 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 and 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.

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 from 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 the regions where new projects seem warranted, we must find ways to meet demands with few resources, respecting ecological criteria and to a smaller budget

Question 21-26

Do the following statement agree with the information given in the text ? In boxes 21-26 on your answer sheet, write

YES	*if the statement agrees with the information*
NO	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on 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.

剑 8 Page25

AIR TRAFFIC CONTROL IN THE USA

A An accident that occurred in the skies over the Grand Canyon in 1956 resulted in the establishment of the Federal Aviation Administration (FAA) to regulate and oversee the operation of aircraft in the skies over the United States, which were becoming quite congested. The resulting structure of air traffic control has greatly increased the safety of flight in the United States, and similar air traffic control procedures are also in place over much of the rest of the world.

B Rudimentary air traffic control (ATC) existed well before the Grand Canyon disaster. As early as the 1920s, the earliest air traffic controllers manually guided aircraft in the vicinity of the airports, using lights and flags, while beacons and flashing lights were placed along cross-country routes to establish the earliest airways. However, this purely visual system was useless in bad weather, and, by the 1930s, radio communication was coming into use for ATC. The first region to have something approximating today ' s ATC was New York City, with other major metropolitan areas following soon after.

C In the 1940s, ATC centres could and did take advantage of the newly developed radar and improved radio communication brought about by the Second World War, but the system remained rudimentary. It was only after the creation of the FAA that full-scale regulation of America ' s airspace took place, and this was fortuitous, for the advent of the jet engine suddenly resulted in a large number of very fast planes, reducing pilots ' margin of error and practically demanding some set of rules to keep everyone well separated and operating safely in the air.

D Many people think that ATC consists of a row of controllers sitting in front of their radar screens at the nation ' s airports, telling arriving and departing traffic what to do. This is a very incomplete part of the picture. The FAA realised that the airspace over the United States would at any time have many different kinds of planes, flying for many different purposes, in a variety of weather conditions, and the same kind of structure was needed to accommodate all of them.

E To meet this challenge, the following elements were put into effect. First, ATC extends over

virtually the entire United States. In general, from 365m above the ground and higher, the entire country is blanketed by controlled airspace. In certain areas, mainly near airports, controlled airspace extends down to 215m above the ground, and, in the immediate vicinity of an airport, all the way down to the surface. Controlled airspace is that airspace in which FAA regulations apply. Elsewhere, in uncontrolled airspace, pilots are bound by fewer regulations. In this way, the recreational pilot who simply wishes to go flying for a while without all the restrictions imposed by the FAA has only to stay in uncontrolled airspace, below 365m, while the pilot who does want the protection afforded by ATC can easily enter the controlled airspace.

F The FAA then recognised two types of operating environments. In good meteorological conditions, flying would be permitted under Visual Flight Rules (VFR), which suggests a strong reliance on visual cues to maintain an acceptable level of safety. Poor visibility necessitated a set of Instrumental Flight Rules (IFR), under which the pilot relied on altitude and navigational information provided by the plane ' s instrument panel to fly safely. On a clear day, a pilot in controlled airspace can choose a VFR or IFR flight plan, and the FAA regulations were devised in a way which accommodates both VFR and IFR operations in the same airspace. However, a pilot can only choose to fly IFR if they possess an instrument rating which is above and beyond the basic pilot's license that must also be held.

G Controlled airspace is divided into several different types, designated by letters of the alphabet. Uncontrolled airspace is designated Class F, while controlled airspace below 5, 490m above sea level and not in the vicinity of an airport is Class E. All airspace above 5, 490m is designated Class A. The reason for the division of Class E and Class A airspace stems from the type of planes operating in them. Generally, Class E airspace is where one finds general aviation aircraft (few of which can climb above 5, 490m anyway), and commercial turboprop aircraft. Above 5, 490m is the realm of the heavy jets, since jet engines operate more efficiently at higher altitudes. The difference between Class E and A airspace is that in Class A, all operations are IFR, and pilots must be instrument-rated, that is, skilled and licensed in aircraft instrumentation. This is because ATC control of the entire space is essential. Three other types of airspace, Classes D, C and B, govern the vicinity of airports. These correspond roughly to small municipal, medium-sized metropolitan and major metropolitan airports respectively, and encompass an increasingly

rigorous set of regulations. For example, all a VFR pilot has to do to enter Class C airspace is establish two-way radio contact with ATC. No explicit permission from ATC to enter is needed, although the pilot must continue to obey all regulations governing VFR flight. To enter Class B airspace, such as on approach to a major metropolitan airport, an explicit ATC clearance is required. The private pilot who cruises without permission into this airspace risks losing their license.

Questions 20-26

Do the following statements agree with the information given in text ? In boxes 20-26 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***

20 The FAA was created as a result of the introduction of the jet engine.

21 Air Traffic Control started after the Grand Canyon crash in 1956.

22 Beacons and flashing lights are still used by ATC today.

23 Some improvements were made in radio communication during World War II.

24 All aircraft in Class E airspace must use IFR.

25 A pilot entering Class C airspace is flying over an average-sized city

剑 5 Page50

The Birth of Scientific English

The European Renaissance (c. 14th16th century) is sometimes called the 1 revival of learning', time of renewed interest in the 'lost knowledge1 of classical times. At the same time, however, scholars also began to test and extend this knowledge. The emergent nation states of Europe developed competitive interests in world exploration and the development of trade. Such expansion, which was to fake the English language west to America and east to India, was supported by scientific developments such as the discovery of magnetism (and hence the invention of the compass), improvements in cartography and- perhaps the most important scientific revolution of them all -the new theories of astronomy and the movement of the Earth in relation to the planets and stars, developed by Copernicus.

Question 35-36

Do the following statements agree with the information given in text ? In boxes 35-36 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***

35 There was strong competition between scientists in Renaissance Europe.

36 The most important scientific development of the Renaissance period was the discovery of magnetism.

剑 9 Page 52

A neuroscientist reveals how to think differently

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, here 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. Rulesaren; t important to them. Iconoclasts face alienation and failure, but can also be a major as set 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 information given in text ? In boxes 32-37 on your answer sheet, write

YES	***if the statement agrees with the information***
NO	***if the statement contradicts the information***
NOT GIVEN.	***if there is no information on 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.

额外练习

THE FALKIRK WHEEL

A unique engineering achievement

The Falkirk Wheel in Scotland is the world's first and only rotating boat lift. Opened in 2002, it is central to the ambitious f84.5m Millennium Link project to restore navigability across Scotland by reconnecting the historic waterways of the Forth & Clyde and Union Canals.

The major challenge of the project lay in the fact that the Forth & Clyde Canal is situated 35 metres below the level of the Union Canal. Historically, the two canals had been joined near the town of Falkirk by a sequence of 11 locks – enclosed sections of canal in which the water level could be raised or lowered – that stepped down across a distance of 1.5 km. This had been dismantled in 1933, thereby breaking the link. When the project was launched in 1994, the British Waterways authority were keen to create a dramatic twenty–first–century landmark which would not only be a fitting commemoration of the Millennium but also a lasting symbol of the economic regeneration of the region.

Numerous ideas were submitted for the project, including concepts ranging from rolling eggs to tilting tanks, from giant seesaws to overhead monorails. The eventual winner was a plan for the huge rotating steel boat lift which was to become The Falkirk Wheel. The unique shape of the structure is claimed to have been inspired by various sources, both manmade and natural, most notably a Celtic double–headed axe, but also the vast turning propeller of a ship, the ribcage of a whale or the spine of a fish.

The various parts of The Falkirk Wheel were all constructed and assembled, like one giant toy building set, at Butterley Engineering's Steelworks in Derbyshire, some 400 km from Falkirk. A team there carefully assembled the 1,200 tonnes of steel, painstakingly fitting the pieces together to an accuracy of just 10 mm to ensure a perfect final fit. In the summer of 2001, the structure was then dismantled and transported on 35 lorries to Falkirk before all being bolted back together again on the ground, and finally lifted into position in five large sections by crane. The Wheel would need to withstand immense and constantly changing stresses as it rotated, so to make the structure more robust, the steel sections were bolted rather than welded together. Over 45,000 bolt holes were matched with their

bolts, and each bolt was hand–tightened.

The Wheel consists of two sets of opposing axe–shaped arms, attached about 25 metres apart to a fixed central spine. Two diametrically opposed water–filled gondolas', each with a capacity of 360,000 litres, are fitted between the ends of the arms. These gondolas always weigh the same, whether or not they are carrying boats. This is because, according to Archimedes' principle of displacement, floating objects displace their own weight in water. So when a boat enters a gondola, the amount of water leaving the gondola weighs exactly the same as the boat. This keeps the Wheel balanced and so, despite its enormous mass, it rotates through 180° in five and a half minutes while using very little power. It takes just 1.5 kilowatt–hours (5.4 MJ) of energy to rotate the Wheel roughly the same as boiling eight small domestic kettles of water.

Boats needing to be lifted up enter the canal basin at the level of the Forth&Clyde Canal and then enter the lower gondola of the Wheel. Two hydraulic steel gates are raised, so as to seal the gondola off from the water in the canal basin. The water between the gates is then pumped out. A hydraulic clamp, which prevents the arms of the Wheel moving while the gondola is docked, is removed, allowing the Wheel to turn. In the central machine room an array of ten hydraulic motors then begins to rotate the central axle. The axle connects to the outer arms of the Wheel, which begin to rotate at a speed of 1/8 of a revolution per minute. As the wheel rotates, the gondolas are kept in the upright position by a simple gearing system. Two eight–metre–wide cogs orbit a fixed inner cog of the same width, connected by two smaller cogs travelling in the opposite direction to the outer cogs – so ensuring that the gondolas always remain level. When the gondola reaches the top, the boat passes straight onto the aqueduct situated 24 metres above the canal basin.

The remaining 11 metres of lift needed to reach the Union Canal is achieved by means of a pair of locks. The Wheel could not be constructed to elevate boats over the full 35–metre difference between the two canals, owing to the presence of the historically important Antonine Wall, which was built by the Romans in the second century AD. Boats travel under this wall via a tunnel, then through the locks, and finally on to the Union Canal.

Questions 14–19

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

In boxes 14–19 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 Falkirk Wheel has linked the Forth & Clyde Canal with the Union Canal for the first time in their history.

15. There was some opposition to the design of the Falkirk Wheel at first.

16. The Falkirk Wheel was initially put together at the location where its components were manufactured.

17. The Falkirk Wheel is the only boat lift in the world which has steel sections bolted together by hand.

18. The weight of the gondolas varies according to the size of boat being carried.

19. The construction of the Falkirk Wheel site took into account the presence of a nearby ancient monument.

The Benefits of Being Bilingual

剑12T2P3

A. According to the latest figures, the majority of the world's population is now bilingual or multilingual, having grown up speaking two or more languages. In the past, such children were considered to be at a disadvantage compared with their monolingual peers. Over the past few decades, however, technological advances have allowed researchers to look more deeply at how bilingualism interacts with and changes the cognitive and neurological systems, thereby identifying several clear benefits of being bilingual.

B. Research shows that when a bilingual person uses one language, the other is active at the same time. When we hear a word, we don't hear the entire word all at once: the sounds arrive in sequential order. Long before the word is finished, the brain's language system begins to guess what that word might be. If you hear ‘can', you will likely activate words like 'candy' and 'candle' as well, at least during the earlier stages of word recognition. For bilingual people, this activation is not limited, to a single language; auditory input activates corresponding words regardless of the language to which they belong. Some of the most compelling evidence for this phenomenon, called 'language co–activation', comes from studying eye movements. A Russian–English bilingual asked to 'pick up a marker' from a set of objects would look more at a stamp than someone who doesn't know Russian, because the Russian word for 'stamp', marka, sounds like the English word he or she heard, 'marker'. In cases like this, language co–activation occurs because what the listener hears could map onto words in either language.

C. Having to deal with this persistent linguistic competition can result in difficulties, however. For instance, knowing more than one language can cause speakers to name pictures more slowly, and can increase 'tip–of–the–tongue states', when you can almost, but not quite, bring a word to mind. As a result, the constant juggling of two languages creates a need to control how much a person accesses a language at any given time. For this reason, bilingual people often perform better on tasks that require conflict management. In the classic Stroop Task, people see a word and are asked to name the colour of the word's font. When the colour and the word match (i.e., the word 'red' printed in red), people correctly name the colour more quickly than when the colour and the word don't match (i.e., the word ‘red' printed in blue). This occurs because the word itself ('red') and its font colour (blue) conflict. Bilingual people often excel at tasks such as this, which tap into the ability to ignore competing perceptual information and focus on the relevant aspects of the input. Bilinguals are also better at switching between two tasks; for example, when bilinguals have to switch from categorizing objects by colour (red or green) to categorizing them by shape (circle or triangle), they do so more quickly than monolingual people, reflecting better cognitive control when having to make rapid changes of strategy.

D. It also seems that the neurological roots of the bilingual advantage extend to brain areas more traditionally associated with sensory processing. When monolingual and bilingual adolescents listen to simple speech sounds without any intervening background noise, they show highly similar brain stem responses. When researchers play the same sound to both groups in the presence of background noise, however, the bilingual listeners' neural response is considerably larger, reflecting better encoding of the sound's fundamental frequency, a feature of sound closely related to pitch perception.

E. Such improvements in cognitive and sensory processing may help a bilingual person to process information in the environment, and help explain why bilingual adults acquire a third language better than monolingual adults master a second language. This advantage may be rooted in the skill of focusing on information about the new language while reducing interference from the languages they already know.

F. Research also indicates that bilingual experience may help to keep the cognitive mechanisms sharp by recruiting alternate brain networks to compensate for those that become damaged during aging. Older bilinguals enjoy improved memory relative to monolingual people, which can lead to real–world health benefits. In a study of over 200 patients with Alzheimer's disease, a degenerative brain disease, bilingual patients reported showing initial symptoms of the disease an average of five years later than monolingual patients. In a follow–up study, researchers compared the brains of bilingual and monolingual patients matched on the severity of Alzheimer's symptoms. Surprisingly, the bilinguals' brains had more physical signs of disease than their monolingual counterparts, even though their outward behaviour and abilities were the same. If the brain is an engine, bilingualism may help it to go farther on the same amount of fuel.

G. Furthermore, the benefits associated with bilingual experience seem to start very early. In one study, researchers taught seven–month–old babies growing up in monolingual or bilingual homes that when they heard a tinkling sound, a puppet appeared on one side of a screen. Halfway through the study, the puppet began appearing on the opposite side of the screen. In order to get a reward, the infants had to adjust the rule they'd learned; only the bilingual babies were able to successfully learn the new rule. This suggests that for very young children, as well as for older people, navigating a multilingual environment imparts advantages that transfer far beyond language.

Questions 32–36

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

In boxes 32–36 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. Attitudes towards bilingualism have changed in recent years.

33. Bilingual people are better than monolingual people at guessing correctly what words are before they are finished.

34. Bilingual people consistently name images faster than monolingual people.

35. Bilingual people's brains process single sounds more efficiently than monolingual people in all situations.

36. Fewer bilingual people than monolingual people suffer from brain disease in old age.

Bring back the big cats

It's time to start returning vanished native animals to Britain, says John Vesty

There is a poem, written around 598 AD, which describes hunting a mystery animal called a llewyn. But what was it? Nothing seemed to fit, until 2006, when an animal bone, dating from around the same period, was found in the Kinsey Cave in northern England. Until this discovery, the lynx – a large spotted cat with tasselled ears – was presumed to have died out in Britain at least 6,000 years ago, before the inhabitants of these islands took up farming. But the 2006 find, together with three others in Yorkshire and Scotland, is compelling evidence that the lynx and the mysterious llewyn were in fact one and the same animal. If this is so, it would bring forward the tassel-eared cat's estimated extinction date by roughly 5,000 years.

However, this is not quite the last glimpse of the animal in British culture. A 9th-century stone cross from the Isle of Eigg shows, alongside the deer, boar and aurochs pursued by a mounted hunter, a speckled cat with tasselled ears. Were it not for the animal's backside having worn away with time, we could have been certain, as the lynx's stubby tail is unmistakable. But even without this key feature, it's hard to see what else the creature could have been. The lynx is now becoming the totemic animal of a movement that is transforming British environmentalism: rewilding.

Rewilding means the mass restoration of damaged ecosystems. It involves letting trees return to places that have been denuded, allowing parts of the seabed to recover from trawling and dredging, permitting rivers to flow freely again. Above all, it means bringing back missing species. One of the most striking findings of modern ecology is that ecosystems without large predators behave in completely different ways from those that retain them. Some of them drive dynamic processes that resonate through the whole food chain, creating niches for hundreds of species that might otherwise struggle to survive. The killers turn out to be bringers of life.

Such findings present a big challenge to British conservation, which has often selected arbitrary assemblages of plants and animals and sought, at great effort and expense, to prevent them from changing. It has tried to preserve the living world as if it were a jar of pickles, letting nothing in and nothing out, keeping nature in a state of arrested development. But ecosystems are not merely collections of species; they are also the dynamic and ever-shifting relationships between them. And this dynamism often depends on large predators.

At sea the potential is even greater: by protecting large areas from commercial fishing, we could once more see what 18th-century literature describes: vast

shoals of fish being chased by fin and sperm whales, within sight of the English shore. This policy would also greatly boost catches in the surrounding seas; the fishing industry's insistence on scouring every inch of seabed, leaving no breeding reserves, could not be more damaging to its own interests.

Rewilding is a rare example of an environmental movement in which campaigners articulate what they are for rather than only what they are against. One of the reasons why the enthusiasm for rewilding is spreading so quickly in Britain is that it helps to create a more inspiring vision than the green movement's usual promise of 'Follow us and the world will be slightly less awful than it would otherwise have been.

The lynx presents no threat to human beings: there is no known instance of one preying on people. It is a specialist predator of roe deer, a species that has exploded in Britain in recent decades, holding back, by intensive browsing, attempts to re-establish forests. It will also winkle out sika deer: an exotic species that is almost impossible for human beings to control, as it hides in impenetrable plantations of young trees. The attempt to reintroduce this predator marries well with the aim of bringing forests back to parts of our bare and barren uplands. The lynx requires deep cover, and as such presents little risk to sheep and other livestock, which are supposed, as a condition of farm subsidies, to be kept out of the woods.

On a recent trip to the Cairngorm Mountains, I heard several conservationists suggest that the lynx could be reintroduced there within 20 years. If trees return to the bare hills elsewhere in Britain, the big cats could soon follow. There is nothing extraordinary about these proposals, seen from the perspective of anywhere else in Europe. The lynx has now been reintroduced to the Jura Mountains, the Alps, the Vosges in eastern France and the Harz mountains in Germany, and has re-established itself in many more places. The European population has tripled since 1970 to roughly 10,000. As with wolves, bears, beavers, boar, bison, moose and many other species, the lynx has been able to spread as farming has left the hills and people discover that it is more lucrative to protect charismatic wildlife than to hunt it, as tourists will pay for the chance to see it. Large-scale rewilding is happening almost everywhere – except Britain.

Here, attitudes are just beginning to change. Conservationists are starting to accept that the old preservation-jar model is failing, even on its own terms. Already, projects such as Trees for Life in the Highlands provide a hint of what might be coming. An organisation is being set up that will seek to catalyse the rewilding of land and sea across Britain, its aim being to reintroduce that rarest of species to British ecosystems: hope.

Questions 23–26

Do the following statements agree with the claims of the writer in Reading Passage 2?

In boxes 23–26 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

23. Britain could become the first European country to reintroduce the lynx.

24. The large growth in the European lynx population since 1970 has exceeded conservationists' expectations.

25. Changes in agricultural practices have extended the habitat of the lynx in Europe.

26. It has become apparent that species reintroduction has commercial advantages.

填空题

雅思阅读带练团强化段填词题/简答题

填词题/简答题解题注意事项

- 填词题简单题都是细节题，所以同样遵循出题的顺序原则;
- 填词题/简答题碰到不确定的，建议先做下一题，前后夹击既省时间也提高 正确率
- 做题方法:大范围到小范围---大范围帮助定位+小范围即解题处;
- 可以运用语法规则缩小答案范围，搞清楚词性非常重要;
- 一定不要填错答案，注意单复数，大小写;
- 开始可以一道题一道题的做，然后两三道题一起做，最后练成一整块一起 做，提速
- 关键对题目要有敏感度!
- 就跟着 omar 走，很容易做到全对!!

填词题/简答题解题步骤

- 先审题，把英语句子理解成中文，切忌太细节
- 确定大范围和小范围，大范围定位，一般为明显的稳定的名词;
- 弄清楚小范围问什么，用中文造句
- 找出对应原文，定位词化圈标记，一定是划一整句话一整句话
- 带着小范围问题解题

剑 7 Page 20

Let's Go Bats

D

What else might the engineer think of Well, blind humans sometimes seem to have an uncanny sense of obstacles in their path. It has been given the name 'facial vision', because blind people have reported that it feels a bit like the sense of touch, on the face. One report tells of a totally blind boy who could ride his tricycle at good speed round the block near his home, using facial vision. Experiments showed that, in fact, facial vision is nothing to do with touch or the front of the face, although the sensation may be referred to the front of the face, like the referred pain in a phantom limb. The sensation of facial vision, it turns out, really goes in through the ears. Blind people, without even being aware of the fact, are actually using echoes of their own footsteps and of other sounds, to sense the presence of obstacles. Before this was discovered, engineers had already built instruments to exploit the principle, for example to measure the depth of the sea under a ship. After this technique had been invented, it was only a matter of time before weapons designers adapted it for the detection of submarines. Both sides in the Second World War relied heavily on these devices, under such codenames as Asdic (British) and Sonar (American), as well as Radar (American) or RDF (British), which uses radio echoes rather than sound echoes.

E

The Sonar and Radar pioneers didn't know it then, but all the world now knows that bats, or rather natural selection working on bats, had perfected the system tens of millions of years earlier: and their 'radar' achieves feats of detection and navigation that would strike an engineer dumb with admiration. It is technically incorrect to talk about bat 'radar', since they do not use radio waves. It is sonar. But the underlying mathematical theories of radar and sonar are very similar: and much of our scientific understanding of the details of what bats are doing has come from applying radar theory to them. The American zoologist Donald Grifiln, who was largely responsible for the discovery of sonar in bats, coined the term 'echolocation' to cover both sonar and radar: whether used by animals or by human instruments.

Question 6-9

Complete the summary below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes 6-9 on your answer sheet.

Facial Vision

Blind people report that so-called 'facial vision' is comparable to the sensation of touch on the face. In fact, the sensation is more similar to the way in which pain from a 6..... arm or leg might be felt. The ability actually comes from perceiving 7.....through the ears. However, even before this was understood, the principle had been applied in the design of instruments which calculated the 8..... of the seabed. This was followed by a wartime application in devices for finding 9.....

Question 10-13

Complete the sentences below.

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

Write your answers in boxes 10-13 on your answer sheet.

10 Long before the invention of radar, ... had resulted in a sophisticated radar-like system in bats.

11 Radar is an inaccurate term when referring to bats because ..... are not used in their navigation system.

12 Radar and sonar are based on similar .....

13 The word 'echolocation' was first used by someone working as a .....

剑 7 Page 47

The True Cost of Food

E The costs included: £ 120m for removal of pesticides; £ 16m for removal of nitrates; £ 55m for removal of phosphates and soil; £ 23m for the removal of the bug cryptosporidium from drinking water by water companies; £ 125m for damage to wildlife habitats, hedgerows and dry stone walls; £ 1,113m from emissions of gases likely to contribute to climate change; £ 106m from soil erosion and organic carbon losses; £ 169m from food poisoning; and £ 607m from cattle disease, Professor Pretty draws a simple but memorable conclusion from all this: our food bills are actually threefold. We are paying for our supposedly cheaper food in three separate ways: once over the counter, secondly through our taxes, which provide the enormous subsidies propping up modern intensive farming, and thirdly to clean up the mess that modern farming leaves behind.

F So can the true cost of food be brought down? Breaking away from industrial agriculture as the solution to hunger may be very hard for some countries, but in Britain, where the immediate need to supply food is less urgent, and the costs and the damage of intensive farming have been clearly seen, it may be more feasible. The government needs to create sustainable, competitive and diverse farming and food sectors, which will contribute to a thriving and sustainable rural economy, and advance environmental, economic, health, and animal welfare goals.

G But if industrial agriculture is to be replaced, what is a viable alternative? Professor Pretty feels that organic farming would be too big a jump in thinking and in practices for many farmers. Furthermore, the price premium would put the produce out of reach of many poorer consumers. He is recommending the immediate introduction of a 'Greener Food Standard', which would push the market towards more sustainable environmental practices than the current norm, while not requiring the full commitment to organic production. Such a standard would comprise agreed practices for different kinds of farming, covering agrochemical use, soil health, land management, water and energy use, food safety and animal health. It could go a long way, he says, to shifting consumers as well as farmers towards a more sustainable system of agriculture.

Question 22-26

Complete the sentences below.

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

Write your answers in boxes 22-26 on your answer sheet.

Professor Pretty concludes that our 22 ..... are higher than most people realise, because we make three different types of payment. He feels it is realistic to suggest that Britain should reduce its reliance on 23 ..... Although most farmers would be unable to adapt to 24 ....., Professor Pretty wants the government to initiate change by establishing what he refers to as a 25 ....., He feels this would help to change the attitudes of both 26 ..... .and .....

剑 8 Page29

TELEPATHY

The ganzfeld experiment tries to recreate these conditions with participants sitting in soft reclining chairs in a sealed room, listening to relaxing sounds while their eyes are covered with special filters letting in only soft pink light. In early ganzfeld experiments, the telepathy test involved identification of a picture chosen from a random selection of four taken from a large image bank. The idea was that a person acting as a 'sender' would attempt to beam the image over to the 'receiver' relaxing in the sealed room. Once the session was over, this person was asked to identify which of the four images had been used. Random guessing would give a hit-rate of 25 per cent; if telepathy is real, however, the hit-rate would be higher. In 1982, the results from the first ganzfeld studies were analysed by one of its pioneers, the American parapsychologist Charles Honorton. They pointed to typical hit-rates of better than 30 per cent - a small effect, but one which statistical tests suggested could not be put down to chance.

The implication was that the ganzfeld method had revealed real evidence for telepathy. But there was a crucial flaw in this argument- one routinely overlooked in more conventional areas of science. Just because chance had been ruled out as an explanation did not prove telepathy must exist; there were many other ways of getting positive results. These ranged from 'sensory leakage' - where clues about the pictures accidentally reach the receiver - to outright fraud. In response, the researchers issued a review of all the ganzfeld studies done up to 1985 to show that 80 per cent had found statistically significant evidence. However, they also agreed that there were still too many problems in the experiments which could lead to positive results, and they drew up a list demanding new standards for future research.

After this, many researchers switched to autoganzfeld tests - an automated variant of the technique which used computers to perform many of the key tasks such as the random selection of images. By minimising human involvement, the idea was to minimise the risk of flawed results. In 1987, results from hundreds of autoganzfeld tests were studied by Honorton in a 'meta-analysis', a statistical technique for finding the overall results from a set of studies. Though less compelling than before, the outcome was still impressive.

Yet some parapsychologists remain disturbed by the lack of consistency between individual ganzfeld studies. Defenders of telepathy point out that demanding impressive evidence from every study ignores one basic statistical fact: it takes large samples to detect small effects. If, as current results suggest, telepathy produces hit-rates only marginally above the 25 per cent expected by chance, it's unlikely to be detected by a typical ganzfeld study involving around 40 people: the group is just not big enough. Only when many studies are combined in a meta-analysis will the faint signal of telepathy really become apparent. And that is what researchers do seem to be finding.

Question 31-40

Complete the sentences below.

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

Write your answers in boxes 31-40 on your answer sheet.

Telepathy Experiments

Name/Date	Description	Result	Flaw
Ganzfeld studies 1982	Involved a person acting as a **31** ..... , who picked out one **32**.....from a random selection of four, and a **33**..... who then tried to identify it.	Hit-rates were higher than with random guessing	Positive results could be produced by factors such as **34**.....or **35** .....
Autoganzfeld studies 1987	**36**.....were used for key tasks to limit the amount of **37**..... in carrying out the tests.	The results were then subjected to a **38**	The **39**.....between different test results was put down to the fact that sample groups were not **40**..... ..... (as with most ganzfeld studies).

剑 9 Page 20

William Henry Perkin

Historically. textile dyes were made from such natural sources as plants and animal excretions. Some of these, such as the glandular mucus of snails, were difficult to obtain and outrageously expensive. Indeed, the purple colour extracted from a snail was once so costly that in society at the time only the rich could afford it. Further, natural dyes tended to be muddy in hue and fade quickly. It was against this backdrop that Perkin's discovery was made.

Perkin quickly grasped that his purple solution could be used to colour fabric, thus making it the world's first synthetic dye. Realising the importance of this breakthrough, he lost no time in patenting it. But perhaps the most fascinating of all Perkin's reactions to his find was his nearly instant recognition that the new dye had commercial possibilities.

Perkin originally named his dye Tyrian Purple, but it later became commonly known as mauve (from the French for the plant used to make the colour violet). He asked advice of Scottish dye works owner Robert Pullar, who assured him that manufacturing the dye would be well worth it if the colour remained fast (i.e. would not fade) and the cost was relatively low. So, over the fierce objections of his mentor Hofmann, he left college to give birth to the modern chemical industry.

With the help of his father and brother, Perkin set up a factory not far from London. Utilising the cheap and plentiful coal tar that was an almost unlimited byproduct of London's gas street lighting, the dye works began producing the world's first synthetically dyed material in 1857. The company received a commercial boost from the Empress Eugenie of France, when she decided the new colour flattered her. Very soon, mauve was the necessary shade for all the fashionable ladies in that country. Not to be outdone, England's Queen Victoria also appeared in public wearing a mauve gown, thus making it all the rage in England as well. The dye was bold and fast, and the public clamoured for more. Perkin went back to the drawing board.

Although Perkin's fame was achieved and fortune assured by his first discovery, the chemist continued his research. Among other dyes he developed and introduced were aniline red (1859) and aniline black (1863) and, in the late 1860s, Perkin's green. It is important to note that Perkin's synthetic dye discoveries had outcomes far beyond the merely decorative. The dyes also became vital to medical research in many ways. For instance, they were used to stain previously invisible microbes and bacteria, allowing researchers to identify such bacilli as tuberculosis, cholera, and anthrax. Artificial dyes continue to play a crucial role today. And, in what would have been particularly pleasing to Perkin, their current use is in the search for a vaccine against malaria.

Question8-13

Answer the questions below.

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

Write your answer in boxes 8-13 on your answer sheet.

8 Before Perkin's discovery, with what group in society was the colour purple associated?

9 What potential did Perkin immediately understand that his new dye had?

10 What was the name finally used to refer to the first colour Perkin invented?

11 What was the name of the person Perkin consulted before setting up his own dye works?

12 In what country did Perkin's newly invented colour first become fashionable?

13 According to the passage, which disease is now being targeted by researchers using synthetic dyes?

剑 9 Page 28

The history of the tortoise

Walter Joyce and Jacques Gauthier, at Yale University, obtained three measurements in these particular bones of 71 species of living turtles and tortoises. They used a kind of triangular graph paper to plot the three measurements against one another. All the land tortoise species formed a tight cluster of points in the upper part of the triangle; all the water turtles cluster in the lower part of the triangular graph. There was no overlap, except when they added some species that spend time both in water and on land. Sure enough, these amphibious species show up on the triangular graph approximately half way between the 'wet cluster' of sea turtles and the 'dry cluster' of land tortoises. The next step was to determine where the fossils fell. The bones of P. quenstedti and P. talampayensis leave us in no doubt. Their points on the graph are right in the thick of the dry cluster. Both these fossils were dry-land tortoises. They come from the era before our turtles returned to the water.

Question 34-39

Complete the flow-chart below.

Choose **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage for each answer. Write your answers in boxes 34-39 on your answer sheet.

Questions 34–39

Complete the flow-chart below.

*Choose **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage for each answer.*

Write your answers in boxes 34–39 on your answer sheet.

Method of determining where the ancestors of turtles and tortoises come from

Step 1

71 species of living turtles and tortoises were examined and a total of **34** ..... were taken from the bones of their forelimbs.

↓

Step 2

The data was recorded on a **35** ..... (necessary for comparing the information).

Outcome: Land tortoises were represented by a dense **36** ..... of points towards the top.

Sea turtles were grouped together in the bottom part.

↓

Step 3

The same data was collected from some living **37** ..... species and added to the other results.

Outcome: The points for these species turned out to be positioned about **38** ..... up the triangle between the land tortoises and the sea turtles.

↓

Step 4

Bones of *P. quenstedti* and *P. talampayensis* were examined in a similar way and the results added.

Outcome: The position of the points indicated that both these ancient creatures were **39** ..... .

额外练习

剑12T1P3

A. 'I would found an institution where any person can find instruction in any subject.' That was the founder's motto for Cornell University, and it seems an apt characterization of the different university, also in the USA, where I currently teach philosophy. A student can prepare for a career in resort management, engineering, interior design, accounting, music, law enforcement, you name it. But what would the founders of these two institutions have thought of a course called 'Arson for Profit? I kid you not: we have it on the books. Any undergraduates who have met the academic requirements can sign up for the course in our program in 'fire science.

B. Naturally, the course is intended for prospective arson investigators, who can learn all the tricks of the trade for detecting whether a fire was deliberately set, discovering who did it, and establishing a chain of evidence for effective prosecution in a court of law. But wouldn't this also be the perfect course for prospective arsonists to sign up for? My point is not to criticize academic programs in fire science: they are highly welcome as part of the increasing professionalization of this and many other occupations. However, it's not unknown for a firefighter to torch a building. This example suggests how dishonest and illegal behavior, with the help of higher education, can creep into every aspect of public and business life.

C. I realized this anew when I was invited to speak before a class in marketing, which is another of our degree programs. The regular instructor is a colleague who appreciates the kind of ethical perspective I can bring as a philosopher. There are endless ways I could have approached this assignment, but I took my cue from the title of the course: 'Principles of Marketing'. It made me think to ask the students, 'Is marketing principled?' After all, a subject matter can have principles in the sense of being codified, having rules, as with football or chess, without being principled in the sense of being ethical. Many of the students immediately assumed that the answer to my question about marketing principles was obvious: no. Just look at the ways in which everything under the sun has been marketed; obviously it need not be done in a principled (=ethical) fashion.

The 'Arson for Profit' course

This is a university course intended for students who are undergraduates and who are studying **33** ..... The expectation is that they will become **34** ..... specialising in arson. The course will help them to detect cases of arson and find **35**..... of criminal intent, leading to successful **36**..... in the courts.

B. Research shows that when a bilingual person uses one language, the other is active at the same time. When we hear a word, we don't hear the entire word all at once: the sounds arrive in sequential order. Long before the word is finished, the brain's language system begins to guess what that word might be. If you hear ‘can' you will likely activate words like 'candy' and 'candle' as well, at least during the earlier stages of word recognition. For bilingual people, this activation is not limited, to a single language; auditory input activates corresponding words regardless of the language to which they belong. Some of the most compelling evidence for this phenomenon, called "language co–activation', comes from studying eye movements. A Russian–English bilingual asked to 'pick up a marker' from a set of objects would look more at a stamp than someone who doesn't know Russian, because the Russian word for ‘stamp', marka, sounds like the English word he or she heard, 'marker'. In cases like this, language co–activation occurs because what the listener hears could map onto words in either language.

C. Having to deal with this persistent linguistic competition can result in difficulties, however. For instance, knowing more than one language can cause speakers to name pictures more slowly, and can increase 'tip–of–the–tongue states', when you can almost, but not quite, bring a word to mind. As a result, the constant juggling of two languages creates a need to control how much a person accesses a language at any given time. For this reason, bilingual people often perform better on tasks that require conflict management. In the classic Stroop Task, people see a word and are asked to name the colour of the word's font. When the colour and the word match (i.e., the word 'red' printed in red), people correctly name the colour more quickly than when the colour and the word don't match (i.e., the word ‘red' printed in blue). This occurs because the word itself ('red') and its font colour (blue) conflict. Bilingual people often excel at tasks such as this, which tap into the ability to ignore competing perceptual information and focus on the relevant aspects of the input. Bilinguals are also better at switching between two tasks; for example, when bilinguals have to switch from categorizing objects by colour (red or green) to categorizing them by shape (circle or triangle), they do so more quickly than monolingual people, reflecting better cognitive control when having to make rapid changes of strategy.

Write your answers in boxes 27–31 on your answer sheet.

Test	Findings
Observing the 27…….. of Russian–English bilingual people when asked to select certain objects	Bilingual people engage both languages simultaneously: a mechanism known as 28…….
A test called the 29……..,focusing on naming colours	Bilingual people are more able to handle tasks involving a skill called 30……
A test involving switching between tasks	When changing strategies, bilingual people have superior 31…….

A recent paper in Nature Neuroscience by a research team in Montreal, Canada, marks an important step in revealing the precise underpinnings of 'the potent pleasurable stimulus' that is music. Although the study involves plenty of fancy technology, including functional magnetic resonance imaging (MRI) and ligand–based positron emission tomography (PET) scanning, the experiment itself was rather straightforward. After screening 217 individuals who responded to advertisements requesting people who experience 'chills' to instrumental music, the scientists narrowed down the subject pool to ten. They then asked the subjects to bring in their playlist of favourite songs – virtually every genre was represented, from techno to tango – and played them the music while their brain activity was monitored. Because the scientists were combining methodologies (PET and fMRI), they were able to obtain an impressively exact and detailed portrait of music in the brain. The first thing they discovered is that music triggers the production of dopamine – a chemical with a key role in setting people's moods – by the neurons (nerve cells) in both the dorsal and ventral regions of the brain. As these two regions have long been linked with the experience of pleasure, this finding isn't particularly surprising.

What is rather more significant is the finding that the dopamine neurons in the caudate – a region of the brain involved in learning stimulus–response associations, and in anticipating food and other 'reward' stimuli – were at their most active around 15 seconds before the participants' favourite moments in the music. The researchers call this the 'anticipatory phase' and argue that the purpose of this activity is to help us predict the arrival of our favourite part. The question, of course, is what all these dopamine neurons are up to. Why are they so active in the period preceding the acoustic climax? After all, we typically associate surges of dopamine with pleasure, with the processing of actual rewards. And yet, this cluster of cells is most active when the 'chills' have yet to arrive, when the melodic pattern is still unresolved.

Write your answers in boxes 27–31 on your answer sheet.

The Montreal Study

Participants, who were recruited for the study through advertisements, had their brain activity monitored while listening to their favourite music. It was noted that the music stimulated the brain's neurons to release a substance called 27…… in two of the parts of the brain which are associated with feeling 28……

Researchers also observed that the neurons in the area of the brain called the 29 …….. were particularly active just before the participants' favourite moments in the music – the period known as the 30..... Activity in this part of the brain is associated with the expectation of 'reward' stimuli such as 31……

配对题

雅思阅读带练团强化段细节配对题

细节配对题注意事项

- 带题号的题目都是遵循顺序原则；
- 找出题目或选项之间的区别，不要乱标记，精准度很重要；
- 找明显的名词定位，如人名，地名，年份，数字等定位
- 记人名切忌用简写如 OC，而应该是读出来 Omar Chen，记忆更深刻定位更快；
- 审题时应判断选项是否有重合，重合多就应该用排除法，没有重合直接选定即可；
- 就跟着 omar 走，很容易做到全对！！

细节配对题解题步骤

- 先审题，把英语句子理解成中文，找出区别
- 尽量精准，不要多划，建议对关键词进行一定记忆；
- 找出对应原文，定位词划圈抠出来，一定是划一整句话一整句话
- 翻译对应原文，一般用排除法选出答案。

剑 7 Page 100

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	

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 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, A-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 Research

A Glass and Singer
B Broadbent
C Finkelman and Glass
D Cohen et al.
E None of the above

剑 6 Page 73

The Search for the Anti-aging Pill

The monkey projects demonstrate that, compared with control animals that eat normally, caloric-restricted monkeys have lower body temperatures and levels of the pancreatic hormone insulin, and they retain more youthful levels of certain hormones that tend to fall with age.

The caloric-restricted animals also look better on indicators of risk for age-related diseases. For example, they have lower blood pressure and triglyceride levels (signifying a decreased likelihood of heart disease), and they have more normal blood glucose levels (pointing to a reduced risk for diabetes, which is marked by unusually high blood glucose levels). Further, it has recently been shown that rhesus monkeys kept on caloric-restricted diets for an extended time (nearly 15 years) have less chronic disease. They and the other monkeys must be followed still longer, however, to know whether low-calorie intake can increase both average and maximum life spans in monkeys. Unlike the multitude of elixirs being touted as the latest anti-aging cure, CR mimetics would alter fundamental processes that underlie aging. We aim to develop compounds that fool cells into activating maintenance and repair.

Question 33-37

Classify the following descriptions as relating to

A caloric-restricted monkeys

B control monkeys

C neither caloric-restricted monkeys nor control monkeys

Write the correct letter, A, B or C, in boxes 33-37on your answer sheet.

33 Monkeys were less likely to become diabetic.

34 Monkeys experienced more chronic disease.

35 Monkeys have been shown to experience a longer than average life span.

36 Monkeys enjoyed a reduced chance of heart disease.

37 Monkeys produced greater quantities of insulin.

剑 7 Page 77

That general declaration was accompanied by six detailed resolutions to assist national policy-making. The first proposes the extension and systematisation of surveillance sites to monitor forest decline. Forest decline is still poorly understood but leads to the loss of a high proportion of a tree‘s needles or leaves. The entire continent and the majority of species are now affected: between 30%and 50% of the tree population. The condition appears to result from the cumulative effect of a number of factors, with atmospheric pollutants the principal culprits. Compounds of nitrogen and sulphur dioxide should be particularly closely watched. However, their effects are probably accentuated by climatic factors, such as drought and hard winters, or soil imbalances such as soil acidification, which damages the roots. The second resolution concentrates on the need to preserve the genetic diversity of European forests. The aim is to reverse the decline in the number of tree species or at least to preserve the ‘genetic material’ of all of them. Although forest fires do not affect all of Europe to the same extent, the amount of damage caused the experts to propose as the third resolution that the Strasbourg conference consider the establishment of a European databank on the subject. All information used in the development of national preventative policies would become generally available. The subject of the fourth resolution discussed by the ministers was mountain forests. In Europe, it is undoubtedly the mountain ecosystem which has changed most rapidly and is most at risk. A thinly scattered permanent population and development of leisure activities, particularly skiing, have resulted in significant long-term changes to the local ecosystems. Proposed developments include a preferential research program on mountain forests. The fifth resolution relaunched the European research network on the physiology of trees, called Eurosilva. Eurosilva should support joint European research on tree diseases and their physiological and biochemical aspects. Each country concerned could increase the number of scholarships and other financial support for doctoral theses and research projects in this area. Finally, the conference established the framework for a European research network on forest ecosystems. This would also involve harmonising activities in individual countries as well as identifying a number of priority research topics relating to the protection of forests. The Strasbourg conference ‘s main concern was to provide for the future. This was the initial motivation, one now shared by all 31 participants representing 31European countries. Their final text commits them to on-going discussion between government representatives with responsibility for forests.

Question 34-39

Look at the following statements issued by the conference.

Which six of the following statements, A-J, refer to the resolutions that were issued?

Match the statements with the appropriate resolutions (Questions 34-39).

Write the correct letter, A-J, in boxes 34-39 on your answer sheet.

A All kinds of species of trees should be preserved.
B Fragile mountain forests should be given priority in research programs.
C The surviving natural forests of Europe do not need priority treatment.
D Research is to be better co-ordinated throughout Europe.
E Information on forest fires should be collected and shared.
F Loss of leaves from trees should be more extensively and carefully monitored.
G Resources should be allocated to research into tree diseases.
H Skiing should be encouraged in thinly populated areas.
I Soil imbalances such as acidification should be treated with compounds of nitrogen and sulphur.
J Information is to be systematically gathered on any decline in the condition of forests.

34 Resolution 1

35 Resolution 2

36 Resolution 3

37 Resolution 4

38 Resolution 5

39 Resolution 6

剑 8 Page 96

Biological control of pests

The Commonwealth Institute of Biological Control (CIBC) in Bangalore, with its global network of research laboratories and field stations, is one of the most active, non-commercial research agencies engaged in pest control by setting natural predators against parasites. CIBC also serves as a clearing-house for the export and import of biological agents for pest control world-wide.

CIBC successfully used a seed-feeding weevil, native to Mexico, to control the obnoxious parthenium weed, known to exert devious influence on agriculture and human health in both India and Australia. Similarly the Hyderabad-based Regional Research Laboratory (RRL), supported by CIBC, is now trying out an Argentinian weevil for the eradication of water hyacinth, another dangerous weed, which has become a nuisance in many parts of the world. According to Mrs Kaiser Jamil of RRL, 'The Argentinian weevil does not attack any other plant and a pair of adult bugs could destroy the weed in 4-5 days. ' CIBC is also perfecting the technique for breeding parasites that prey on 'disapene scale' insects - notorious defoliants of fruit trees in the US and India.

How effectively biological control can be pressed into service is proved by the following examples. In the late 1960s, when Sri Lanka's flourishing coconut groves were plagued by leaf-mining hispides, a larval parasite imported from Singapore brought the pest under control. A natural predator indigenous to India, Neodumetia sangawani, was found useful in controlling the Rhodes grass-scale insect that was devouring forage grass in many parts of the US. By using Neochetina bruci, a beetle native to Brazil, scientists at Kerala Agricultural University freed a 12-kilometrelong canal from the clutches of the weed Salvinia molesta, popularly called 'African Payal' in Kerala. About 30, 000 hectares of rice fields in Kerala are infested by this weed.

Questions 22-26

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

Write the correct letter, A-I, in boxes 22-26 on your answer sheet.

22 Disapene scale insects feed on

23 Neodumetia sangawani ate

24 Leaf-mining hispides blighted

25 An Argentinian weevil may be successful in wiping out

26 Salvinia molesta plagues

A forage grass.
B rice fields.
C coconut trees.
D fruit trees.
E water hyacinth.
F parthenium weed.
G Brazilian beetles.
H grass-scale insects.
I larval parasites.

剑 9 Page 94

Young children's sense of identity

A A sense of self develops in young children by degrees. The process can usefully be thought of in terms of the gradual emergence of two somewhat separate features: the self as a subject, and the self as an object. William James introduced the distinction in 1892, and contemporaries of his, such as Charles Cooley, added to the developing debate. Ever since then psychologists have continued building on the theory.

B According to James, a child's first step on the road to self-understanding can be seen as the recognition that he or she exists. This is an aspect of the self that he labeled 'self-as-subject', and he gave it various elements. These included an awareness of one's own agency (i.e. one's power to act), and an awareness of one's distinctiveness from other people. These features gradually emerge as infants explore their world and interact with caregivers. Cooley (1903) suggested that a sense of the self-as-subject was primarily concerned with being able to exercise power. He proposed that the earliest examples of this are an infant's attempts to control physical objects, such as toys or his or her own limbs. This Is followed by attempts to affect the behaviour of other people. For example, infants learn that when they cry or smile someone responds to them.

C Another powerful source of information for infants about the effects they can have on the world around them is provided when others mimic them. Many parents spend ma lot of time, particularly in the early months, copying their infant's vocalizations and expressions. In addition, young children enjoy looking in mirrors, where the movements they can see are dependent upon their own movements. This is not to say that infants recognize the reflection as their own image (a later development). However, Lewis and Brooks-Gunn (1979) suggest that infants' developing understanding that the movements they see in the mirror are contingent on their own, leads to a growing awareness that they are distinct form other people. This is because they, and only they, can change the reflection in the mirror.

D This understanding that children gain of themselves as active agent continues to develop in their attempts to co-operate with others in play. Dunn (1988) points out that it is in such day-to –day relationships and interactions that the child's understanding of his-or herself emerges. Empirical investigations of the self-as-subject in young children are, however, rather scarce because of difficulties of communication: even if young infants can reflect on their experience, they certainly cannot express this aspect of the self directly.

E Once children have acquired a certain level of self-awareness, they begin to place themselves in whole series of categories, which together play such an important part in defining them uniquely as 'themselves'. This second step in the development of a full sense of self is what James called the 'self-as-object'. This has been seen by many to be the aspect of the self which is most influenced by social elements, since it is made up of social roles (such as student, brother, colleague) and characteristics which derive their meaning from comparison or interaction with other people (such as trustworthiness, shyness, sporting ability).

F Cooley and other researchers suggested a close connection between a person's own understanding of their identity and other people's understanding of it. Cooley believed that people build up their sense of identity form the reactions of others to them, and form the view they believe others have of them. He called the self-as-object the 'looking-glass self', since people come to see themselves as they are reflected in others. Mead (1934) went even further and saw the self and the social world as inextricably bound together: 'The self is essentially a social structure, and it arises in social experience. it is impossible to conceive of a self arising outside of social experience.'

G Lewis and Brooks-Gunn argued that an important developmental milestone is reached when children become able to recognize themselves visually without the support of seeing contingent movement. This recognition occurs around their second birthday. In one experiment, Lewis and Brooks-Gunn (1979) dabbed some red powder on the noses of children who were playing in front of a mirror, and then observed how often they touched their noses. The psychologists reasoned that if the children knew what they usually looked like, they would be surprised by the unusual red mark and would start touching it. On the other hand, they found

that children of 15 to 18 months are generally not able to recognize themselves unless other cues such as movement are present.

H Finally, perhaps the most graphic expressions of self-awareness in general can be seen in the displays of rage which are most common from 18 months to 3yearss of age. In a longitudinal study of groups of three or four children, Bronson (1975) found that the intensity of the frustration and anger in their disagreements increased sharply between the ages of 1 and 2 years. Often, the children's disagreements involved a struggle over a toy that none of them had played with before or after the tug-of-war: the children seemed to be disputing ownership rather than wanting to play with it. Although it may be less marked in other societies, the link between the sense of 'self' and of 'ownership' is a notable feature of childhood in Western societies.

Questions 20-23

Look at the following findings (Questions 20-23) and the list of researchers below.

Match each finding with the correct researcher or researchers, A-E.

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

20 A sense of identity can never be formed without relationships with other people.

21 A child's awareness of self is related to a sense of mastery over things and people

22 At a certain age, children's sense of identity leads to aggressive behavior.

23 Observing their own reflection contributes to children's self awareness.

List of Researchers

A James

B Cooley

C Lewis and Brooks-Gunn

D Mead

E Bronson

剑 11 Page 43

Raising the Mary Rose

How a sixteenth-century warship was recovered from the seabed

On 19 July 1545, English and French fleets were engaged in a sea battle off the coast of southern England in the area of water called the Solent, between Portsmouth and the Isle of Wight. Among the English vessels was a warship by the name of Mary Rose. Built in Portsmouth some 35 years earlier, she had had a long and successful fighting career, and was a favourite of King Henry VIII. Accounts of what happened to the ship vary: while witnesses agree that she was not hit by the French, some maintain that she was outdated, overladen and sailing too low in the water, others that she was mishandled by undisciplined crew. What is undisputed, however, is that the Mary Rose sank into the Solent that day, taking at least 500 men with her. After the battle, attempts were made to recover the ship, but these failed.

The Mary Rose came to rest on the seabed, lying on her starboard (right) side at an angle of approximately 60 degrees. The hull (the body of the ship) acted as a trap for the sand and mud carried by Solent currents. As a result, the starboard side filled rapidly, leaving the exposed port (left) side to be eroded by marine organisms and mechanical degradation. Because of the way the ship sank, nearly all of the starboard half survived intact. During the seventeenth and eighteenth centuries, the entire site became covered with a layer of hard grey clay, which minimised further erosion.

Then, on 16 June 1836, some fishermen in the Solent found that their equipment was caught on an underwater obstruction, which turned out to be the Mary Rose. Diver John Deane happened to be exploring another sunken ship nearby, and the fishermen approached him, asking him to free their gear. Deane dived down, and found the equipment caught on a timber protruding slightly from the seabed. Exploring further, he uncovered several other timbers and a bronze gun. Deane continued diving on the site intermittently until 1840, recovering several more guns, two bows, various timbers, part of a pump and various other small finds.

The Mary Rose then faded into obscurity for another hundred years. But in 1965, military historian and amateur diver Alexander McKee, in conjunction with the British Sub-Aqua Club, initiated a project called 'Solent Ships'. While on paper this was a plan to examine a number of known wrecks in the Solent, what McKee really hoped for was to find the Mary Rose. Ordinary search techniques provedunsatisfactory, so McKee entered into collaboration with Harold E. Edgerton, professor of electrical engineering at the Massachusetts Institute of Technology. In 1967, Edgerton's side-scan sonar systems revealed a large, unusually shaped object, which McKee believed was the Mary Rose.

Further excavations revealed stray pieces of timber and an iron gun. But the climax to the operation came when, on 5 May 1971, part of the ship's frame was uncovered. McKee and his team now knew for certain that they had found the wreck, but were as yet unaware that it also housed a treasure trove of beautifully preserved artefacts. Interest in the project grew, and in 1979, The Mary Rose Trust was formed, with Prince Charles as its President and Dr Margaret Rule its Archaeological Director. The decision whether or not to salvage the wreck was not an easy one, although an excavation in 1978 had shown that it might be possible to raise the hull. While the original aim was to raise the hull if at all feasible, the operation was not given the go-ahead until January 1982, when all the necessary information was available.

An important factor in trying to salvage the Mary Rose was that the remaining hull was an open shell. This led to an important decision being taken: namely to carry out the lifting operation in three very distinct stages. The hull was attached to a lifting frame via a network of bolts and lifting wires. The problem of the hull being sucked back downwards into the mud was overcome by using 12 hydraulic jacks. These raised it a few centimetres over a period of several days, as the lifting frame rose slowly up its four legs. It was only when the hull was hanging freely from the lifting frame, clear of the seabed and the suction effect of the surrounding mud, that the salvage operation progressed to the second stage. In this stage, the lifting frame was fixed to a hook attached to a crane, and the hull was lifted completely clear of the seabed and transferred underwater into the lifting cradle. This required precise positioning to locate the legs into the 'stabbing guides' of the lifting cradle. The lifting cradle was designed to fit the hull using archaeological survey drawings, and was fitted with air bags to provide additional cushioning

for the hull's delicate timber framework. The third and final stage was to lift the entire structure into the air, by which time the hull was also supported from below. Finally, on 11 October 1982, millions of people around the world held their breath as the timber skeleton of the Mary Rose was lifted clear of the water, ready to be returned home to Portsmouth.

Questions 5-8

Look at the following statements (Questions 5-8) and the list of dates below.

Match each statement with the correct date, A-G.

Write the correct letter, A-G, in boxes 5-8 on your answer sheet.

5 A search for the Mary Rose was launched.

6 One person's exploration of the Mary Rose site stopped.

7 It was agreed that the hull of the Mary Rose should be raised.

8 The site of the Mary Rose was found by chance.

List of Dates

A 1836	**E** 1971
B 1840	**F** 1979
C 1965	**G** 1982
D 1967	

额外练习

Reducing the Effects of Climate Change

Mark Rowe reports on the increasingly ambitious geo-engineering projects being explored by scientists

A. Such is our dependence on fossil fuels, and such is the volume of carbon dioxide already released into the atmosphere, that many experts agree that significant global warming is now inevitable. They believe that the best we can do is keep it at a reasonable level, and at present the only serious option for doing this is cutting back on our carbon emissions. But while a few countries are making major strides in this regard, the majority are having great difficulty even stemming the rate of increase, let alone reversing it. Consequently, an increasing number of scientists are beginning to explore the alternative of geo-engineering – a term which generally refers to the intentional large-scale manipulation of the environment. According to its proponents, geo-engineering is the equivalent of a backup generator: if Plan A – reducing our dependency on fossil fuels – fails, we require a Plan B, employing grand schemes to slow down or reverse the process of global warming.

B. Geo-engineering has been shown to work, at least on a small localised scale. For decades, May Day parades in Moscow have taken place under clear blue skies, aircraft having deposited dry ice, silver iodide and cement powder to disperse clouds. Many of the schemes now suggested look to do the opposite, and reduce the amount of sunlight reaching the planet. The most eye-catching idea of all is suggested by Professor Roger Angel of the University of Arizona. His scheme would employ up to 16 trillion minute spacecraft, each weighing about one gram, to form a transparent, sunlight-refracting sunshade in an orbit 1.5 million km above the Earth. This could, argues Angel, reduce the amount of light reaching the Earth by two per cent.

C. The majority of geo-engineering projects so far carried out – which include planting forests in deserts and depositing iron in the ocean to stimulate the growth of algae – have focused on achieving a general cooling of the Earth. But some look specifically at reversing the melting at the poles, particularly the Arctic. The reasoning is that if you replenish the ice sheets and frozen waters of the high latitudes, more light will be reflected back into space, so reducing the warming of the oceans and atmosphere.

D. The concept of releasing aerosol sprays into the stratosphere above the Arctic has been proposed by several scientists. This would involve using sulphur or hydrogen sulphide aerosols so that sulphur dioxide would form clouds, which would, in turn, lead to a global dimming. The idea is modelled on historic volcanic explosions, such as that of Mount Pinatubo in the Philippines in 1991, which led to a short-term cooling of global temperatures by 0.5 °C. Scientists have also scrutinised whether it's possible to preserve the ice sheets of Greenland with reinforced high-tension cables, preventing icebergs from moving into the sea. Meanwhile in the Russian Arctic, geo-engineering plans include the planting of millions of birch trees. Whereas the region's native evergreen pines shade the snow and absorb radiation, birches would shed their leaves in winter, thus enabling radiation to be reflected by the snow. Rerouting Russian rivers to increase cold water flow to ice-forming areas could also be used to slow down warming, say some climate scientists.

E. But will such schemes ever be implemented? Generally speaking, those who are most cautious about geo-engineering are the scientists involved in the research. Angel says that his plan is ‘no substitute for developing renewable energy: the only permanent solution’. And Dr Phil Rasch of the US-based Pacific Northwest National Laboratory is equally guarded about the role of geo-engineering: ‘I think all of us agree that if we were to end geo-engineering on a given day, then the planet would return to its pre-engineered condition very rapidly, and probably within ten to twenty years. That's certainly something to worry about.’

F. The US National Center for Atmospheric Research has already suggested that the proposal to inject sulphur into the atmosphere might affect rainfall patterns across the tropics and the Southern Ocean. 'Geo-engineering plans to inject stratospheric aerosols or to seed clouds would act to cool the planet, and act to increase the extent of sea ice,' says Rasch. 'But all the models suggest some impact on the distribution of precipitation'

G. 'A further risk with geo-engineering projects is that you can “overshoot”,'says Dr Dan Lunt, from the University of Bristol's School of Geophysical Sciences, who has studied the likely impacts of the sunshade and aerosol schemes on the climate. ‘You may bring global temperatures back to pre-industrial levels, but the risk is that the poles will still be warmer than they should be and the tropics will be cooler than before

industrialisation.' To avoid such a scenario, Lunt says Angel's project would have to operate at half strength; all of which reinforces his view that the best option is to avoid the need for geo-engineering altogether.

H. The main reason why geo-engineering is supported by many in the scientific community is that most researchers have little faith in the ability of politicians to agree – and then bring in – the necessary carbon cuts. Even leading conservation organisations see the value of investigating the potential of geo-engineering. According to Dr Martin Sommerkorn, climate change advisor for the World Wildlife Fund's International Arctic Programme, 'Human-induced climate change has brought humanity to a position where we shouldn't exclude thinking thoroughly about this topic and its possibilities.'

Questions 37–40

Look at the following statements (Questions 37–40) and the list of scientists below.

Match each statement with the correct scientist. **A–D.**

Write the correct letter, **A–D**, in boxes 37–40 on your answer sheet.

37. The effects of geo-engineering may not be long-lasting.
38. Geo-engineering is a topic worth exploring.
39. It may be necessary to limit the effectiveness of geo-engineering projects.
40. Research into non-fossil-based fuels cannot be replaced by geo-engineering.

List of Scientists

A. Roger Angel
B. Phil Rasch
C. Dan Lunt
D. Martin Sommerkorn

The risks agriculture faces in developing countries

Synthesis of an online debate*

A. Two things distinguish food production from all other productive activities: first, every single person needs food each day and has a right to it; and second, it is hugely dependent on nature. These two unique aspects, one political, the other natural, make food production highly vulnerable and different from any other business. At the same time, cultural values are highly entrenched in food and agricultural systems worldwide.

B. Farmers everywhere face major risks, including extreme weather, long-term climate change, and price volatility in input and product markets. However, smallholder farmers in developing countries must in addition deal with adverse environments, both natural, in terms of soil quality, rainfall, etc., and human, in terms of infrastructure, financial systems, markets, knowledge and technology. Counter-intuitively, hunger is prevalent among many smallholder farmers in the developing world.

C. Participants in the online debate argued that our biggest challenge is to address the underlying causes of the agricultural system's inability to ensure sufficient food for all, and they identified as drivers of this problem our dependency on fossil fuels and unsupportive government policies.

D. On the question of mitigating the risks farmers face, most essayists called for greater state intervention. In his essay, Kanayo F. Nwanze, President of the International Fund for Agricultural Development, argued that governments can significantly reduce risks for farmers by providing basic services like roads to get produce more efficiently to markets, or water and food storage facilities to reduce losses. Sophia Murphy, senior advisor to the Institute for Agriculture and Trade Policy, suggested that the procurement and holding of stocks by governments can also help mitigate wild swings in food prices by alleviating uncertainties about market supply.

E. Shenggen Fan, Director General of the International Food Policy Research Institute, held up social safety nets and public welfare programmes in Ethiopia, Brazil and Mexico as valuable ways to address poverty among farming families and reduce their vulnerability to agriculture shocks. However, some commentators responded that cash transfers to poor families do not necessarily translate into increased food security, as these programmes do not always strengthen food production or raise incomes. Regarding state subsidies for agriculture, Rokeya Kabir, Executive Director of Bangladesh Nari Progati Sangha, commented in her essay that these 'have not compensated for the stranglehold exercised by private traders. In fact, studies show that sixty percent of beneficiaries of subsidies are not poor, but rich landowners and non-farmer traders.

F. Nwanze, Murphy and Fan argued that private risk management tools, like private insurance, commodity futures markets, and rural finance can help small-scale producers

mitigate risk and allow for investment in improvements. Kabir warned that financial support schemes often encourage the adoption of high-input agricultural practices, which in the medium term may raise production costs beyond the value of their harvests. Murphy noted that when futures markets become excessively financialised they can contribute to short-term price volatility, which increases farmers' food insecurity. Many participants and commentators emphasised that greater transparency in markets is needed to mitigate the impact of volatility, and make evident whether adequate stocks and supplies are available. Others contended that agribusiness companies should be held responsible for paying for negative side effects.

G. Many essayists mentioned climate change and its consequences for small-scale agriculture. Fan explained that 'in addition to reducing crop yields, climate change increases the magnitude and the frequency of extreme weather events, which increase smallholder vulnerability.' The growing unpredictability of weather patterns increases farmers' difficulty in managing weather-related risks. According to this author, one solution would be to develop crop varieties that are more resilient to new climate trends and extreme weather patterns. Accordingly, Pat Mooney, co-founder and executive director of the ETC Group, suggested that 'if we are to survive climate change, we must adopt policies that let peasants diversify the plant and animal species and varieties/ breeds that make up our menus.'

H. Some participating authors and commentators argued in favour of community- based and autonomous risk management strategies through collective action groups, cooperatives or producers' groups. Such groups enhance market opportunities for small-scale producers, reduce marketing costs and synchronise buying and selling with seasonal price conditions. According to Murphy, 'collective action offers an important way for farmers to strengthen their political and economic bargaining power, and to reduce their business risks.' One commentator, Giel Ton, warned that collective action does not come as a free good. It takes time, effort and money to organise, build trust and to experiment. Others, like Marcel Vernooij and Marcel Beukeboom, suggested that in order to 'apply what we already know', all stakeholders, including business, government, scientists and civil society, must work together, starting at the beginning of the value chain.

I. Some participants explained that market price volatility is often worsened by the presence of intermediary purchasers who, taking advantage of farmers' vulnerability, dictate prices. One commentator suggested farmers can gain greater control over prices and minimise price volatility by selling directly to consumers. Similarly, Sonali Bisht, founder and advisor to the Institute of Himalayan Environmental Research and Education (INHERE), India, wrote that community-supported agriculture, where consumers invest in local farmers by subscription and guarantee producers a fair price, is a risk-sharing model worth more attention. Direct food distribution systems not only encourage small-scale agriculture but also give consumers more control over the food they consume, she wrote.

Questions 4–9

Look at the following statements (Questions 4–9) and the list of people below.

Match each statement with the correct person, A–G.

Write the correct letter, A–G, in boxes 4–9 on your answer sheet.

NB You may use any letter more than once.

4. Financial assistance from the government does not always go to the farmers who most need it.

5. Farmers can benefit from collaborating as a group.

6. Financial assistance from the government can improve the standard of living of farmers.

7. Farmers may be helped if there is financial input by the same individuals who buy from them.

8. Governments can help to reduce variation in prices.

9. Improvements to infrastructure can have a major impact on risk for farmers.

List of People

A. Kanayo F. Nwanze
B. Sophia Murphy
C. Shenggen Fan
D. Rokeya Kabir
E. Pat Mooney
F. Giel Ton
G. Sonali Bisht

Music and the emotions

Neuroscientist Jonah Lehrer considers the emotional power of music

Why does music make us feel? On the one hand, music is a purely abstract art form devoid of language or explicit ideas. And yet, even though music says little, it still manages to touch us deeply. When listening to our favourite songs, our body betrays all the symptoms of emotional arousal. The pupils in our eyes dilate, our pulse and blood pressure rise, the electrical conductance of our skin is lowered, and the cerebellum, a brain region associated with bodily movement, becomes strangely active. Blood is even re-directed to the muscles in our legs. In other words, sound stirs us at our biological roots.

A recent paper in Nature Neuroscience by a research team in Montreal, Canada, marks an important step in revealing the precise underpinnings of 'the potent pleasurable stimulus' that is music. Although the study involves plenty of fancy technology, including functional magnetic resonance imaging (MRI) and ligand-based positron emission tomography (PET) scanning, the experiment itself was rather straightforward. After screening 217 individuals who responded to advertisements requesting people who experience 'chills' to instrumental music, the scientists narrowed down the subject pool to ten. They then asked the subjects to bring in their playlist of favourite songs – virtually every genre was represented, from techno to tango – and played them the music while their brain activity was monitored. Because the scientists were combining methodologies (PET and fMRI), they were able to obtain an impressively exact and detailed portrait of music in the brain. The first thing they discovered is that music triggers the production of dopamine – a chemical with a key role in setting people's moods – by the neurons (nerve cells) in both the dorsal and ventral regions of the brain. As these two regions have long been linked with the experience of pleasure, this finding isn't particularly surprising.

What is rather more significant is the finding that the dopamine neurons in the caudate – a region of the brain involved in learning stimulus-response associations, and in anticipating food and other 'reward' stimuli – were at their most active around 15 seconds before the participants' favourite moments in the music. The researchers call this the 'anticipatory phase' and argue that the purpose of this activity is to help us predict the arrival of our favourite part. The question, of course, is what all these dopamine neurons are up to. Why are they so active in the period preceding the acoustic climax? After all, we typically associate surges of dopamine with pleasure, with the processing of actual rewards. And yet, this cluster of cells is most active when the 'chills' have yet to arrive, when the melodic pattern is still unresolved.

One way to answer the question is to look at the music and not the neurons. While music can often seem (at least to the outsider) like a labyrinth of intricate patterns, it turns out that the most important part of every song or symphony is when the patterns break down, when the sound becomes unpredictable. If the music is too obvious, it is annoyingly boring, like an alarm clock. Numerous studies, after all, have demonstrated that dopamine neurons quickly adapt to predictable rewards. If we

know what's going to happen next, then we don't get excited. This is why composers often introduce a key note in the beginning of a song, spend most of the rest of the piece in the studious avoidance of the pattern, and then finally repeat it only at the end. The longer we are denied the pattern we expect, the greater the emotional release when the pattern returns, safe and sound.

To demonstrate this psychological principle, the musicologist Leonard Meyer, in his classic book Emotion and Meaning in Music (1956), analysed the 5th movement of Beethoven's String Quartet in C–sharp minor, Op. 131. Meyer wanted to show how music is defined by its flirtation with – but not submission to – our expectations of order. Meyer dissected 50 measures (bars) of the masterpiece, showing how Beethoven begins with the clear statement of a rhythmic and harmonic pattern and then, in an ingenious tonal dance, carefully holds off repeating it. What Beethoven does instead is suggest variations of the pattern. He wants to preserve an element of uncertainty in his music, making our brains beg for the one chord he refuses to give us. Beethoven saves that chord for the end.

According to Meyer, it is the suspenseful tension of music, arising out of our unfulfilled expectations, that is the source of the music's feeling. While earlier theories of music focused on the way a sound can refer to the real world of images and experiences – its "connotative' meaning – Meyer argued that the emotions we find in music come from the unfolding events of the music itself. This 'embodied meaning' arises from the patterns the symphony invokes and then ignores. It is this uncertainty that triggers the surge of dopamine in the caudate, as we struggle to figure out what will happen next. We can predict some of the notes, but we can't predict them all, and that is what keeps us listening, waiting expectantly for our reward, for the pattern to be completed.

Questions 37–40

Complete each sentence with the correct ending, **A–F**, below.
Write the correct letter, **A–F,** in boxes 37–40 on your answer sheet.

37. The Montreal researchers discovered that
38. Many studies have demonstrated that
39. Meyer's analysis of Beethoven's music shows that
40. Earlier theories of music suggested that

A. our response to music depends on our initial emotional state.
B. neuron activity decreases if outcomes become predictable.
C. emotive music can bring to mind actual pictures and events.
D. experiences in our past can influence our emotional reaction to music.
E. emotive music delays giving listeners what they expect to hear.
F. neuron activity increases prior to key points in a musical piece.

单选/多选题

雅思阅读带练团强化段选择题

选择题解题注意事项

- 选择题都是细节题，所以同样遵循出题的顺序原则;
- 选择题碰到不确定的，建议先做下一题，前后夹击既省时间也提高正确率;
- 做题方法:题干帮助定位，用排除法选出正确答案，一定要用排除法;
- 审题不仅要审题干，连着选项 ABC 也要审题，标出选项间的区别，精准点更好;
- 选择题的难点主要在于阅读量大，实在没时间可以放弃，一旦是用猜的就 不要多想;
- 开始可以一道题一道题的做，然后两三道题一起做，最后练成一整块一起 做，提速关键对题目要有敏感度!
- 就跟着 omar 走，很容易做到全对!!

选择题解题步骤

- 先审题，把英语句子理解成中文，切忌太细节
- 标注题干的定位词以及选项之间的区别;
- 找出对应原文，定位词化圈标记，一定是划一整句话一整句话
- 不一定是一句话，有可能是一段，选项中的关键词也能帮助定位
- 对题目的敏感度很重要，否则会乱跑乱撞思绪混乱

剑 6 Page 96

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.

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.

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.

Question 31-34

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

Write the correct letter in boxes 31-34 on your answer sheet.

31 A recent survey found that in British secondary schools

A there was more bullying than had previously been the case.

B there was less bullying than in primary schools.

C cases of persistent bullying were very common.

D indirect forms of bullying were particularly difficult to deal with.

32 Children who are bullied

A are twice as likely to commit suicide as the average person.

B find it more difficult to relate to adults.

C are less likely to be violent in later life.

D may have difficulty forming relationships in later life.

33 What were the findings of research carried out in Norway?

A Bullying declined by 50% after an anti-bullying campaign.

B Twenty-one schools reduced bullying as a result of an anti-bullying campaign.

C Two years is the optimum length for an anti-bullying campaign.

D Bullying is a less serious problem in Norway than in the UK.

剑 7 Page 98

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)

Question 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

剑 8 Page 92

LAND OF THE RISING SUM

C Traditional ways of teaching form the basis of the lesson and the remarkably quiet classes take their own notes of the points made and the examples demonstrated. Everyone has their own copy of the textbook supplied by the central education authority, Monbusho, as part of the concept of free compulsory education up to the age of 15. These textbooks are, on the whole, small, presumably inexpensive to produce, but well set out and logically developed. (One teacher was particularly keen to introduce colour and pictures into maths textbooks: he felt this would make them more accessible to pupils brought up in a cartoon culture.) Besides approving textbooks, Monbusho also decides the highly centralised national curriculum and how it is to be delivered.

D Lessons all follow the same pattern. At the beginning, the pupils put solutions to the homework on the board, then the teachers comment, correct or elaborate as necessary. Pupils mark their own homework: this is an important principle in Japanese schooling as it enables pupils to see where and why they made a mistake, so that these can be avoided in future. No one minds mistakes or ignorance as long as you are prepared to learn from them. After the homework has been discussed, the teacher explains the topic of the lesson, slowly and with a lot of repetition and elaboration. Examples are demonstrated on the board; questions from the textbook are worked through first with the class, and then the class is set questions from the textbook to do individually. Only rarely are supplementary worksheets distributed in a maths class. The impression is that the logical nature of the textbooks and their comprehensive coverage of different types of examples, combined with the relative homogeneity of the class, renders work sheets unnecessary. At this point, the teacher would circulate and make sure that all the pupils were coping well.

E It is remarkable that large, mixed-ability classes could be kept together for maths throughout all their compulsory schooling from 6 to 15. Teachers say that they give individual help at the end of a lesson or after school, setting extra work if necessary. In observed lessons,

any strugglers would be assisted by the teacher or quietly seek help from their neighbour. Carefully fostered class identity makes pupils keen to help each other - anyway, it is in their interests since the class progresses together.

This scarcely seems adequate help to enable slow learners to keep up. However, the Japanese attitude towards education runs along the lines of 'if you work hard enough, you can do almost anything'. Parents are kept closely informed of their children's progress and will play a part in helping their children to keep up with class, sending them to 'Juku' (private evening tuition) if extra help is needed and encouraging them to work harder. It seems to work, at least for 95 per cent of the school population.

F So what are the major contributing factors in the success of maths teaching? Clearly, attitudes are important. Education is valued greatly in Japanese culture; maths is recognised as an important compulsory subject throughout schooling; and the emphasis is on hard work coupled with a focus on accuracy.

Other relevant points relate to the supportive attitude of a class towards slower pupils, the lack of competition within a class, and the positive emphasis on learning for oneself and improving one's own standard. And the view of repetitively boring lessons and learning the facts by heart, which is sometimes quoted in relation to Japanese classes, may be unfair and unjustified. No poor maths lessons were observed. They were mainly good and one or two were inspirational.

Questions 10-13

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

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

10 Maths textbooks in Japanese schools are

A cheap for pupils to buy.

B well organised and adapted to the needs of the pupils.

C written to be used in conjunction with TV programmes.

D not very popular with many Japanese teachers.

11 When a new maths topic is introduced,

A students answer questions on the board.

B students rely entirely on the textbook.

C it is carefully and patiently explained to the students.

D it is usual for students to use extra worksheets.

12 How do schools deal with students who experience difficulties?

A They are given appropriate supplementary tuition.

B They are encouraged to copy from other pupils.

C They are forced to explain their slow progress.

D They are placed in a mixed-ability class.

13 Why do Japanese students tend to achieve relatively high rates of success in maths?

A It is a compulsory subject in Japan.

B They are used to working without help from others.

C Much effort is made and correct answers are emphasised.

D There is a strong emphasis on repetitive learning.

剑 8 Page 95

Biological control of pests

The continuous and reckless use of synthetic chemicals for the control of pests which pose a threat to agricultural crops and human health is proving to be counter-productive. Apart from engendering widespread ecological disorders, pesticides have contributed to the emergence of a new breed of chemical-resistant, highly lethal superbugs.

According to a recent study by the Food and Agriculture Organisation (FAO), more than 300species of agricultural pests have developed resistance to a wide range of potent chemicals. Not to be left behind are the disease-spreading pests, about 100 species of which have become immune to a variety of insecticides now in use.

One glaring disadvantage of pesticides‘ application is that, while destroying harmful pests, they also wipe out many useful non-targeted organisms, which keep the growth of the pest population in check. This results in what agroecologists call the ‘treadmill syndrome’. Because of their tremendous breeding potential and genetic diversity, many pests are known to withstand synthetic chemicals and bear offspring with a built-in resistance to pesticides.

The havoc that the ‘treadmill syndrome’ can bring about is well illustrated by what happened to cotton farmers in Central America. In the early 1940s, basking in the glory of chemicalbased intensive agriculture, the farmers avidly took to pesticides as a sure measure to boost crop yield. The insecticide was applied eight times a year in the mid-1940s, rising to 28 in a season in the mid-1950s, following the sudden proliferation of three new varieties of chemicalresistant pests.

By the mid-1960s, the situation took an alarming turn with the outbreak of four more new pests, necessitating pesticide spraying to such an extent that 50% of the financial outlay on cotton production was accounted for by pesticides. In the early 1970s, the spraying frequently reached 70times a season as the farmers were pushed to the wall by the invasion of genetically stronger insect species.

Questions 14-17

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

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

14 The use of pesticides has contributed to

A a change in the way ecologies are classified by agroecologists.

B an imbalance in many ecologies around the world.

C the prevention of ecological disasters in some parts of the world.

D an increase in the range of ecologies which can be usefully farmed.

15 The Food and Agriculture Organisation has counted more than 300 agricultural pests which

A are no longer responding to most pesticides in use.

B can be easily controlled through the use of pesticides.

C continue to spread disease in a wide range of crops.

D may be used as part of bio-control's replacement of pesticides.

16 Cotton farmers in Central America began to use pesticides

A because of an intensive government advertising campaign.

B in response to the appearance of new varieties of pest.

C as a result of changes in the seasons and the climate.

D to ensure more cotton was harvested from each crop.

17 By the mid-1960s, cotton farmers in Central America found that pesticides

A were wiping out 50% of the pests plaguing the crops.

B were destroying 50% of the crops they were meant to protect.

C were causing a 50% increase in the number of new pests reported.

D were costing 50% of the total amount they spent on their crops.

剑 8 Page 72

The Nature of Genius

There has always been an interest in geniuses and prodigies. The word ‘genius, from the Latin gens (= family) and the term ‘genius’, meaning ‘begetter’, comes from the early Roman cult of a divinity as the head of the family. In its earliest form, genius was concerned with the ability of the head of the family, the paterfamilias, to perpetuate himself. Gradually, genius came to represent a person‘s characteristics and thence an individual‘s highest attributes derived from his ’genius‘ or guiding spirit. Today, people still look to stars or genes, astrology or genetics, in the hope of finding the source of exceptional abilities or personal characteristics.

The concept of genius and of gifts has become part of our folk culture, and attitudes are ambivalent towards them. We envy the gifted and mistrust them. In the mythology of giftedness, it is popularly believed that if people are talented in one area, they must be defective in another, that intellectuals are impractical, that prodigies burn too brightly too soon and burn out, that gifted people are eccentric, that they are physical weaklings, that there‘s a thin line between genius and madness, that genius runs in families, that the gifted are so clever they don‘t need special help, that giftedness is the same as having a high IQ, that some races are more intelligent or musical or mathematical than others, that genius goes unrecognised and unrewarded, that adversity makes men wise or that people with gifts have a responsibility to use them. Language has been enriched with such terms as ‘highbrow’, ‘egghead’, ‘blue-stocking’, ‘wiseacre’, 'know-all', 'boffin' and, for many, 'intellectual' is a term of denigration.

Questions 14-18

*Choose **FIVE** letters, **A-K**.*

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

NB *Your answers may be given in any order.*

Below are listed some popular beliefs about genius and giftedness.

Which **FIVE** of these beliefs are reported by the writer of the text?

A Truly gifted people are talented in all areas.

B The talents of geniuses are soon exhausted.

C Gifted people should use their gifts.

D A genius appears once in every generation.

E Genius can be easily destroyed by discouragement.

F Genius is inherited.

G Gifted people are very hard to live with.

H People never appreciate true genius.

I Geniuses are natural leaders.

J Gifted people develop their greatness through difficulties.

K Genius will always reveal itself.

额外练习

The risks agriculture faces in developing countries

Synthesis of an online debate*

A. Two things distinguish food production from all other productive activities: first, every single person needs food each day and has a right to it; and second, it is hugely dependent on nature. These two unique aspects, one political, the other natural, make food production highly vulnerable and different from any other business. At the same time, cultural values are highly entrenched in food and agricultural systems worldwide.

B. Farmers everywhere face major risks, including extreme weather, long-term climate change, and price volatility in input and product markets. However, smallholder farmers in developing countries must in addition deal with adverse environments, both natural, in terms of soil quality, rainfall, etc., and human, in terms of infrastructure, financial systems, markets, knowledge and technology. Counter-intuitively, hunger is prevalent among many smallholder farmers in the developing world.

C. Participants in the online debate argued that our biggest challenge is to address the underlying causes of the agricultural system's inability to ensure sufficient food for all, and they identified as drivers of this problem our dependency on fossil fuels and unsupportive government policies.

D. On the question of mitigating the risks farmers face, most essayists called for greater state intervention. In his essay, Kanayo F. Nwanze, President of the International Fund for Agricultural Development, argued that governments can significantly reduce risks for farmers by providing basic services like roads to get produce more efficiently to markets, or water and food storage facilities to reduce losses. Sophia Murphy, senior advisor to the Institute for Agriculture and Trade Policy, suggested that the procurement and holding of stocks by governments can also help mitigate wild swings in food prices by alleviating uncertainties about market supply.

E. Shenggen Fan, Director General of the International Food Policy Research Institute, held up social safety nets and public welfare programmes in Ethiopia, Brazil and Mexico as valuable ways to address poverty among farming families and reduce their vulnerability to agriculture shocks. However, some commentators responded that cash transfers to poor families do not necessarily translate into increased food security, as these programmes do not always strengthen food production or raise incomes. Regarding state subsidies for agriculture, Rokeya Kabir, Executive Director of Bangladesh Nari Progati Sangha, commented in her essay that these

'have not compensated for the stranglehold exercised by private traders. In fact, studies show that sixty percent of beneficiaries of subsidies are not poor, but rich landowners and non-farmer traders.

F. Nwanze, Murphy and Fan argued that private risk management tools, like private insurance, commodity futures markets, and rural finance can help small-scale producers mitigate risk and allow for investment in improvements. Kabir warned that financial support schemes often encourage the adoption of high-input agricultural practices, which in the medium term may raise production costs beyond the value of their harvests. Murphy noted that when futures markets become excessively financialised they can contribute to short-term price volatility, which increases farmers' food insecurity. Many participants and commentators emphasised that greater transparency in markets is needed to mitigate the impact of volatility, and make evident whether adequate stocks and supplies are available. Others contended that agribusiness companies should be held responsible for paying for negative side effects.

G. Many essayists mentioned climate change and its consequences for small-scale agriculture. Fan explained that 'in addition to reducing crop yields, climate change increases the magnitude and the frequency of extreme weather events, which increase smallholder vulnerability.' The growing unpredictability of weather patterns increases farmers' difficulty in managing weather-related risks. According to this author, one solution would be to develop crop varieties that are more resilient to new climate trends and extreme weather patterns. Accordingly, Pat Mooney, co-founder and executive director of the ETC Group, suggested that 'if we are to survive climate change, we must adopt policies that let peasants diversify the plant and animal species and varieties/breeds that make up our menus.'

H. Some participating authors and commentators argued in favour of community- based and autonomous risk management strategies through collective action groups, cooperatives or producers' groups. Such groups enhance market opportunities for small-scale producers, reduce marketing costs and synchronise buying and selling with seasonal price conditions. According to Murphy, 'collective action offers an important way for farmers to strengthen their political and economic bargaining power, and to reduce their business risks.' One commentator, Giel Ton, warned that collective action does not come as a free good. It takes time, effort and money to organise, build trust and to experiment. Others, like Marcel Vernooij and Marcel Beukeboom, suggested that in order to 'apply what we already know', all stakeholders, including business, government, scientists and civil society, must work together, starting at the beginning of the value chain.

I. Some participants explained that market price volatility is often worsened by the presence of intermediary purchasers who, taking advantage of farmers' vulnerability, dictate prices. One commentator suggested farmers can gain greater control over prices and minimise price volatility by selling directly to consumers. Similarly, Sonali Bisht, founder and advisor to the Institute of Himalayan Environmental Research and Education (INHERE), India, wrote that community–supported agriculture, where consumers invest in local farmers by subscription and guarantee producers a fair price, is a risk–sharing model worth more attention. Direct food distribution systems not only encourage small–scale agriculture but also give consumers more control over the food they consume, she wrote.

Questions 10 and 11

Choose **TWO** letters, **A–E.**

Write the correct letters in boxes 10 and 11 on your answer sheet.

Which **TWO** problems are mentioned which affect farmers with small farms in developing countries?

A. lack of demand for locally produced food
B. lack of irrigation programmes
C. being unable to get insurance
D. the effects of changing weather patterns
E. having to sell their goods to intermediary buyers

Questions 12 and 13

Choose **TWO** letters, **A–E**.

Write the correct letters in boxes 12 and 13 on your answer sheet.

Which **TWO** actions are recommended for improving conditions for farmers?

A. reducing the size of food stocks
B. attempting to ensure that prices rise at certain times of the year
C. organising cooperation between a wide range of interested parties
D. encouraging consumers to take a financial stake in farming
E. making customers aware of the reasons for changing food prices

Music and the emotions

Neuroscientist Jonah Lehrer considers the emotional power of music

Why does music make us feel? On the one hand, music is a purely abstract art form devoid of language or explicit ideas. And yet, even though music says little, it still manages to touch us deeply. When listening to our favourite songs, our body betrays all the symptoms of emotional arousal. The pupils in our eyes dilate, our pulse and blood pressure rise, the electrical conductance of our skin is lowered, and the cerebellum, a brain region associated with bodily movement, becomes strangely active. Blood is even re-directed to the muscles in our legs. In other words, sound stirs us at our biological roots.

A recent paper in Nature Neuroscience by a research team in Montreal, Canada, marks an important step in revealing the precise underpinnings of 'the potent pleasurable stimulus' that is music. Although the study involves plenty of fancy technology, including functional magnetic resonance imaging (MRI) and ligand-based positron emission tomography (PET) scanning, the experiment itself was rather straightforward. After screening 217 individuals who responded to advertisements requesting people who experience 'chills' to instrumental music, the scientists narrowed down the subject pool to ten. They then asked the subjects to bring in their playlist of favourite songs – virtually every genre was represented, from techno to tango – and played them the music while their brain activity was monitored. Because the scientists were combining methodologies (PET and fMRI), they were able to obtain an impressively exact and detailed portrait of music in the brain. The first thing they discovered is that music triggers the production of dopamine – a chemical with a key role in setting people's moods – by the neurons (nerve cells) in both the dorsal and ventral regions of the brain. As these two regions have long been linked with the experience of pleasure, this finding isn't particularly surprising.

What is rather more significant is the finding that the dopamine neurons in the caudate – a region of the brain involved in learning stimulus-response associations, and in anticipating food and other 'reward' stimuli – were at their most active around 15 seconds before the participants' favourite moments in the music. The researchers call this the 'anticipatory phase' and argue that the purpose of this activity is to help us predict the arrival of our favourite part. The question, of course, is what all these dopamine neurons are up to. Why are they so active in the period preceding the acoustic climax? After all, we typically associate surges of dopamine with pleasure, with the processing of actual rewards. And yet, this cluster of cells is most active when the 'chills' have yet to arrive, when the melodic pattern is still unresolved.

One way to answer the question is to look at the music and not the neurons. While music can often seem (at least to the outsider) like a labyrinth of intricate patterns, it turns out that the most important part of every song or symphony is when the patterns break down, when the sound becomes unpredictable. If the music is too obvious, it is annoyingly boring, like an alarm clock. Numerous studies, after all, have demonstrated that dopamine neurons quickly adapt to predictable rewards. If we know what's going to happen next, then we don't get excited. This is why composers often introduce a key note in the beginning of a song, spend most of the rest of the piece in the studious avoidance of the pattern, and then finally repeat it only at the end. The longer we are denied the pattern we expect, the greater the emotional release when the pattern returns, safe and sound.

To demonstrate this psychological principle, the musicologist Leonard Meyer, in his classic book Emotion and Meaning in Music (1956), analysed the 5th movement of Beethoven's String Quartet in C–sharp minor, Op. 131. Meyer wanted to show how music is defined by its flirtation with – but not submission to – our expectations of order. Meyer dissected 50 measures (bars) of the masterpiece, showing how Beethoven begins with the clear statement of a rhythmic and harmonic pattern and then, in an ingenious tonal dance, carefully holds off repeating it. What Beethoven does instead is suggest variations of the pattern. He wants to preserve an element of uncertainty in his music, making our brains beg for the one chord he refuses to give us. Beethoven saves that chord for the end.

According to Meyer, it is the suspenseful tension of music, arising out of our unfulfilled expectations, that is the source of the music's feeling. While earlier theories of music focused on the way a sound can refer to the real world of images and experiences – its "connotative' meaning – Meyer argued that the emotions we find in music come from the unfolding events of the music itself. This 'embodied meaning' arises from the patterns the symphony invokes and then ignores. It is this uncertainty that triggers the surge of dopamine in the caudate, as we struggle to figure out what will happen next. We can predict some of the notes, but we can't predict them all, and that is what keeps us listening, waiting expectantly for our reward, for the pattern to be completed.

Questions 32–36

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

Write the correct letter in boxes **32–36** on your answer sheet.

32 What point does the writer emphasise in the first paragraph?

A. how dramatically our reactions to music can vary
B. how intense our physical responses to music can be
C. how little we know about the way that music affects us
D. how much music can tell us about how our brains operate

33 What view of the Montreal study does the writer express in the second paragraph?

A. Its aims were innovative.
B. The approach was too simplistic.
C. It produced some remarkably precise data.
D. The technology used was unnecessarily complex.

34 What does the writer find interesting about the results of the Montreal study?

A. the timing of participants' neural responses to the music
B. the impact of the music on participants' emotional state
C. the section of participants' brains which was activated by the music
D. the type of music which had the strongest effect on participants' brains

35 Why does the writer refer to Meyer's work on music and emotion?

A. to propose an original theory about the subject
B. to offer support for the findings of the Montreal study
C. to recommend the need for further research into the subject
D. to present a view which opposes that of the Montreal researchers

36 According to Leonard Meyer, what causes the listener's emotional response to music?

A. the way that the music evokes poignant memories in the listener
B. the association of certain musical chords with certain feelings
C. the listener's sympathy with the composer's intentions
D. the internal structure of the musical composition

Bring back the big cats

It's time to start returning vanished native animals to Britain, says John Vesty

There is a poem, written around 598 AD, which describes hunting a mystery animal called a llewyn. But what was it? Nothing seemed to fit, until 2006, when an animal bone, dating from around the same period, was found in the Kinsey Cave in northern England. Until this discovery, the lynx – a large spotted cat with tasselled ears – was presumed to have died out in Britain at least 6,000 years ago, before the inhabitants of these islands took up farming. But the 2006 find, together with three others in Yorkshire and Scotland, is compelling evidence that the lynx and the mysterious llewyn were in fact one and the same animal. If this is so, it would bring forward the tassel-eared cat's estimated extinction date by roughly 5,000 years.

However, this is not quite the last glimpse of the animal in British culture. A 9th-century stone cross from the Isle of Eigg shows, alongside the deer, boar and aurochs pursued by a mounted hunter, a speckled cat with tasselled ears. Were it not for the animal's backside having worn away with time, we could have been certain, as the lynx's stubby tail is unmistakable. But even without this key feature, it's hard to see what else the creature could have been. The lynx is now becoming the totemic animal of a movement that is transforming British environmentalism: rewilding.

Rewilding means the mass restoration of damaged ecosystems. It involves letting trees return to places that have been denuded, allowing parts of the seabed to recover from trawling and dredging, permitting rivers to flow freely again. Above all, it means bringing back missing species. One of the most striking findings of modern ecology is that ecosystems without large predators behave in completely different ways from those that retain them. Some of them drive dynamic processes that resonate through the whole food chain, creating niches for hundreds of species that might otherwise struggle to survive. The killers turn out to be bringers of life.

Such findings present a big challenge to British conservation, which has often selected arbitrary assemblages of plants and animals and sought, at great effort and expense, to prevent them from changing. It has tried to preserve the living world as if it were a jar of pickles, letting nothing in and nothing out, keeping nature in a state of arrested development. But ecosystems are not merely collections of species; they are also the dynamic and ever-shifting relationships between them. And this dynamism often depends on large predators.

At sea the potential is even greater: by protecting large areas from commercial fishing, we could once more see what 18th-century literature describes: vast

shoals of fish being chased by fin and sperm whales, within sight of the English shore. This policy would also greatly boost catches in the surrounding seas; the fishing industry's insistence on scouring every inch of seabed, leaving no breeding reserves, could not be more damaging to its own interests.

Rewilding is a rare example of an environmental movement in which campaigners articulate what they are for rather than only what they are against. One of the reasons why the enthusiasm for rewilding is spreading so quickly in Britain is that it helps to create a more inspiring vision than the green movement's usual promise of 'Follow us and the world will be slightly less awful than it would otherwise have been.

The lynx presents no threat to human beings: there is no known instance of one preying on people. It is a specialist predator of roe deer, a species that has exploded in Britain in recent decades, holding back, by intensive browsing, attempts to re-establish forests. It will also winkle out sika deer: an exotic species that is almost impossible for human beings to control, as it hides in impenetrable plantations of young trees. The attempt to reintroduce this predator marries well with the aim of bringing forests back to parts of our bare and barren uplands. The lynx requires deep cover, and as such presents little risk to sheep and other livestock, which are supposed, as a condition of farm subsidies, to be kept out of the woods.

On a recent trip to the Cairngorm Mountains, I heard several conservationists suggest that the lynx could be reintroduced there within 20 years. If trees return to the bare hills elsewhere in Britain, the big cats could soon follow. There is nothing extraordinary about these proposals, seen from the perspective of anywhere else in Europe. The lynx has now been reintroduced to the Jura Mountains, the Alps, the Vosges in eastern France and the Harz mountains in Germany, and has re-established itself in many more places. The European population has tripled since 1970 to roughly 10,000. As with wolves, bears, beavers, boar, bison, moose and many other species, the lynx has been able to spread as farming has left the hills and people discover that it is more lucrative to protect charismatic wildlife than to hunt it, as tourists will pay for the chance to see it. Large-scale rewilding is happening almost everywhere – except Britain.

Here, attitudes are just beginning to change. Conservationists are starting to accept that the old preservation-jar model is failing, even on its own terms. Already, projects such as Trees for Life in the Highlands provide a hint of what might be coming. An organisation is being set up that will seek to catalyse the rewilding of land and sea across Britain, its aim being to reintroduce that rarest of species to British ecosystems: hope.

Questions 14–18

Write the correct letter, **A, B, C** or **D**, in boxes **14–18** on your answer sheet.

14 What did the 2006 discovery of the animal bone reveal about the lynx?

A. Its physical appearance was very distinctive.
B. Its extinction was linked to the spread of farming.
C. It vanished from Britain several thousand years ago.
D. It survived in Britain longer than was previously thought.

15 What point does the writer make about large predators in the third paragraph?

A. Their presence can increase biodiversity.
B. They may cause damage to local ecosystems.
C. Their behaviour can alter according to the environment.
D. They should be reintroduced only to areas where they were native.

16 What does the writer suggest about British conservation in the fourth paragraph?

A. It has failed to achieve its aims.
B. It is beginning to change direction.
C. It has taken a misguided approach.
D. It has focused on the most widespread species.

17 Protecting large areas of the sea from commercial fishing would result in

A. practical benefits for the fishing industry.
B. some short-term losses to the fishing industry.
C. widespread opposition from the fishing industry.
D. certain changes to techniques within the fishing industry.

18 According to the author, what distinguishes rewilding from other environmental campaigns?

A. Its objective is more achievable.
B. Its supporters are more articulate.
C. Its positive message is more appealing.
D. It is based on sounder scientific principles.

标题配对题

雅思阅读带练团强化段 标题配对题

标题配对题解题注意事项

- 先审题再看文章，审题时逆向思维很重要
- 首尾句确实很重要，但绝对不是只看首尾句
- 考主要意思，不考细节，做减法

suggests/reveals/indicates 等词引导的 that 宾语从句，表结论很重要

- 遵从原文，不要主观推测，切忌想太多
- 破折后表解释说明，后面内容可以不看
- 冒号和引号引导的具体内容，要重视
- —般不要看：

which/that 引导的定语从句

介词 in/on/with/at/from/between 等介词引导的状语 动词 ing 或动词 ed 形式引导的伴随状语或后置定语 although/because 引导的状语从句 ving;

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List of Headings	
i	Scientists' call for a revision of policy
ii	An explanation for reduced water use
iii	How a global challenge was met
iv	Irrigation systems fall into disuse
v	Environmental effects
vi	The financial cost of recent technological improvements
vii	The relevance to health
viii	Addressing the concern over increasing populations
ix	A surprising downward trend in demand for water
x	The need to raise standards
xi	A description of ancient water supplies

14 Paragraph **A**

Example	*Answer*
Paragraph **B**	**iii**

15 Paragraph **C**
16 Paragraph **D**
17 Paragraph **E**
18 Paragraph **F**
19 Paragraph **G**
20 Paragraph **H**

Making Every Drop 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 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 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 and 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.

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 from 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 the regions where new projects seem warranted, we must find ways to meet demands with few resources, respecting ecological criteria and to a smaller budget

剑 6 Page 67

List of Headings

i	Ensure the reward system is fair
ii	Match rewards to individuals
iii	Ensure targets arc realistic
iv	Link rewards to achievement
v	Encourage managers to take more responsibility
vi	Recognise changes in employees' performance over time
vii	Establish targets and give feedback
viii	Ensure employees arc suited to their jobs

Example	*Answer*
Key Point **One**	**viii**

14 Key Point **Two**
15 Key Point **Three**
16 Key Point **Four**
17 Key Point **Five**
18 Key Point **Six**

Motivating Employees under Adverse Conditions

THE CHALLENGE

It is a great deal easier to motivate employees in a growing organisation than a declining one. When organisations are expanding and adding personnel, promotional opportunities, pay rises, and the excitement of being associated with a dynamic organisation create feelings of optimism. Management is able to use the growth to entice and encourage employees. When an organisation is shrinking, the best and most mobile workers are prone to leave voluntarily. Unfortunately, they are the ones the organisation can least afford to lose -those with the highest skills and experience. The minor employees remain because their job options are limited.

Morale also suffers during decline. People fear they may be the next to be made redundant. Productivity often suffers, as employees spend their time sharing rumours and providing one another with moral support rather than focusing on their job. For those whose jobs are secure, pay increases are rarely possible. Pay cuts, unheard of during times of growth, may even be imposed. The challenge to management is how to motivate employees under such retrenchment conditions. The ways of meeting this challenge can be broadly divided into six Key Points, which are outlined below.

KEY POINT ONE

There is an abundance of evidence to support the motivational benefits that result from carefully matching people to jobs. For example, if the job is running a small business or an autonomous unit within a larger business, high achievers should be sought. However, if the job to be filled is a managerial post in a large bureaucratic organisation, a candidate who has a high need for power and a low need for affiliation should be selected. Accordingly, high achievers should not be put into jobs *that* are inconsistent with their needs. High achievers will do best when the job provides moderately challenging goals and where there is independence and feedback. However, it should be remembered that not everybody is motivated by jobs that are high in independence, variety and responsibility.

KEY POINT TWO

The literature on goal-setting theory suggests that managers should ensure that oil employees have specific goals and receive comments on how well they are doing in those goals. For those with high achievement needs, typically a minority in any organisation, the existence of external goal is less important because high achievers are already internally motivated. The next factor to be determined is whether the goals should be assigned by manager or collectively set in conjunction with the employees. The answer to that depends on perceptions of goal acceptance and the organisation's culture. If resistance to goals is expected, the use of participation in goal-setting should increase acceptance. If participation is inconsistent with the culture, however, goals should be assigned. If participant and the culture are incongruous, employees are likely to perceive the participation process as manipulative and be negatively affected by it.

KEY POINT THREE

Regardless of whether goals are achievable or well within management's perceptions of the employee's ability, if employees see them as unachievable they will reduce their effort. Managers must be sure, therefore, that employees feel confident that their efforts can lead to performance goals. For managers, this means that employees must have the capability of doing the job and must regard the appraisal process as valid.

KEY POINT FOUR

Since employees have different needs, what acts as a reinforcement for one may not for another. Managers could use their knowledge of each employee to personalise the rewards over which they have control. Some of the more obvious rewards that managers allocate include pay, promotions, autonomy, job scope and depth, and the opportunity to participate in goal-setting and decision-making.

KEY POINT FIVE

Managers need to make rewards contingent on performance. To reward factors other than performance will only reinforce those other factors. Key rewards such as pay increases and promotions or advancements should be allocated for the attainment of the employee's specific goals. Consistent with maximising the impact of rewards; managers should look for ways to

increase their visibility. Eliminating the secrecy surrounding pay by openly communicating everyone's remuneration, publicising performance bonuses and allocating annual salary increases in a lump sum rather than spreading them out over an entire year are examples of actions that will make rewards more visible and potentially more motivating.

KEY POINT SIX

The way rewards are distributed should be transparent so that employees perceive that rewards or outcomes are equitable and equal to the inputs given. On a simplistic level, experience, abilities, effort and other obvious inputs should explain differences in pay, responsibility and other obvious outcomes. The problem, however is complicated by the existence of dozens of inputs and outcomes and by the fact that employee groups place different degrees of importance on them. For instance, a study comparing clerical and production workers identified nearly twenty inputs and outcomes. The clerical workers considered factors such as quality of work performed and job knowledge near the top of their list but these were at the bottom of the production workers' list. Similarly, production workers thought that the most important inputs were intelligence and personal involvement with task accomplishment, two factors that were quite low in the importance ratings of the clerks. There were also important, though less dramatic, differences on the outcome side. For example, production workers rated advancement very highly, whereas clerical workers rated advancement in the lower third of their list. Such findings suggest that one person's equity is another's inequity, so an ideal should probably weigh different inputs and outcomes according to employee group.

剑 8 Page 40

List of headings

i The difficulties of talking about smells
ii The role of smell in personal relationships
iii Future studies into smell
iv The relationship between the brain and the nose
v The interpretation of smells as a factor in defining groups
vi Why our sense of smell is not appreciated
vii Smell is our superior sense
viii The relationship between smell and feelings

27 Paragraph **A**
28 Paragraph **B**
29 Paragraph **C**
30 Paragraph **D**
31 Paragraph **E**
32 Paragraph **F**

The meaning and power of smell

The sense of smell, or olfaction, is powerful. Odours affect us on a physical, psychological and social level. For the most part, however, we breathe in the aromas which surround us without consciously aware of their importance to us. It is only when the faculty of smell is impaired for some reason that we begin to realise the essential role the sense of smell plays in our sense of well-being

A

A survey conducted by Anthony Synott at Montreal's Concordia University asked participants to comment on how important smell was to them in their lives. It became apparent that smell can evoke strong emotional responses. A scent associated with a good experience can bring a rush of joy, while a foul odour or one associated with a bad memory may make us grimace with disgust. Respondents to the survey noted that many of their olfactory likes and dislikes were based one motional associations. Such associations can be powerful enough so that odours that we would generally label unpleasant become agreeable, and those that we would generally consider fragrant become disagreeable for particular individuals. The perception of smell, therefore, consists not only of the sensation of the odours themselves, but of the experiences and emotions associated with them.

B

Odours are also essential cues in social bonding. One respondent to the survey believed that there is no true emotional bonding without touching and smelling a loved one. In fact, infants recognise the odours of their mothers soon after birth and adults can often identify their children or spouses by scent. In one well-known test, women and men were able to distinguish by smell alone clothing worn by their marriage partners from similar clothing worn by other people. Most of the subjects would probably never have given much thought to odour as a cue for identifying family members before being involved in the test, but as the experiment revealed, even when not consciously considered, smells register.

C

In spite of its importance to our emotional and sensory lives, smell is probably the most undervalued sense in many cultures. The reason often given for the low regard in which smell is held is that, in comparison with its importance among animals, the human sense of smell is feeble and undeveloped. While it is true that the olfactory powers of humans are nothing like as fine as those possessed by certain animals, they are still remarkably acute. Our noses are able to recognise thousands of smells, and to perceive odours which are present only in extremely small quantities.

D

Smell, however, is a highly elusive phenomenon. Odours, unlike colours, for instance, cannot be named in many languages because the specific vocabulary simply doesn‘t exist. ’It smells like . . . ,‘ we have to say when describing an odour, struggling to express our olfactory experience. Nor can odours be recorded: there is no effective way to either capture or store them overtime. In the realm of olfaction, we must make do with descriptions and recollections. This has implications for olfactory research .

E

Most of the research on smell undertaken to date has been of a physical scientific nature. Significant advances have been made in the understanding of the biological and chemical nature of olfaction, but many fundamental questions have yet to be answered. Researchers have still to decide whether smell is one sense or two - one responding to odours proper and the other registering odourless chemicals in the air. Other unanswered questions are whether the nose is the only part of the body affected by odours, and how smells can be measured objectively given the non-physical components. Questions like these mean that interest in the psychology of smell is inevitably set to play an increasingly important role for researchers.

F

However, smell is not simply a biological and psychological phenomenon. Smell is cultural, hence it is a social and historical phenomenon. Odours are invested with cultural values: smells that are considered to be offensive in some cultures may be perfectly acceptable in others.

Therefore, our sense of smell is a means of, and model for, interacting with the world. Different smells can provide us with intimate and emotionally charged experiences and the value that we attach to these experiences is interiorised by the members of society in a deeply personal way. Importantly, our commonly held feelings about smells can help distinguish us from other cultures. The study of the cultural history of smell is, therefore, in a very real sense, an investigation into the essence of human culture.

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List of headings

i Benefits of the new scheme and its resistance
ii Making use of the once wasted weekends
iii Cutting work hours for better efficiency
iv Optimism of the great future
v Negative effects on production itself
vi Soviet Union' s five year plan
vii The abolishment of the new work-week scheme
viii The Ford model
ix Reaction from factory workers and their families
x The color-coding scheme
xi Establishing a three-shift system
xii Foreign inspiration

27 Paragraph A

28 Paragraph B

Example	*Answer*
Paragraph C	*iii*

29 Paragraph D

30 Paragraph E

31 Paragraph F

32 Paragraph G

33 Paragraph H

34 Paragraph I

Soviet's New Working Week

Historian investigates how Stalin changed the calendar to keep the Soviet people continually at work.

A "There are no fortresses that Bolsheviks cannot storm". With these words, Stalin expressed the dynamic self-confidence of the Soviet Union ' s Five Year Plan: weak and backward Russia was to turn overnight into a powerful modern industrial country. Between 1928 and 1932, production of coal, iron and steel increased at a fantastic rate, and new industrial cities sprang up, along with the worlds biggest dam. Everyone's life was affected, as collectivised farming drove millions from the land to swell the industrial proletariat. Private enterprise disappeared in city and country, leaving the State supreme under the dictatorship of Stalin. Unlimited enthusiasm was the mood of the day, with the Communists believing that iron will and hard-working manpower alone would bring about a new world.

B Enthusiasm spread to time itself, in the desire to make the state a huge efficient machine, where not a moment would be wasted, especially in the workplace. Lenin had already been intrigued by the ideas of the American Frederick Winslow Taylor (1856-1915), whose time-motion studies had discovered ways of stream-lining effort so that every worker could produce the maximum. The Bolsheviks were also great admirers of Henry Ford' s assembly line mass production and of his Fordson tractors that were imported by the thousands. The engineers who came with them to train their users helped spread what became a real cult of Ford. Emulating and surpassing such capitalist models formed part of the training of the new Soviet Man, a heroic figure whose unlimited capacity for work would benefit everyone in the dynamic new society. All this culminated in the Plan, which has been characterized as the triumph of the machine, where workers would become supremely efficient robot-like creatures.

C Yet this was Communism whose goals had always included improving the lives of the proletariat. One major step in that direction was the sudden announcement in 1927 that reduced the working day from eight to seven hours. In January 1929, all industries were ordered to adopt the shorter day by the end of the Plan. Workers were also to have an extra hour off on the eve of Sundays and holidays. Typically though, the state took away more than it gave, for this was

part of a scheme to increase production by establishing a three-shift system. This meant that the factories were open day and night and that many had to work at highly undesirable hours.

D Hardly had that policy been announced, though, than Yuri Larin, who had been a close associate of Lenin and architect of his radical economic policy, came up with an idea for even greater efficiency. Workers were free and plants were closed on Sundays. Why not abolish that wasted day by instituting a continuous work week so that the machines could operate to their full capacity every day of the week? When Larin presented his idea to the Congress of Soviets in May 1929, no one paid much attention. Soon after, though, he got the ear of Stalin, who approved. Suddenly, in June, the Soviet press was filled with articles praising the new scheme. In August, the Council of Peoples ' Commissars ordered that the continuous work week be brought into immediate effect, during the height of enthusiasm for the Plan, whose goals the new schedule seemed guaranteed to forward.

E The idea seemed simple enough, but turned out to be very complicated in practice. Obviously, the workers couldn't be made to work seven days a week, nor should their total work hours be increased. The solution was ingenious: a new five-day week would have the workers on the job for four days, with the fifth day free; holidays would be reduced from ten to five, and the extra hour off on the eve of rest days would be abolished. Staggering the rest-days between groups of workers meant that each worker would spend the same number of hours on the job, but the factories would be working a full 360 days a year instead of 300, The 360 divided neatly into 72 five-day weeks. Workers in each establishment (at first factories, then stores and offices) were divided into five groups, each assigned a colour which appeared on the new Uninterrupted Work Week calendars distributed all over the country. Colour-coding was a valuable mnemonic device, since workers might have trouble remembering what their day off was going to be, for it would change every week. A glance at the colour on the calendar would reveal the free day, and allow workers to plan their activities. This system, however, did not apply to construction or seasonal occupations, which followed a six-day week, or to factories or mines which had to close regularly for maintenance: they also had a six-day week, whether interrupted (with the same day off for everyone) or continuous. In all cases, though, Sunday was treated like any other day.

F Official propaganda touted the material and cultural benefits of the new scheme. Workers would get more rest; production and employment would increase (for more workers would be needed to keep the factories running continuously); the standard of living would improve. Leisure time would be more rationally employed, for cultural activities (theatre, clubs, sports) would no longer have to be crammed into a weekend, but could flourish every day, with their facilities far less crowded. Shopping would be easier for the same reasons. Ignorance and superstition, as represented by organized religion, would suffer a mortal blow, since 80 per cent of the workers would be on the job on any given Sunday. The only objection concerned the family, where normally more than one member was working: well, the Soviets insisted, the narrow family was far less important than the vast common good and besides, arrangements could be made for husband and wife to share a common schedule. In fact, the regime had long wanted to weaken or sideline the two greatest potential threats to its total dominance: organised religion and the nuclear family. Religion succumbed, but the family, as even Stalin finally had to admit, proved much more resistant.

G The continuous work week, hailed as a Utopia where time itself was conquered and the sluggish Sunday abolished forever, spread like an epidemic. According to official figures, 63 percent of industrial workers were so employed by April 1930; in June, all industry was ordered to convert during the next year. The fad reached its peak in October when it affected 73 per cent of workers. In fact, many managers simply claimed that their factories had gone over to the new week, without actually applying it. Conforming to the demands of the Plan was important; practical matters could wait. By then, though, problems were becoming obvious. Most serious (though never officially admitted), the workers hated it. Coordination of family schedules was virtually impossible and usually ignored, so husbands and wives only saw each other before or after work; rest days were empty without any loved ones to share them — even friends were likely to be on a different schedule. Confusion reigned: the new plan was introduced haphazardly, with some factories operating five-, six- and seven-day weeks at the same time, and the workers often not getting their rest days at all.

H The Soviet government might have ignored all that (It didn ' t depend on public approval), but the new week was far from having the vaunted effect on production. With the complicated

rotation system, the work teams necessarily found themselves doing different kinds of work in successive weeks. Machines, no longer consistently in the hands of people who knew how to tend them, were often poorly maintained or even broken. Workers lost a sense of responsibility for the special tasks they had normally performed.

I As a result, the new week started to lose ground. Stalin's speech of June 1931, which criticised the "depersonalised labor" its too hasty application had brought, marked the beginning of the end. In November, the government ordered the widespread adoption of the six-day week, which had its own calendar, with regular breaks on the 6th, 12th, 18th, 24th, and 30th, with Sunday usually as a working day. By July 1935, only 26 per cent of workers still followed the continuous schedule, and the six-day week was soon on its way out. Finally, in 1940, as part of the general reversion to more traditional methods, both the continuous five-day week and the novel six-day week were abandoned, and Sunday returned as the universal day of rest. A bold but typically ill-conceived experiment was at an end.

额外练习

You should spend about 20 minutes on Questions 27–40, which are based on Reading Passage 3 on pages 24 and 25.

剑12T1P3

Questions 27–32

Reading Passage 3 has six sections, A–F.

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

Write the correct number, **i–viif**, in boxes 27–32 on your answer sheet.

List of Headings

i. Courses that require a high level of commitment
ii. A course title with two meanings
iii. The equal importance of two key issues
iv. Applying a theory in an unexpected context
v. The financial benefits of studying
vi. A surprising course title
vii. Different names for different outcomes
viii. The possibility of attracting the wrong kind of student

27. Section A
28. Section B
29. Section C
30. Section D
31. Section E
32. Section F

What's the purpose of gaining knowledge?

A. 'I would found an institution where any person can find instruction in any subject.' That was the founder's motto for Cornell University, and it seems an apt characterization of the different university, also in the USA, where I currently teach philosophy. A student can prepare for a career in resort management, engineering, interior design, accounting, music, law enforcement, you name it. But what would the founders of these two institutions have thought of a course called 'Arson for Profit'? I kid you not: we have it on the books. Any undergraduates who have met the academic requirements can sign up for the course in our program in 'fire science.

B. Naturally, the course is intended for prospective arson investigators, who can learn all the tricks of the trade for detecting whether a fire was deliberately set, discovering who did it, and establishing a chain of evidence for effective

prosecution in a court of law. But wouldn't this also be the perfect course for prospective arsonists to sign up for? My point is not to criticize academic programs in fire science: they are highly welcome as part of the increasing professionalization of this and many other occupations. However, it's not unknown for a firefighter to torch a building. This example suggests how dishonest and illegal behavior, with the help of higher education, can creep into every aspect of public and business life.

C. I realized this anew when I was invited to speak before a class in marketing, which is another of our degree programs. The regular instructor is a colleague who appreciates the kind of ethical perspective I can bring as a philosopher. There are endless ways I could have approached this assignment, but I took my cue from the title of the course: 'Principles of Marketing. It made me think to ask the students, 'Is marketing principled? After all, a subject matter can have principles in the sense of being codified, having rules, as with football or chess, without being principled in the sense of being ethical. Many of the students immediately assumed that the answer to my question about marketing principles was obvious: no. Just look at the ways in which everything under the sun has been marketed; obviously it need not be done in a principled (=ethical) fashion.

D. Is that obvious? I made the suggestion, which may sound downright crazy in light of the evidence, that perhaps marketing is by definition principled. My inspiration for this judgement is the philosopher Immanuel Kant, who argued that any body of knowledge consists of an end (or purpose) and a means.

E. Let us apply both the terms 'means' and 'end' to marketing. The students have signed up for a course in order to learn how to market effectively. But to what end? There seem to be two main attitudes toward that question. One is that the answer is obvious: the purpose of marketing is to sell things and to make money. The other attitude is that the purpose of marketing is irrelevant: Each person comes to the program and course with his or her own plans, and these need not even concern the acquisition of marketing expertise as such. My proposal, which I believe would also be Kant's, is that neither of these attitudes captures the significance of the end to the means for marketing. A field of knowledge or a professional endeavor is defined by both the means and the end; hence both deserve scrutiny. Students need to study both how to achieve X, and also what X is.

F. It is at this point that 'Arson for Profit' becomes supremely relevant. That course is presumably all about means: how to detect and prosecute criminal activity. It is therefore assumed that the end is good in an ethical sense. When I ask fire science students to articulate the end, or purpose, of their field, they eventually generalize to something like, 'The safety and welfare of society,; which seems right. As we have seen, someone could use the very same knowledge of means to achieve a much less noble end, such as personal profit via destructive, dangerous, reckless activity. But we would not call that firefighting. We have a separate word for it: arson. Similarly, if you employed the 'principles of marketing' in an unprincipled way, you would not be doing marketing. We have another term for it: fraud. Kant gives the example of a doctor and a poisoner, who use the identical knowledge to achieve their divergent ends. We would say that one is practicing medicine, the other, murder.

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

剑12T2P2

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–vili,** in boxes **14–20** on your answer sheet.

List of Headings

i. Different accounts of the same journey
ii. Bingham gains support
iii. A common belief
iv. The aim of the trip
v. A dramatic description
vi. A new route
vii. Bingham publishes his theory
viii. Bingham's lack of enthusiasm

14. Paragraph **A**
15. Paragraph **B**
16. Paragraph **C**
17. Paragraph **D**
18. Paragraph **E**
19. Paragraph **F**
20. Paragraph **G**

The Lost City

An explorer's encounter with the ruined city of Machu Picchu, the most famous icon of the Inca civilisation

A. When the US explorer and academic Hiram Bingham arrived in South America in 1911, he was ready for what was to be the greatest achievement of his life: the exploration of the remote hinterland to the west of Cusco, the old capital of the Inca empire in the Andes mountains of Peru. His goal was to locate the remains of a city called Vitos, the last capital of the Inca civilisation. Cusco lies on a high plateau at an elevation of more than 3,000 metres, and Bingham's plan was to descend from this plateau along the valley of the Urubamba river, which takes a circuitous route down to the Amazon and passes through an area of dramatic canyons and mountain ranges.

B. When Bingham and his team set off down the Urubamba in late July, they had an advantage over travellers who had preceded them: a track had recently been blasted down the valley canyon to enable rubber to be brought up by mules from the jungle. Almost all previous travellers had left the river at Ollantaytambo and taken a high pass across the mountains to rejoin the river lower down, thereby cutting a substantial corner, but also therefore never passing through the area around Mach Picchu.

C. On 24 July they were a few days into their descent of the valley. The day began slowly, with Bingham trying to arrange sufficient mules for the next stage of the trek. His companions showed no interest in accompanying him up the nearby hill to see some ruins that a local farmer, Melchor Arteaga, had told them about the night before. The morning was dull and damp, and Bingham also seems to have been less than keen on the prospect of climbing the hill. In his book Lost City of the Incas, he relates that he made the ascent without having the least expectation that he would find anything at the top.

D. Bingham writes about the approach in vivid style in his book. First, as he climbs up the hill, he describes the ever–present possibility of deadly snakes, "capable of making considerable springs when in pursuit of their prey'; not that he sees any. Then there's a sense of mounting discovery as he comes across great sweeps of terraces, then a mausoleum, followed by monumental staircases and, finally, the grand ceremonial buildings of Machu Picchu. 'It seemed like an unbelievable dream ... the sight held me spellbound ...' he wrote.

E. We should remember, however, that Lost City of the Incas is a work of hindsight, not written until 1948, many years after his journey. His journal entries of the time reveal a much more gradual appreciation of his achievement. He spent the afternoon at the ruins noting down the dimensions of some of the buildings, then descended and rejoined his companions, to whom he seems to have said little about his discovery. At this stage, Bingham didn't realise the extent or the importance of the site, nor did he realise what use he could make of the discovery.

F. However, soon after returning it occurred to him that he could make a name for himself from this discovery. When he came to write the National Geographic magazine article that broke the story to the world in April 1913, he knew he had to produce a big idea. He wondered whether it could have been the birthplace of the very first Inca, Manco the Great, and whether it could also have been what chroniclers described as the last city of the Incas'. This term refers to Vilcabamba, the settlement where the Incas had fled from Spanish invaders in the 1530s. Bingham made desperate attempts to prove this belief for nearly 40 years. Sadly, his vision of the site as both the beginning and end of the Inca civilisation, while a magnificent one, is inaccurate. We now know that Vilcabamba actually lies 65 kilometres away in the depths of the jungle.

G. One question that has perplexed visitors, historians and archaeologists alike ever since Bingham, is why the site seems to have been abandoned before the Spanish Conquest. There are no references to it by any of the Spanish chroniclers – and if they had known of its existence so close to Cusco they would certainly have come in search of gold. An idea which has gained wide acceptance over the past few years is that Machu Picchu was a moya, a country estate built by an Inca emperor to escape the cold winters of Cusco, where the elite could enjoy monumental architecture and spectacular views. Furthermore, the particular architecture of Machu Picchu suggests that it was constructed at the time of the greatest of all the Incas, the emperor Pachacuti (c. 1438–71). By custom, Pachacuti's descendants built other similar estates for their own use, and so Mach Picchu would have been abandoned after his death, some 50 years before the Spanish Conquest.

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

剑12T3P1

Questions 1–7

Reading Passage 1 has seven paragraphs, **A–G.**

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

Write the correct number, i–vill, in boxes 1–7 on your answer sheet.

List of Headings

i. The importance of getting the timing right
ii. Young meets old
iii. Developments to the disadvantage of tortoise
iv. populations
v. Planning a bigger idea
vi. Tortoises populate the islands
vii. Carrying out a carefully prepared operation
viii. Looking for a home for the islands' tortoises
ix. The start of the conservation project

1. Paragraph **A**
2. Paragraph **B**
3. Paragraph **C**
4. Paragraph **D**
5. Paragraph **E**
6. Paragraph **F**
7. Paragraph **G**

Flying tortoises

An airborne reintroduction programme has helped conservationists take significant steps to protect the endangered Galápagos tortoise.

A. Forests of spiny cacti cover much of the uneven lava plains that separate the interior of the Galápagos island of Isabela from the Pacific Ocean. With its five distinct volcanoes, the island resembles a lunar landscape. Only the thick vegetation at the skirt of the often cloud–covered peak of Sierra Negra offers respite from the barren terrain below. This inhospitable environment is home to the giant Galápagos tortoise. Some time after the Galápagos's birth, around five million years ago, the islands were colonised by one or more tortoises from mainland South America. As these ancestral tortoises settled on the individual islands, the different populations adapted to their unique environments, giving rise to at least 14 different subspecies. Island life agreed with them. In the absence of significant predators, they grew to become the largest and longest–living tortoises on the planet, weighing more than 400 kilograms, occasionally exceeding 1.8 metres in length and living for more than a century.

B. Before human arrival, the archipelago's tortoises numbered in the hundreds of thousands. From the 17th century onwards, pirates took a few on board for food, but the arrival of whaling ships in the 1790s saw this exploitation grow exponentially. Relatively immobile and capable of surviving for months without food or water, the tortoises were taken on board these ships to act as food supplies during long ocean passages. Sometimes, their bodies were processed into high– grade oil. In total, an estimated 200,000 animals were taken from the archipelago before the 20th century. This historical exploitation was then exacerbated when settlers came to the islands. They hunted the tortoises and destroyed their habitat to clear land for agriculture. They also introduced alien species – ranging from cattle, pigs, goats, rats and dogs to plants and ants – that either prey on the eggs and young tortoises or damage or destroy their habitat.

C. Today, only 11 of the original subspecies survive and of these, several are highly endangered. In 1989, work began on a tortoise–breeding centre just outside the town of Puerto Villamil on Isabela, dedicated to protecting the island's tortoise populations. The centre's captive–breeding programme proved to be extremely successful, and it eventually had to deal with an overpopulation problem.

D. The problem was also a pressing one. Captive–bred tortoises can't be reintroduced into the wild until they're at least five years old and weigh at least 4.5 kilograms, at which point their size and weight – and their hardened shells – are sufficient to protect them from predators. But if people wait too long after that point, the tortoises eventually become too large to transport.

E. For years, repatriation efforts were carried out in small numbers, with the tortoises carried on the backs of men over weeks of long, treacherous hikes along narrow trails. But in November 2010, the environmentalist and Galápagos National Park liaison officer Godfrey Merlin, a visiting private motor yacht captain and a helicopter pilot gathered around a table in a small café in Puerto Ayora on the island of Santa Cruz to work out more ambitious reintroduction. The aim was to use a helicopter to move 300 of the breeding centre's tortoises to various locations close to Sierra Negra.

F. This unprecedented effort was made possible by the owners of the 67–metre yacht White Cloud, who provided the Galápagos National Park with free use of their helicopter and its experienced pilot, as well as the logistical support of the yacht, its captain and crew. Originally an air ambulance, the yacht's helicopter has a rear double door and a large internal space that's well suited for cargo, so a custom crate was designed to hold up to 33 tortoises with a total weight of about 150 kilograms. This weight, together with that of the fuel, pilot and four crew, approached the helicopter's maximum payload, and there were times when it was clearly right on the edge of the helicopter's capabilities. During a period of three days, a group of volunteers from the breeding centre worked around the clock to prepare the young tortoises for transport. Meanwhile, park wardens, dropped off ahead of time in remote locations, cleared landing sites within the thick brush, cacti and lava rocks.

G. Upon their release, the juvenile tortoises quickly spread out over their ancestral territory, investigating their new surroundings and feeding on the vegetation. Eventually, one tiny tortoise came across a fully grown giant who had been lumbering around the island for around a hundred years. The two stood side by side, a powerful symbol of the regeneration of an ancient species.

段落信息包含题

雅思阅读带练团强化段段落细节包含题

段落细节包含解题注意事项

- 段落细节包含题涵盖全文，绝对没有顺序性原则；
- 最核心的部分是找出每个题目的重点信息，和其他的区别；
- 这种题型没有记住考点，动手也是浪费时间，像苍蝇乱撞没有头绪；
- 出题数量多的一般建议先做，和其他题型结合起来做；
- 出题数量少的一般建议可以做完其他细节题型，再做此题型；
- 一定注意段落细节包含题型和标题配对的差异，不能混为一谈，标题配对 可以不记忆，直接用排除法；
- 就跟着 omar 走，很容易做到全对!!

段落细节包含解题步骤

- 先审题，把英语句子理解成中文，切忌太细节
- 最和其他不一样的地方就是考点，最重要；
- 建议在旁边写中文，辅助记忆，这个题型没记住考点一定不要动手做题；
- 一段段翻译，自然对应原文句子；

剑 8 Page72

Nature or Nurture

A A few years ago, in one of the most fascinating and disturbing experiments in behavioural psychology, Stanley Milgram of Yale University tested 40 subjects from all walks of life for their willingness to obey instructions given by a 'leader' in a situation in which the subjects might feel a personal distaste for the actions they were called upon to perform. Specifically, Milgram told each volunteer 'teacher-subject' that the experiment was in the noble cause of education, and was designed to test whether or not punishing pupils for their mistakes would have a positive effect on the pupils' ability to learn.

B Milgram's experimental set-up involved placing the teacher-subject before a panel of thirty switches with labels ranging from '15 vols of electricity (slight shock)' to '450 volts (danger - severe shock)' in steps of 15 volts each. The teacher-subject was told that whenever the pupil gave the wrong answer to a question, a shock was to be administered, beginning at the lowest level and increasing in severity with each successive wrong answer. The supposed 'pupil' was in reality an actor hired by Milgram to simulate receiving the shocks by emitting a spectrum of groans, screams and writhings together with an assortment of statements and expletives denouncing both the experiment and the experimenter. Milgram told the teacher-subject to ignore the reactions of the pupil, and to administer whatever level of shock was called for, as per the rule governing the experimental situation of the moment.

C As the experiment unfolded, the pupil would deliberately give the wrong answers to questions posed by the teacher, thereby bringing on various electrical punishments, even up to the danger level of 300 volts and beyond. Many of the teacher-subjects balked at administering the higher levels of punishment, and turned to Milgram with questioning looks and/or complaints about continuing the experiment. In these situations, Milgram calmly explained that the teacher-subject was to ignore the pupil's cries for mercy and carry on with the experiment. If the subject was still reluctant to proceed, Milgram said that it was important for the sake of the experiment that the procedure be followed through to the

end. His final argument was, 'You have no other choice. You must go on.' What Milgram was trying to discover was the number of teacher-subjects who would be willing to administer the highest levels of shock, even in the face of strong personal and moral revulsion against the rules and conditions of the experiment.

D Prior to carrying out the experiment, Milgram explained his idea to a group of 39 psychiatrists and asked them to predict the average percentage of people in an ordinary population who would be willing to administer the highest shock level of 450 volts. The overwhelming consensus was that virtually all the teacher-subjects would refuse to obey the experimenter. They psychiatrists felt that 'most subjects would not go beyond 150 volts' and they further anticipated that only four per cent would go up to 300 volts. Furthermore, they thought that only a lunatic fringe of about one in 1,000 would give the highest shock of 450 volts.

E What were the actual results ? Well, over 60 per cent of the teacher-subjects continued to obey Milgram up to the 450-volt limit! In repetitions of the experiment in other countries, the percentage of obedient teacher-subjects was even higher, reaching 85 per cent in one country. How can we possible account for this vast discrepancy between what calm, rational, knowledgeable people predict in the comfort of their study and what pressured, flustered, but cooperative 'teachers' actually do in the laboratory of real life?

F One's first inclination might be to argue that there must be some sort of built-in animal aggression instinct that was activated by the experimental, and the Milgram's teacher-subjects were just following a genetic need to discharge this pent-up primal urge onto the pupil by administering the electrical shock. A modern hard-core sociobiologist might even go so far as to claim that this aggressive instinct evolved as an advantageous trait, having been of survival value to our ancestors in their struggle against the hardships of life on the plains and in the caves, ultimately finding its way into our genetic make-up as a remnant of our ancient animal ways.

G An alternative to this notion of genetic programming is to see the teacher-subjects‘ actions as a result of the social environment under which the experiment was carried out. As Milgram himself pointed out, ‘Most subjects in the experiment see their behaviour in a larger context that is benevolent and useful to society - the pursuit of scientific truth. The psychological laboratory has a strong claim to legitimacy and evokes trust and confidence in those who perform. there. An action such as shocking a victim, which in isolation appears evil, acquires a completely different meaning when placed in this setting'.

H Thus, in this explanation the subject merges his unique personality and personal and moral code with that of larger institutional structures, surrendering individual properties like loyalty, self-sacrifice and discipline to the service of malevolent systems of authority.

I Here we have two radically different explanations for why so many teacher-subjects were willing to forgot their sense of personal responsibility for the sake of an institutional authority figure. The problem for biologists, psychologists and anthropologists is to sort out which of these two polar explanations is more plausible. This, in essence, is the problem of modern sociobiology - to discover the degree to which hard-wired genetic programming dictates, or at least strongly biases, the interaction of animals and humans with their environment, that is, their behaviour. Put another way, sociobiology is concerned with elucidating the biological basis of all behaviour.

Question 14-19

Reading Passage 2 has nine paragraphs, A-I.

Which paragraph contains the following information?

Write the correct letter A-I in boxes 14-19 on your answer sheet.

14 a biological explanation of the teacher-subjects' behaviour

15 the explanation Milgram gave the teacher-subjects for the experiment

16 the identity of the pupils

17 the expected statistical outcome

18 the general aim of sociobiological study

19 the way Milgram persuaded the teacher-subjects to continue

九分达人 1 Page 21

Being Left-handed in a Right-handed World

The world is designed for right-handed people. Why does a tenth of the population prefer the left?

A

The probability that two right-handed people would have a left-handed child is only about 9.5percent. The chance rises to 19.5 percent if one parent is a lefty and 26 percent if both parents are left-handed: The preference, however, could also stem from an infant‘s imitation of his parents. To test genetic influence, starting in the1970s British biologist Marian Annett of the University of Leicester hypothesized that no single gene determines handedness. Rather, during fetal development, a certain molecular factor helps to strengthen the brain‘s left hemisphere, which increases the probability that the right hand will be dominant, because the left side of the brain controls the right side of the body, and vice versa. Among the minority of people who lack this factor, handedness develops entirely by chance.

Research conducted on twins complicates the theory, however. One in five sets of identical twins involves one right-handed and one left-handed person, despite the fact that their genetic material is the same. Genes, therefore, are not solely responsible for handedness.

B

Genetic theory is also undermined by results from Peter Hepper and his team at Queen‘s University in Belfast, Ireland. In 2004 the psychologists used ultra sound to show that by the 15th week of pregnancy, fetuses already have a preference as to which thumb they suck. In most cases, the preference continued after birth. At 15 weeks, though, the brain does not yet have control over the body‘s limbs. Hepper speculates that fetuses tend to prefer whichever side of the body is developing quicker and that their movements, in turn, influence the brain‘s development. Whether this early preference is temporary or holds up throughout development and infancy is unknown.

Genetic predetermination is also contradicted by the widespread observation that children do not settle on either their right or left hand until they are two or three year sold.

C

But even if these correlations were true, they did not explain what actually causes left-handedness. Furthermore, specialization on either side of the body is common among animals. Cats will favor one paw over another when fishing toys out from under the couch. Horses stomp more frequently with one hoof than the other. Certain crabs motion predominantly with the left or right claw. In evolutionary terms, focusing power and dexterity in one limb is more efficient than having to train two, four or even eight limbs equally. Yet for most animals, the preference for one side or the other is seemingly random. The overwhelming dominance of the right hand is associated only with humans. That fact directs attention toward the brain's two hemispheres and perhaps toward language.

D

Interest in hemispheres dates back to at least 1836. That year, at a medical conference, French physician Marc Dax reported on an unusual commonality among his patients. During his many years as a country doctor, Dax had encountered more than 40 men and women for whom speech was difficult, the result of some kind of brain damage. What was unique was that every individual suffered damage to the left side of the brain. At the conference, Dax elaborated on his theory, stating that each half of the brain was responsible for certain functions and that the left hemisphere controlled speech. Other experts showed little interest in the Frenchman's ideas.

Over time, however, scientists found more and more evidence of people experiencing speech difficulties following injury to the left brain. Patients with damage to the right hemisphere most often displayed disruptions in perception or concentration. Major advancements in understanding the brain's asymmetry were made in the 1960s as a result of so -called split-brain surgery, developed to help patients with epilepsy. During this operation, doctors severed the corpus callosum — the nerve bundle that connects the two hemispheres. The surgical cut also stopped almost all normal communication between the two hemispheres, which offered researchers the opportunity to investigate each side's activity.

E

In 1949 neurosurgeon John Wada devised the first test to provide access to the brain's functional organization of language. By injecting an anesthetic into the right or left carotid artery, Wada temporarily paralyzed one side of a healthy brain, enabling him to more closely study the other side's capabilities. Based on this approach, Brenda Milner and the late Theodore Rasmussen of the Montreal Neurological Institute published a major study in 1975 that confirmed the theory that country doctor Dax had formulated nearly 140 years earlier: in 96 percent of right-handed people, language is processed much more intensely in the left hemisphere. The correlation is not as clear in lefties, however. For two thirds of them, the left hemisphere is still the most active language processor. But for the remaining third, either the right side is dominant or both sides work equally, controlling different language functions.

That last statistic has slowed acceptance of the notion that the predominance of right-handedness is driven by left-hemisphere dominance in language processing. It is not at all clear why language control should somehow have dragged the control of body movement with it. Some experts think one reason the left hemisphere reigns over language is because the organs of speech processing—the larynx and tongue—are positioned on the body's symmetry axis. Because these structures were centered, it may have been unclear, in evolutionary terms, which side of the brain should control them, and it seems unlikely that shared operation would result in smooth motor activity.

Language and handedness could have developed preferentially for very different reasons as well. For example, some researchers, including evolutionary psychologist Michael C. Corballis of the University of Auckland in New Zealand, think that the origin of human speech lies in gestures. Gestures predated words and helped language emerge. If the left hemisphere began to dominate speech, it would have dominated gestures, too, and because the left brain controls the right side of the body, the right hand developed more strongly.

F

Perhaps we will know more soon. In the meantime, we can revel in what, if any, differences handedness brings to our human talents. Popular wisdom says right-handed, left-brained

people excel at logical, analytical thinking. Left-handed, right-brained individuals are thought to possess more creative skills and maybe better at combining the functional features emergent in both sides of the brain. Yet some neuroscientists see such claims as pure speculation.

Fewer scientists are ready to claim that left-handedness means greater creative potential. Yet lefties are prevalent among artists, composers and the generally acknowledged great political thinkers. Possibly if these individuals are among the lefties whose language abilities are evenly distributed between hemispheres, the intense interplay required could lead to unusual mental capabilities.

G Or perhaps some lefties become highly creative simply because they must be cleverer to get by in our right-handed world. This battle, which begins during the very early stages of childhood, may lay the groundwork for exceptional achievements.

Question 14-18

*Reading Passage 2 has seven sections **A-G**.*
Which section contains the following information?
*Write the correct letter **A-G** in boxes 14-18 on your answer sheet.*

14 Phenomenon of using one side of their body for animals.
15 statistics on rate of one-handedness born.
16 The age when the preference of using one hand is fixed.
17 great talents of occupations in left-handed population.
18 Earliest record of researching hemisphere's function.

剑 9 Page 115

OUT OF THE ASHES

A On the afternoon of 30th August 1989, fire broke out at Uppark, a large eighteenth-century house in Sussex. For a year builders had been replacing the lead on the roof, and by a stroke of irony, were due to finish the next day, on August 31st Within fifteen minutes of the alarm being sounded, the &:e brigade had arrived on the scene; though nothing was to survive of the priceless collection on the first floor apart from an oil painting of a dog which the firemen swept up as they finally retreated from the blaze. But due to the courage and swift action of the previous owners, the Meade-Featherstonhaugh family, and the staff, stewards and visitors to the house, who formed human chains to pass the precious pieces of porcelain, furniture and paintings out on to the lawn, 95 per cent of the contents from the ground floor and the basement were saved. As the fire continued to rage, the National Trust's conservators were being mobilised, and that evening local stationers were especially opened to provide the bulk supplies of blotting paper so desperately
needed in the salvage operation.

B The following morning, Uppark stood open to the sky. A sludge of wet charcoal covered the ground floor and basement, and in every room charred and fallen timbers lay amongst the smoke. It was a scene of utter devastation.

C After the initial sense of shock, the days which followed the fire were filled with discoveries. Helped by volunteers, the National Trust's archaeologists and conservators swung into action, first of all marking the site out into a grid and then salvaging everything down to the last door handle. The position of each fragment was recorded, and all the debris was stored in countless dustbins before being sifted and categorised.

D There was great excitement as remnants of the lantern from the Staircase Hall were pulled out from the debris of two fallen floors, and also three weeks later when the Red Room carpet, thought to have been totally lost, was found wrapped around the remains of a piano. There was a lucky reprieve for the State Bed too. Staff who had left the scene at 3am on the night of the

fire had thought its loss was inevitable, but when they returned the next morning it had escaped largely undamaged. Firemen, directed by the National Trust's conservators from outside the Tapestry Room window, dismantled the silk-hung bed and passed it out piece by piece. Twenty minutes later the ceiling fell in.

E The scale of the task to repair Uppark was unprecedented in the National Trust. The immediate question was whether it should be done at all. A decision had to be taken quickly, as the building was unsound and whatever had not been damaged by the fire was exposed to the elements. Within a month after consulting many experts and with the agreement of the National Trust's Executive Committee, the restoration programme began. It was undertaken for three main reasons. After the fire it had become apparent just how much remained of the structure with its splendidly decorated interiors; to have pulled the house down, as one commentator suggested, would have been vandalism. Also the property was covered by insurance, so the repairs would not call upon the National Trust's own funds. Lastly, much had been saved of the fine collection acquired especially for Uppark from 1747 by Sir Matthew Featherstonhaugh and his son Harry. These objects belonged nowhere else, and complete restoration of the house would allow them to be seen and enjoyed again in their original setting.

F The search for craftsmen and women capable of doing the intricate restoration work was nation-wide. Once the quality and skill of the individual or company had been ascertained, they had to pass an economic test, as every job was competitively tendered. This has had enormous benefits because not only have a number of highly skilled people come to the fore - woodcarvers for example, following in the footsteps of Grinling Gibbons - but many of them, for example plasterers, have relearnt the skills of the seventeenth and eighteenth centuries which can now be of use to other country house owners when the need arises.

G In June 1994 the building programme was completed, on time and on budget. The total cost of the work to repair the house and its contents came to be nearly £20 million, largely met from insurance. In addition, it made economic sense for the National Trust to invest time and money in upgrading water and heating systems, installing modern environmental controls, and updating fire and security equipment.

H The final stages of restoration and the massive programme of reinstallation took eight months. The family and the room stewards were visibly moved when returning to their old haunts, perhaps the best testament that the spirit of Uppark had not died. But the debate will no doubt continue as to whether or not it was right to repair the house after the fire. The National Trust has done its best to remain true to Uppark; it is for others to judge the success of the project.

Note: The National Trust is a charitable organisation in Britain set up over a hundred years ago to preserve the national heritage.

Question 28-33

The text on pages 113 and 114 has eight paragraphs, ***A-H.***

Which paragraphs contain the following information?

Write the appropriate letters, ***A-H****, in boxes 28-33 on your answer sheet.*

28 the procedure for sorting through the remains of the fire

29 how Uppark looked after the fire

30 improvements made to the rebuilt Uppark

31 the selection of people to carry out the repair work

32 why the National Trust chose to rebuild Uppark

33 how people reacted to the rebuilt Uppark

额外练习

Preface to 'How the other half thinks: Adventures in mathematical reasoning'

剑11T3P3

A. Occasionally, in some difficult musical compositions, there are beautiful, but easy parts – parts so simple a beginner could play them. So it is with mathematics as well. There are some discoveries in advanced mathematics that do not depend on specialized knowledge, not even on algebra, geometry, or trigonometry. Instead they may involve, at most, a little arithmetic, such as 'the sum of two odd numbers is even', and common sense. Each of the eight chapters in this book illustrates this phenomenon. Anyone can understand every step in the reasoning.

   The thinking in each chapter uses at most only elementary arithmetic, and sometimes not even that. Thus all readers will have the chance to participate in a mathematical experience, to appreciate the beauty of mathematics, and to become familiar with its logical, yet intuitive, style of thinking.

B. One of my purposes in writing this book is to give readers who haven't had the opportunity to see and enjoy real mathematics the chance to appreciate the mathematical way of thinking. I want to reveal not only some of the fascinating discoveries, but, more importantly, the reasoning behind them.

   In that respect, this book differs from most books on mathematics written for the general public. Some present the lives of colorful mathematicians. Others describe important applications of mathematics. Yet others go into mathematical procedures, but assume that the reader is adept in using algebra.

C. I hope this book will help bridge that notorious gap that separates the two cultures: the humanities and the sciences, or should I say the right brain (intuitive) and the left brain (analytical, numerical). As the chapters will illustrate, mathematics is not restricted to the analytical and numerical; intuition plays a significant role. The alleged gap can be narrowed or completely overcome by anyone, in part because each of us is far from using the full capacity of either side of the brain. To illustrate our human potential, I cite a structural engineer who is an artist, an electrical engineer who is an opera singer, an opera singer who published mathematical research, and a mathematician who publishes short stories.

D. Other scientists have written books to explain their fields to non–scientists, but have necessarily had to omit the mathematics, although it provides the foundation of their theories. The reader must remain a tantalized spectator rather than an involved participant, since the appropriate language for describing the details in much of science is mathematics, whether the subject is expanding universe, subatomic particles, or chromosomes. Though the broad outline of a scientific theory can be sketched intuitively, when a part of the physical universe is finally understood, its description often looks like a page in a mathematics text.

E. Still, the non–mathematical reader can go far in understanding mathematical reasoning. This book presents the details that illustrate the mathematical style of thinking, which involves sustained, step–by–step analysis, experiments, and insights. You will turn these pages much more slowly than when reading a novel or a newspaper. It may help to have a pencil and paper ready to check claims and carry out experiments.

F. As I wrote, I kept in mind two types of readers: those who enjoyed mathematics until they were turned off by an unpleasant episode, usually around fifth grade, and mathematics aficionados, who will find much that is new throughout the book.

This book also serves readers who simply want to sharpen their analytical skills. Many careers, such as law and medicine, require extended, precise analysis. Each chapter offers practice in following a sustained and closely argued line of thought. That mathematics can develop this skill is shown by these two testimonials:

G. A physician wrote, The discipline of analytical thought processes [in mathematics] prepared me extremely well for medical school. In medicine one is faced with a problem which must be thoroughly analyzed before a solution can be found. The process is similar to doing mathematics.

A lawyer made the same point, 'Although I had no background in law – not even one political science course – I did well at one of the best law schools. I attribute much of my success there to having learned, through the study of mathematics, and, in particular, theorems, how to analyze complicated principles. Lawyers who have studied mathematics can master the legal principles in a way that most others cannot.'

I hope you will share my delight in watching as simple, even naive, questions lead to remarkable solutions and purely theoretical discoveries find unanticipated applications.

Questions 27–34

Reading Passage 3 has seven sections, **A–G**.

Which section contains the following information?

Write the correct letter, **A–G**, in boxes **27–34** on your answer sheet.

NB You may use any letter more than once.

27. a reference to books that assume a lack of mathematical knowledge
28. the way in which this is not a typical book about mathematics
29. personal examples of being helped by mathematics
30. examples of people who each had abilities that seemed incompatible
31. mention of different focuses of books about mathematics
32. a contrast between reading this book and reading other kinds of publication
33. a claim that the whole of the book is accessible to everybody
34. a reference to different categories of intended readers of this book

The risks agriculture faces in developing countries

剑12T2P1

Synthesis of an online debate*

A. Two things distinguish food production from all other productive activities: first, every single person needs food each day and has a right to it; and second, it is hugely dependent on nature. These two unique aspects, one political, the other natural, make food production highly vulnerable and different from any other business. At the same time, cultural values are highly entrenched in food and agricultural systems worldwide.

B. Farmers everywhere face major risks, including extreme weather, long-term climate change, and price volatility in input and product markets. However, smallholder farmers in developing countries must in addition deal with adverse environments, both natural, in terms of soil quality, rainfall, etc., and human, in terms of infrastructure, financial systems, markets, knowledge and technology. Counter-intuitively, hunger is prevalent among many smallholder farmers in the developing world.

C. Participants in the online debate argued that our biggest challenge is to address the underlying causes of the agricultural system's inability to ensure sufficient food for all, and they identified as drivers of this problem our dependency on fossil fuels and unsupportive government policies.

D. On the question of mitigating the risks farmers face, most essayists called for greater state intervention. In his essay, Kanayo F. Nwanze, President of the International Fund for Agricultural Development, argued that governments can significantly reduce risks for farmers by providing basic services like roads to get produce more efficiently to markets, or water and food storage facilities to reduce losses. Sophia Murphy, senior advisor to the Institute for Agriculture and Trade Policy, suggested that the procurement and holding of stocks by governments can also help mitigate wild swings in food prices by alleviating uncertainties about market supply.

E. Shenggen Fan, Director General of the International Food Policy Research Institute, held up social safety nets and public welfare programmes in Ethiopia, Brazil and Mexico as valuable ways to address poverty among farming families and reduce their vulnerability to agriculture shocks. However, some commentators responded that cash transfers to poor families do not necessarily translate into increased food security, as these programmes do not always strengthen food production or raise incomes. Regarding state subsidies for agriculture, Rokeya

Kabir, Executive Director of Bangladesh Nari Progati Sangha, commented in her essay that these 'have not compensated for the stranglehold exercised by private traders. In fact, studies show that sixty percent of beneficiaries of subsidies are not poor, but rich landowners and non-farmer traders.

F. Nwanze, Murphy and Fan argued that private risk management tools, like private insurance, commodity futures markets, and rural finance can help small-scale producers mitigate risk and allow for investment in improvements. Kabir warned that financial support schemes often encourage the adoption of high-input agricultural practices, which in the medium term may raise production costs beyond the value of their harvests. Murphy noted that when futures markets become excessively financialised they can contribute to short-term price volatility, which increases farmers' food insecurity. Many participants and commentators emphasised that greater transparency in markets is needed to mitigate the impact of volatility, and make evident whether adequate stocks and supplies are available. Others contended that agribusiness companies should be held responsible for paying for negative side effects.

G. Many essayists mentioned climate change and its consequences for small-scale agriculture. Fan explained that 'in addition to reducing crop yields, climate change increases the magnitude and the frequency of extreme weather events, which increase smallholder vulnerability.' The growing unpredictability of weather patterns increases farmers' difficulty in managing weather-related risks. According to this author, one solution would be to develop crop varieties that are more resilient to new climate trends and extreme weather patterns. Accordingly, Pat Mooney, co-founder and executive director of the ETC Group, suggested that 'if we are to survive climate change, we must adopt policies that let peasants diversify the plant and animal species and varieties/breeds that make up our menus.'

H. Some participating authors and commentators argued in favour of community-based and autonomous risk management strategies through collective action groups, cooperatives or producers' groups. Such groups enhance market opportunities for small-scale producers, reduce marketing costs and synchronise buying and selling with seasonal price conditions. According to Murphy, 'collective action offers an important way for farmers to strengthen their political and economic bargaining power, and to reduce their business risks.' One commentator, Giel Ton, warned that collective action does not come as a free good. It takes time, effort and money to organise, build trust and to experiment. Others, like Marcel Vernooij and Marcel Beukeboom, suggested that in order to 'apply what we already know', all stakeholders, including business, government,

scientists and civil society, must work together, starting at the beginning of the value chain.

I. Some participants explained that market price volatility is often worsened by the presence of intermediary purchasers who, taking advantage of farmers' vulnerability, dictate prices. One commentator suggested farmers can gain greater control over prices and minimise price volatility by selling directly to consumers. Similarly, Sonali Bisht, founder and advisor to the Institute of Himalayan Environmental Research and Education (INHERE), India, wrote that community-supported agriculture, where consumers invest in local farmers by subscription and guarantee producers a fair price, is a risk-sharing model worth more attention. Direct food distribution systems not only encourage small-scale agriculture but also give consumers more control over the food they consume, she wrote.

Questions 1–3

Reading Passage 1 has nine paragraphs, **A–I**.

Which paragraph contains the following information?

Write the correct letter, **A–I**, in boxes 1–3 on your answer sheet.

1. a reference to characteristics that only apply to food production
2. a reference to challenges faced only by farmers in certain parts of the world
3. a reference to difficulties in bringing about co-operation between farmers

The Intersection of Health Sciences and Geography

A. While many diseases that affect humans have been eradicated due to improvements in vaccinations and the availability of healthcare, there are still areas around the world where certain health issues are more prevalent. In a world that is far more globalised than ever before, people come into contact with one another through travel and living closer and closer to each other. As a result, super-viruses and other infections resistant to antibiotics are becoming more and more common.

B. Geography can often play a very large role in the health concerns of certain populations. For instance, depending on where you live, you will not have the same health concerns as someone who lives in a different geographical region. Perhaps one of the most obvious examples of this idea is malaria-prone areas, which are usually tropical regions that foster a warm and damp environment in which the mosquitos that can give people this disease can grow. Malaria is much less of a problem in high-altitude deserts, for instance.

C. In some countries, geographical factors influence the health and well-being of the population in very obvious ways. In many large cities, the wind is not strong enough to clear the air of the massive amounts of smog and pollution that cause asthma, lung problems, eyesight issues and more in the people who live there. Part of the problem is, of course, the massive number of cars being driven, in addition to factories that run on coal power. The rapid industrialisation of some countries in recent years has also led to the cutting down of forests to allow for the expansion of big cities, which makes it even harder to fight the pollution with the fresh air that is produced by plants.

D. It is in situations like these that the field of health geography comes into its own. It is an increasingly important area of study in a world where diseases like polio are re-emerging, respiratory diseases continue to spread, and malaria-prone areas are still fighting to find a better cure. Health geography is the combination of, on the one hand, knowledge regarding geography and methods used to analyse and interpret geographical information, and on the other, the study of health, diseases and healthcare practices around the world. The aim of this hybrid science is to create solutions for common geography-based health problems. While people will always be prone to illness, the study of how geography affects our health could lead to the eradication of certain illnesses, and the prevention of others in the future. By understanding why and how we get sick, we can change the way we treat illness and disease specific to certain geographical locations.

E. The geography of disease and ill health analyses the frequency with which certain diseases appear in different parts of the world, and overlays the data with the geography of the region, to see if there could be a correlation between the two. Health geographers also study factors that could make certain individuals or a population more likely to be taken ill with a specific health concern or disease, as

compared with the population of another area. Health geographers in this field are usually trained as healthcare workers, and have an understanding of basic epidemiology as it relates to the spread of diseases among the population.

F. Researchers study the interactions between humans and their environment that could lead to illness (such as asthma in places with high levels of pollution) and work to create a clear way of categorising illnesses, diseases and epidemics into local and global scales. Health geographers can map the spread of illnesses and attempt to identify the reasons behind an increase or decrease in illnesses, as they work to find a way to halt the further spread or re-emergence of diseases in vulnerable populations.

G. The second subcategory of health geography is the geography of healthcare provision. This group studies the availability (or lack thereof) of healthcare resources to individuals and populations around the world. In both developed and developing nations there is often a very large discrepancy between the options available to people in different social classes, income brackets, and levels of education. Individuals working in the area of the geography of healthcare provision attempt to assess the levels of healthcare in the area (for instance, it may be very difficult for people to get medical attention because there is a mountain between their village and the nearest hospital). These researchers are on the frontline of making recommendations regarding policy to international organisations, local government bodies and others.

H. The field of health geography is often overlooked, but it constitutes a huge area of need in the fields of geography and healthcare. If we can understand how geography affects our health no matter where in the world we are located, we can better treat disease, prevent illness, and keep people safe and well.

Questions 14_19

Reading Passage 2 has eight sections, **A–H**.
Which paragraph contains the following information?
Write the correct letter, **A–H**, in boxes 14–19 on your answer sheet.
NB You may use any letter more than once.

14. an acceptance that not all diseases can be totally eliminated
15. examples of physical conditions caused by human behaviour
16. a reference to classifying diseases on the basis of how far they extend geographically
17. reasons why the level of access to healthcare can vary within a country
18. a description of health geography as a mixture of different academic fields
19. a description of the type of area where a particular illness is rare

第三阶段

题型混合单个passage练习阶段

【day16】 3个passage1--剑13T1P1(判断正误+填词) ➕剑13T2P1(填词+判断正误) ➕剑13T4P1(判断正误+配对)

【day17】3个passage1--剑14T1P1(填词+判断正误) ➕剑14T2P1(判断正误+填词) ➕剑14T3P1(段落包含+判断正误+配对)

【day18+19】3个passage2---剑13T1P2(标题配对+配对+填词) ➕剑13T2P2(段落包含+配对+填词) ➕剑13T4P2(填词+配对+段落包含)

【day20+21】3个passage2---剑14T2P2(段落包含+填词) ➕剑14T3P2(判断正误+填词) ➕剑14T4P2(段落包含+判断正误+多选)

【day22+23】3个passage3---剑13T1P3(选择+配对+判断正误) ➕剑13T2P3(选择+配对*2) ➕剑13T3P3(段落包含+填词+配对)

【day24+25】3个passage3—剑14T1P3(配对+判断正误+填词) ➕剑14T3P3(配对+判断正误+填词) ➕剑14T4P3(判断正误+填词+选择)

此阶段具体要求如下：

建议先背每个passage配套单词，并完成自测保证正确率95%方可开始做题，既增加单词量也减少单词对做题的干扰，也将单词放入题目文章中应用记得更牢。

此阶段建议每个passage限时25-30分钟，不可超过30分钟。

以一个passage为单位，做完题后，听omar视频讲解，可暂停做笔记/思考，听完后口述整个做题过程，说不明白出建议重看视频。

最后再重新做一遍，限时20分钟自测，做题顺畅才算通过。

Passage1
组合训练1

Case Study: Tourism New Zealand website

剑13T1P1

New Zealand is a small country of four million inhabitants, a long-haul flight from all the major tourist-generating markets of the world. Tourism currently makes up 9% of the country's gross domestic product, and is the country's largest export sector. Unlike other export sectors, which make products and then sell them overseas, tourism brings its customers to New Zealand. The product is the country itself – the people, the places and the experiences. In 1999, Tourism New Zealand launched a campaign to communicate a new brand position to the world. The campaign focused on New Zealand's scenic beauty, exhilarating outdoor activities and authentic Maori culture, and it made New Zealand one of the strongest national brands in the world.

A key feature of the campaign was the website www.newzealand.com, which provided potential visitors to New Zealand with a single gateway to everything the destination had to offer. The heart of the website was a database of tourism services operators, both those based in New Zealand and those based abroad which offered tourism services to the country. Any tourism-related business could be listed by filling in a simple form. This meant that even the smallest bed and breakfast address or specialist activity provider could gain a web presence with access to an audience of long-haul visitors. In addition, because participating businesses were able to update the details they gave on a regular basis, the information provided remained accurate. And to maintain and improve standards, Tourism New Zealand organised a scheme whereby organisations appearing on the website underwent an independent evaluation against a set of agreed national standards of quality. As part of this, the effect of each business on the environment was considered.

To communicate the New Zealand experience, the site also carried features relating to famous people and places. One of the most popular was an interview with former New Zealand All Blacks rugby captain Tana Umaga. Another feature that attracted a lot of attention was an interactive journey through a number of the locations chosen for blockbuster films which had made use of New Zealand's stunning scenery as a backdrop. As the site developed, additional features were added to help independent travellers devise their own customised itineraries. To make it easier to plan motoring holidays, the site catalogued the most popular driving routes in the country, highlighting different routes according to the season and indicating distances and times.

Later, a Travel Planner feature was added, which allowed visitors to click and 'bookmark' places or attractions they were interested in, and then view the results on a map. The Travel Planner offered suggested routes and public transport options between the chosen locations. There were also links to accommodation in the area. By registering with the website, users could save their Travel Plan and return to it

later, or print it out to take on the visit. The website also had a 'Your Words' section where anyone could submit a blog of their New Zealand travels for possible inclusion on the website.

The Tourism New Zealand website won two Webby awards for online achievement and innovation. More importantly perhaps, the growth of tourism to New Zealand was impressive. Overall tourism expenditure increased by an average of 6.9% per year between 1999 and 2004. From Britain, visits to New Zealand grew at an average annual rate of 13% between 2002 and 2006, compared to a rate of 4% overall for British visits abroad.

The website was set up to allow both individuals and travel organisations to create itineraries and travel packages to suit their own needs and interests. On the website, visitors can search for activities not solely by geographical location, but also by the particular nature of the activity. This is important as research shows that activities are the key driver of visitor satisfaction, contributing 74% to visitor satisfaction, while transport and accommodation account for the remaining 26%. The more activities that visitors undertake, the more satisfied they will be. It has also been found that visitors enjoy cultural activities most when they are interactive, such as visiting a mare (meeting ground) to learn about traditional Maori life. Many long-haul travellers enjoy such learning experiences, which provide them with stories to take home to their friends and family. In addition, it appears that visitors to New Zealand don't want to be 'one of the crowd' and find activities that involve only a few people more special and meaningful.

It could be argued that New Zealand is not a typical destination. New Zealand is a small country with a visitor economy composed mainly of small businesses. It is generally perceived as a safe English-speaking country with a reliable transport infrastructure. Because of the long-haul flight, most visitors stay for longer (average 20 days) and want to see as much of the country as possible on what is often seen as a once-in-a-lifetime visit. However, the underlying lessons apply anywhere – the effectiveness of a strong brand, a strategy based on unique experiences and a comprehensive and user-friendly website

Questions 1–7

Complete the table below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes 1–7 on your answer sheet.

Section of website	Comments
Database of tourism services	• easy for tourism–related businesses to get on the list • allowed businesses to 1..... information regularly • provided a country–wide evaluation of businesses, including their impact on the 2.....
Special features on local topics	• e.g. an interview with a former sports 3....., and an interactive tour of various locations used in 4.....
Information on driving routes	• varied depending on the 5.....
Travel Planner	• included a map showing selected places, details of public transport and local 6.....
"Your Words'	• travellers could send a link to their 7.....

Questions 8–13

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

In boxes 8–13 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

8. The website www.newzealand.com aimed to provide ready–made itineraries and packages for travel companies and individual tourists.
9. It was found that most visitors started searching on the website by geographical location.
10. According to research, 26% of visitor satisfaction is related to their accommodation.
11. Visitors to New Zealand like to become involved in the local culture.
12. Visitors like staying in small hotels in New Zealand rather than in larger ones.

13 Many visitors feel it is unlikely that they will return to New Zealand after their visit.

Bringing cinnamon to Europe

Cinnamon is a sweet, fragrant spice produced from the inner bark of trees of the genus Cinnamomum, which is native to the Indian sub-continent. It was known in biblical times and is mentioned in several books of the Bible, both as an ingredient that was mixed with oils for anointing people's bodies, and also as a token indicating friendship among lovers and friends. In ancient Rome, mourners attending funerals burnt cinnamon to create a pleasant scent. Most often, however, the spice found its primary use as an additive to food and drink. In the Middle Ages, Europeans who could afford the spice used it to flavour food, particularly meat, and to impress those around them with their ability to purchase an expensive condiment from the 'exotic' East. At a banquet, a host would offer guests a plate with various spices piled upon it as a sign of the wealth at his or her disposal. Cinnamon was also reported to have health benefits, and was thought to cure various ailments, such as indigestion.

Toward the end of the Middle Ages, the European middle classes began to desire the lifestyle of the elite, including their consumption of spices. This led to a growth in demand for cinnamon and other spices. At that time, cinnamon was transported by Arab merchants, who closely guarded the secret of the source of the spice from potential rivals. They took it from India, where it was grown, on camels via an overland route to the Mediterranean. Their journey ended when they reached Alexandria. European traders sailed there to purchase their supply of cinnamon, then brought it back to Venice. The spice then travelled from that great trading city to markets all around Europe. Because the overland trade route allowed for only small quantities of the spice to reach Europe, and because Venice had a virtual monopoly of the trade, the Venetians could set the price of cinnamon exorbitantly high. These prices, coupled with the increasing demand, spurred the search for new routes to Asia by Europeans eager to take part in the spice trade.

Seeking the high profits promised by the cinnamon market, Portuguese traders arrived on the island of Ceylon in the Indian Ocean toward the end of the 15th century. Before Europeans arrived on the island, the state had organized the cultivation of cinnamon People belonging to the ethnic group called the Salagama would peel the bark off young shoots of the cinnamon plant in the rainy season, when the wet bark was more pliable. During the peeling process, they curled the bark into the 'stick' shape still associated with the spice today. The Salagama then gave the finished product to the king as a form of tribute. When the Portuguese arrived, they needed to increase production significantly, and so enslaved many other members of the Ceylonese native population, forcing them to work in cinnamon harvesting. In 1518, the Portuguese built a fort on Ceylon, which enabled them to protect the island, so helping them to develop a monopoly in the cinnamon trade and generate very high

profits. In the late 16th century, for example, they enjoyed a tenfold profit when shipping cinnamon over a journey of eight days from Ceylon to India.
When the Dutch arrived off the coast of southern Asia at the very beginning of the 17th century, they set their sights on displacing the Portuguese as kings of cinnamon. The Dutch allied themselves with Kandy, an inland kingdom on Ceylon. In return for payments of elephants and cinnamon, they protected the native king from the Portuguese. By 1640, the Dutch broke the 150–year Portuguese monopoly when they overran and occupied their factories. By 1658, they had permanently expelled the Portuguese from the island, thereby gaining control of the lucrative cinnamon trade.

In order to protect their hold on the market, the Dutch, like the Portuguese before them, treated the native inhabitants harshly. Because of the need to boost production and satisfy Europe's ever–increasing appetite for cinnamon, the Dutch began to alter the harvesting practices of the Ceylonese. Over time, the supply of cinnamon trees on the island became nearly exhausted, due to systematic stripping of the bark. Eventually, the Dutch began cultivating their own cinnamon trees to supplement the diminishing number of wild trees available for use.

Then, in 1796, the English arrived on Ceylon, thereby displacing the Dutch from their control of the cinnamon monopoly. By the middle of the 19th century, production of cinnamon reached 1,000 tons a year, after a lower grade quality of the spice became acceptable to European tastes. By that time, cinnamon was being grown in other parts of the Indian Ocean region and in the West Indies, Brazil, and Guyana. Not only was a monopoly of cinnamon becoming impossible, but the spice trade overall was diminishing in economic potential, and was eventually superseded by the rise of trade in coffee, tea, chocolate, and sugar.

Questions 1–9

Complete the notes below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes **1–9** on your answer sheet.

The Early History of Cinnamon

Biblical times:	added to 1…….. used to show 2……. between people
Ancient Rome:	used for its sweet smell at 3……..
Middle Ages:	added to food, especially meat was an indication of a person's 4…… known as a treatment for 5…….and other health problems grown in 6…… merchants used 7…….to bring it to the Mediterranean arrived in the Mediterranean at 8…….. traders took it to 9…….and sold it to destinations around Europe

Questions 10–13

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

In boxes 10–13 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

10. The Portuguese had control over the cinnamon trade in Ceylon throughout the 16th century.
11. The Dutch took over the cinnamon trade from the Portuguese as soon as they arrived in Ceylon.
12. The trees planted by the Dutch produced larger quantities of cinnamon than the wild trees.
13. The spice trade maintained its economic importance during the 19th century.

Cutty Sark: the fastest sailing ship of all time

The nineteenth century was a period of great technological development in Britain, and for shipping the major changes were from wind to steam power, and from wood to iron and steel.

The fastest commercial sailing vessels of all time were clippers, three-masted ships built to transport goods around the world, although some also took passengers. From the 1840s until 1869, when the Suez Canal opened and steam propulsion was replacing sail, clippers dominated world trade. Although many were built, only one has survived more or less intact: Cutty Sark, now on display in Greenwich, southeast London.

Cutty Sark's unusual name comes from the poem Tam O'Shanter by the Scottish poet Robert Burns. Tam, a farmer, is chased by a witch called Nannie, who is wearing a "cutty sark' – an old Scottish name for a short nightdress. The witch is depicted in Cutty Sark's figurehead – the carving of a woman typically at the front of old sailing ships. In legend, and in Burns's poem, witches cannot cross water, so this was a rather strange choice of name for a ship.

Cutty Sark was built in Dumbarton, Scotland, in 1869, for a shipping company owned by John Willis. To carry out construction, Willis chose a new shipbuilding firm, Scott & Linton, and ensured that the contract with them put him in a very strong position. In the end, the firm was forced out of business, and the ship was finished by a competitor.

Willis's company was active in the tea trade between China and Britain, where speed could bring shipowners both profits and prestige, so Cutty Sark was designed to make the journey more quickly than any other ship. On her maiden voyage, in 1870, she set sail from London, carrying large amounts of goods to China. She returned laden with tea, making the journey back to London in four months. However, Cutty Sark never lived up to the high expectations of her owner, as a result of bad winds and various misfortunes. On one occasion, in 1872, the ship and a rival clipper, Thermopylae, left port in China on the same day. Crossing the Indian Ocean, Cutty Sark gained a lead of over 400 miles, but then her rudder was severely damaged in stormy seas, making her impossible to steer. The ship's crew had the daunting task of repairing the rudder at sea, and only succeeded at the second attempt. Cutty Sark reached London a week after Thermopylae.

Steam ships posed a growing threat to clippers, as their speed and cargo capacity increased. In addition, the opening of the Suez Canal in 1869, the same year that

Cutty Sark was launched, had a serious impact. While steam ships could make use of the quick, direct route between the Mediterranean and the Red Sea, the canal was of no use to sailing ships, which needed the much stronger winds of the oceans, and so had to sail a far greater distance. Steam ships reduced the journey time between Britain and China by approximately two months.

By 1878, tea traders weren't interested in Cutty Sark, and instead, she took on the much less prestigious work of carrying any cargo between any two ports in the world. In 1880, violence aboard the ship led ultimately to the replacement of the captain with an incompetent drunkard who stole the crew's wages. He was suspended from service, and a new captain appointed. This marked a turnaround and the beginning of the most successful period in Cutty Sark's working life, transporting wool from Australia to Britain. One such journey took just under 12 weeks, beating every other ship sailing that year by around a month.

The ship's next captain, Richard Woodget, was an excellent navigator, who got the best out of both his ship and his crew. As a sailing ship, Cutty Sark depended on the strong trade winds of the southern hemisphere, and Woodget took her further south than any previous captain, bringing her dangerously close to icebergs off the southern tip of South America. His gamble paid off, though, and the ship was the fastest vessel in the wool trade for ten years.

As competition from steam ships increased in the 1890s, and Cutty Sark approached the end of her life expectancy, she became less profitable. She was sold to a Portuguese firm, which renamed her Ferreira. For the next 25 years, she again carried miscellaneous cargoes around the world.

Badly damaged in a gale in 1922, she was put into Falmouth harbour in southwest England, for repairs. Wilfred Dowman, a retired sea captain who owned a training vessel, recognised her and tried to buy her, but without success. She returned to Portugal and was sold to another Portuguese company. Dowman was determined, however, and offered a high price: this was accepted, and the ship returned to Falmouth the following year and had her original name restored.

Dowman used Cutty Sark as a training ship, and she continued in this role after his death. When she was no longer required, in 1954, she was transferred to dry dock at Greenwich to go on public display. The ship suffered from fire in 2007, and again, less seriously, in 2014, but now Cutty Sark attracts a quarter of a million visitors a year.

Questions 1–8

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

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. Clippers were originally intended to be used as passenger ships.
2. Cutty Sark was given the name of a character in a poem.
3. The contract between John Willis and Scott & Linton favoured Willis.
4. John Willis wanted Cutty Sark to be the fastest tea clipper travelling between the UK and China.
5. Despite storm damage, Cutty Sark beat Thermopylae back to London.
6. The opening of the Suez Canal meant that steam ships could travel between Britain and China faster than clippers.
7. Steam ships sometimes used the ocean route to travel between London and China.
8. Captain Woodget put Cutty Sark at risk of hitting an iceberg.

Questions 9–13

Complete the sentences below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes **9–13** on your answer sheet.

9. After 1880, Cutty Sark carried.....as its main cargo during its most successful time.
10. As a captain and……. Woodget was very skilled.
11. Ferreira went to Falmouth to repair damage that ……had caused.
12. Between 1923 and 1954, Cutty Sark was used for……..
13. Cutty Sark has twice been damaged by……in the 21st century.

Passage1
组合训练2

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

剑14T1P1

THE IMPORTANCE OF CHILDREN'S PLAY

Brick by brick, six–year–old Alice is building a magical kingdom. Imagining fairy–tale turrets and fire–breathing dragons, wicked witches and gallant heroes, she's creating an enchanting world. Although she isn't aware of it, this fantasy is helping her take her first steps towards her capacity for creativity and so it will have important repercussions in her adult life.

Minutes later, Alice has abandoned the kingdom in favour of playing schools with her younger brother. When she bosses him around as his "teacher', she's practising how to regulate her emotions through pretence. Later on, when they tire of this and settle down with a board game, she's learning about the need to follow rules and take turns with a partner.

'Play in all its rich variety is one of the highest achievements of the human species,'says Dr David Whitebread from the Faculty of Education at the University of Cambridge, UK. 'It underpins how we develop as intellectual, problem–solving adults and is crucial to our success as a highly adaptable species.

Recognising the importance of play is not new: over two millennia ago, the Greek philosopher Plato extolled its virtues as a means of developing skills for adult life, and ideas about play–based learning have been developing since the 19th century.

But we live in changing times, and Whitebread is mindful of a worldwide decline in play, pointing out that over half the people in the world now live in cities. "The opportunities for free play, which I experienced almost every day of my childhood, are becoming increasingly scarce, ; he says. Outdoor play is curtailed by perceptions of risk to do with traffic, as well as parents' increased wish to protect their children from being the victims of crime, and by the emphasis on "earlier is better' which is leading to greater competition in academic learning and schools.

International bodies like the United Nations and the European Union have begun to develop policies concerned with children's right to play, and to consider implications for leisure facilities and educational programmes. But what they often lack is the evidence to base policies on.

'The type of play we are interested in is child–initiated, spontaneous and unpredictable – but, as soon as you ask a five–year–old "to play", then you as the researcher have intervened, explains Dr Sara Baker. 'And we want to know what the long–term impact of play is. It's a real challenge'

Dr Jenny Gibson agrees, pointing out that although some of the steps in the puzzle of how and why play is important have been looked at, there is very little data on the impact it has on the child's later life.

Now, thanks to the university's new Centre for Research on Play in Education, Development and Learning (PEDAL), Whitebread, Baker, Gibson and a team of researchers hope to provide evidence on the role played by play in how a child develops.

'A strong possibility is that play supports the early development of children's self-control,' explains Baker. 'This is our ability to develop awareness of our own thinking processes – it influences how effectively we go about undertaking challenging activities.'

In a study carried out by Baker with toddlers and young pre-schoolers, she found that children with greater self-control solved problems more quickly when exploring an unfamiliar set-up requiring scientific reasoning. 'This sort of evidence makes us think that giving children the chance to play will make them more successful problem-solvers in the long run.'

If playful experiences do facilitate this aspect of development, say the researchers, it could be extremely significant for educational practices, because the ability to self-regulate has been shown to be a key predictor of academic performance.

Gibson adds: 'Playful behaviour is also an important indicator of healthy social and emotional development. In my previous research, I investigated how observing children at play can give us important clues about their well-being and can even be useful in the diagnosis of neurodevelopmental disorders like autism.'

Whitebread's recent research has involved developing a play-based approach to supporting children's writing. "Many primary school children find writing difficult, but we showed in a previous study that a playful stimulus was far more effective than an instructional one.' Children wrote longer and better-structured stories when they first played with dolls representing characters in the story. In the latest study, children first created their story with Lego*, with similar results. 'Many teachers commented that they had always previously had children saying they didn't know what to write about. With the Lego building, however, not a single child said this through the whole year of the project.'

Whitebread, who directs PEDAL, trained as a primary school teacher in the early 1970s, when, as he describes, "the teaching of young children was largely a quiet backwater, untroubled by any serious intellectual debate or controversy.' Now, the landscape is very different, with hotly debated topics such as school starting age.

'Somehow the importance of play has been lost in recent decades. It's regarded as something trivial, or even as something negative that contrasts with "work". Let's not lose sight of its benefits, and the fundamental contributions it makes to human achievements in the arts, sciences and technology. Let's make sure children have a rich diet of play experiences'

Questions 1–8

Complete the notes below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes 1–8 on your answer sheet.

Children's play

Uses of children's play

- building a 'magical kingdom' may help develop 1…….
- board games involve 2……and turn–taking

Recent changes affecting children's play

- populations of 3……..have grown
- opportunities for free play are limited due to
  - fear of 4……..
  - fear of 5……..
  - Increased 6……..in schools

International policies on children's play

- it is difficult to find 7…….. to support new policies
- research needs to study the impact of play on the rest of the child's 8……

Questions 9–13

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

In boxes 9–13 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

9. Children with good self–control are known to be likely to do well at school later on.
10. The way a child plays may provide information about possible medical problems.
11. Playing with dolls was found to benefit girls' writing more than boys' writing.
12. Children had problems thinking up ideas when they first created the story with Lego.
13. People nowadays regard children's play as less significant than they did in the past.

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

剑14T2P1

Alexander Henderson (1831–1913)

Born in Scotland, Henderson emigrated to Canada in 1855 and became a well-known landscape photographer

Alexander Henderson was born in Scotland in 1831 and was the son of a successful merchant. His grandfather, also called Alexander, had founded the family business, and later became the first chairman of the National Bank of Scotland. The family had extensive landholdings in Scotland. Besides its residence in Edinburgh, it owned Press Estate, 650 acres of farmland about 35 miles southeast of the city. The family often stayed at Press Castle, the large mansion on the northern edge of the property, and Alexander spent much of his childhood in the area, playing on the beach near Eyemouth or fishing in the streams nearby.

Even after he went to school at Murcheston Academy on the outskirts of Edinburgh, Henderson returned to Press at weekends. In 1849 he began a three-year apprenticeship to become an accountant. Although he never liked the prospect of a business career, he stayed with it to please his family. In October 1855, however, he emigrated to Canada with his wife Agnes Elder Robertson and they settled in Montreal.

Henderson learned photography in Montreal around the year 1857 and quickly took it up as a serious amateur. He became a personal friend and colleague of the Scottish–Canadian photographer William Notman. The two men made a photographic excursion to Niagara Falls in 1860 and they cooperated on experiments with magnesium flares as a source of artificial light in 1865. They belonged to the same societies and were among the founding members of the Art Association of Montreal. Henderson acted as chairman of the association's first meeting, which was held in Notman's studio on 11 January 1860.

In spite of their friendship, their styles of photography were quite different. While Notman's landscapes were noted for their bold realism, Henderson for the first 20 years of his career produced romantic images, showing the strong influence of the British landscape tradition. His artistic and technical progress was rapid and in 1865 he published his first major collection of landscape photographs. The publication had limited circulation (only seven copies have ever been found), and was called *Canadian Views and Studies*. The contents of each copy vary significantly and have proved a useful source for evaluating Henderson's early work.

In 1866, he gave up his business to open a photographic studio, advertising himself as a portrait and landscape photographer. From about 1870 he dropped portraiture to specialize in landscape photography and other views. His numerous photographs of city life revealed in street scenes, houses, and markets are alive with human activity, and although his favourite subject was landscape he usually composed his scenes around such human pursuits as farming the land, cutting ice on a river, or sailing down a woodland stream. There was sufficient demand for these types of scenes and others he took depicting the lumber trade, steamboats and waterfalls to enable him to make a living. There was little competing hobby or amateur photography before the late 1880s because of the time-consuming techniques involved and the weight of the equipment. People wanted to buy photographs as souvenirs of a trip or as gifts, and catering to this market, Henderson had stock photographs on display at his studio for mounting, framing, or inclusion in albums.

Henderson frequently exhibited his photographs in Montreal and abroad, in London, Edinburgh, Dublin, Paris, New York, and Philadelphia. He met with greater success in 1877 and 1878 in New York when he won first prizes in the exhibition held by E and H T Anthony and Company for landscapes using the Lambertype process. In 1878 his work won second prize at the world exhibition in Paris.

In the 1870s and 1880s Henderson travelled widely throughout Quebec and Ontario, in Canada, documenting the major cities of the two provinces and many of the villages in Quebec. He was especially fond of the wilderness and often travelled by canoe on the Blanche, du Lièvre, and other noted eastern rivers. He went on several occasions to the Maritimes and in 1872 he sailed by yacht along the lower north shore of the St Lawrence River. That same year, while in the lower St Lawrence River region, he took some photographs of the construction of the Intercolonial Railway. This undertaking led in 1875 to a commission from the railway to record the principal structures along the almost-completed line connecting Montreal to Halifax. Commissions from other railways followed. In 1876 he photographed bridges on the Quebec, Montreal, Ottawa and Occidental Railway between Montreal and Ottawa. In 1885 he went west along the Canadian Pacific Railway (CPR) as far as Rogers Pass in British Columbia, where he took photographs of the mountains and the progress of construction.

In 1892 Henderson accepted a full-time position with the CPR as manager of a photographic department which he was to set up and administer. His duties included spending four months in the field each year. That summer he made his second trip west, photographing extensively along the railway line as far as Victoria. He continued in this post until 1897, when he retired completely from photography.

When Henderson died in 1913, his huge collection of glass negatives was stored in the basement of his house. Today collections of his work are held at the National Archives of Canada, Ottawa, and the McCord Museum of Canadian History, Montreal.

Questions 1–8

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

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 Henderson rarely visited the area around Press estate when he was younger.

2 Henderson pursued a business career because it was what his family wanted.

3 Henderson and Notman were surprised by the results of their 1865 experiment.

4 There were many similarities between Henderson's early landscapes and those of Notman.

5 The studio that Henderson opened in 1866 was close to his home.

6 Henderson gave up portraiture so that he could focus on taking photographs of scenery.

7 When Henderson began work for the Intercolonial Railway, the Montreal to Halifax line had been finished.

8 Henderson's last work as a photographer was with the Canadian Pacific Railway.

Questions 9–13

Complete the notes below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 9–13 on your answer sheet.

Alexander Henderson

Early life

- was born in Scotland in 1831 – father was a **9** .....
- trained as an accountant, emigrated to Canada in 1855

Start of a photographic career

- opened up a photographic studio in 1866
- took photos of city life, but preferred landscape photography
- people bought Henderson's photos because photography took up considerable time and the **10** ..... was heavy
- the photographs Henderson sold were **11** ..... or souvenirs

Travelling as a professional photographer

- travelled widely in Quebec and Ontario in 1870s and 1880s
- took many trips along eastern rivers in a **12** .....
- worked for Canadian railways between 1875 and 1897
- worked for CPR in 1885 and photographed the **13** ..... and the railway at Rogers Pass

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

剑14T3P1

The concept of intelligence

A Looked at in one way, everyone knows what intelligence is; looked at in another way, no one does. In other words, people all have unconscious notions – known as 'implicit theories' – of intelligence, but no one knows for certain what it actually is. This chapter addresses how people conceptualize intelligence, whatever it may actually be.

But why should we even care what people think intelligence is, as opposed only to valuing whatever it actually is? There are at least four reasons people's conceptions of intelligence matter.

B First, implicit theories of intelligence drive the way in which people perceive and evaluate their own intelligence and that of others. To better understand the judgments people make about their own and others' abilities, it is useful to learn about people's implicit theories. For example, parents' implicit theories of their children's language development will determine at what ages they will be willing to make various corrections in their children's speech. More generally, parents' implicit theories of intelligence will determine at what ages they believe their children are ready to perform various cognitive tasks. Job interviewers will make hiring decisions on the basis of their implicit theories of intelligence. People will decide who to be friends with on the basis of such theories. In sum, knowledge about implicit theories of intelligence is important because this knowledge is so often used by people to make judgments in the course of their everyday lives.

C Second, the implicit theories of scientific investigators ultimately give rise to their explicit theories. Thus it is useful to find out what these implicit theories are. Implicit theories provide a framework that is useful in defining the general scope of a phenomenon – especially a not-well-understood phenomenon. These implicit theories can suggest what aspects of the phenomenon have been more or less attended to in previous investigations.

D Third, implicit theories can be useful when an investigator suspects that existing explicit theories are wrong or misleading. If an investigation of implicit theories reveals little correspondence between the extant implicit and explicit theories, the implicit theories may be wrong. But the possibility also needs to be taken into account that the explicit theories are wrong and in need of correction or supplementation. For example, some implicit theories of intelligence suggest the need for expansion of some of our explicit theories of the construct.

E Finally, understanding implicit theories of intelligence can help elucidate developmental and cross-cultural differences. As mentioned earlier, people have expectations for intellectual performances that differ for children of different ages. How these expectations differ is in part a function of culture. For example, expectations for children who participate in Western-style schooling are almost certain to be different from those for children who do not participate in such schooling.

F I have suggested that there are three major implicit theories of how intelligence relates to society as a whole (Sternberg, 1997). These might be called Hamiltonian, Jeffersonian, and Jacksonian. These views are not based strictly, but rather, loosely, on the philosophies of Alexander Hamilton, Thomas Jefferson, and Andrew Jackson, three great statesmen in the history of the United States.

G The Hamiltonian view, which is similar to the Platonic view, is that people are born with different levels of intelligence and that those who are less intelligent need the good offices of the more intelligent to keep them in line, whether they are called government officials or, in Plato's term, philosopher-kings. Herrnstein and Murray (1994) seem to have shared this belief when they wrote about the emergence of a cognitive (high-IQ) elite, which eventually would have to take responsibility for the largely irresponsible masses of non-elite (low-IQ) people who cannot take care of themselves. Left to themselves, the unintelligent would create, as they always have created, a kind of chaos.

H The Jeffersonian view is that people should have equal opportunities, but they do not necessarily avail themselves equally of these opportunities and are not necessarily equally rewarded for their accomplishments. People are rewarded for what they accomplish, if given equal opportunity. Low achievers are not rewarded to the same extent as high achievers. In the Jeffersonian view, the goal of education is not to favor or foster an elite, as in the Hamiltonian tradition, but rather to allow children the opportunities to make full use of the skills they have. My own views are similar to these (Sternberg, 1997).

I The Jacksonian view is that all people are equal, not only as human beings but in terms of their competencies – that one person would serve as well as another in government or on a jury or in almost any position of responsibility. In this view of democracy, people are essentially intersubstitutable except for specialized skills, all of which can be learned. In this view, we do not need or want any institutions that might lead to favoring one group over another.

J Implicit theories of intelligence and of the relationship of intelligence to society perhaps need to be considered more carefully than they have been because they often serve as underlying presuppositions for explicit theories and even experimental designs that are then taken as scientific contributions. Until scholars are able to discuss their implicit theories and thus their assumptions, they are likely to miss the point of what others are saying when discussing their explicit theories and their data.

Questions 1–3

Reading Passage 1 has ten sections, **A–J**.

Which section contains the following information?

*Write the correct letter, **A–J**, in boxes 1–3 on your answer sheet.*

1 information about how non-scientists' assumptions about intelligence influence their behaviour towards others

2 a reference to lack of clarity over the definition of intelligence

3 the point that a researcher's implicit and explicit theories may be very different

Questions 4–6

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

In boxes 4–6 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*

4 Slow language development in children is likely to prove disappointing to their parents.

5 People's expectations of what children should gain from education are universal.

6 Scholars may discuss theories without fully understanding each other.

Questions 7–13

Look at the following statements (Questions 7–13) and the list of theories below.

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

*Write the correct letter, **A**, **B**, or **C**, in boxes 7–13 on your answer sheet.*

NB *You may use any letter more than once.*

7 It is desirable for the same possibilities to be open to everyone.

8 No section of society should have preferential treatment at the expense of another.

9 People should only gain benefits on the basis of what they actually achieve.

10 Variation in intelligence begins at birth.

11 The more intelligent people should be in positions of power.

12 Everyone can develop the same abilities.

13 People of low intelligence are likely to lead uncontrolled lives.

List of Theories

A Hamiltonian

B Jeffersonian

C Jacksonian

Passage2
组合训练1

READING PASSAGE 2

剑13T1P2

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

Questions 14–19

Reading Passage 2 has six paragraphs, **A–F**

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

Write the correct number, **i–vili**, in boxes **14–19** on your answer sheet.

List of Headings

i. The productive outcomes that may result from boredom
ii. What teachers can do to prevent boredom
iii. A new explanation and a new cure for boredom
iv. Problems with a scientific approach to boredom
v. A potential danger arising from boredom
vi. Creating a system of classification for feelings of boredom
vii. Age groups most affected by boredom
viii. Identifying those most affected by boredom

14. Paragraph **A**
15. Paragraph **B**
16. Paragraph **C**
17. Paragraph **D**
18. Paragraph **E**
19. Paragraph **F**

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.

Questions 24–26

Complete the summary below.

Choose ***ONE WORD ONLY*** *from the passage for each answer.*

Write your answers in boxes 24–26 on your answer sheet.

Responses to boredom

For John Eastwood, the central feature of boredom is that people cannot **24** ..... , due to a failure in what he calls the 'attention system', and as a result they become frustrated and irritable. His team suggests that those for whom **25** ..... is an important aim in life may have problems in coping with boredom, whereas those who have the characteristic of **26** ..... can generally cope with it.

剑13T2P2

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 emerged 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 Shamay-Tsoory 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

Questions 18–20

Look at the following research findings (Questions 18–20) and the list of researchers below.

*Match each research finding with the correct researcher, **A–F**.*

*Write the correct letter, **A–F**, in boxes 18–20 on your answer sheet.*

18 People are more trusting when affected by oxytocin.

19 Oxytocin increases people's feelings of jealousy.

20 The effect of oxytocin varies from one type of person to another.

	List of Researchers
A	Markus Heinrichs
B	Simone Shamay-Tsoory
C	Jennifer Bartz
D	Carolyn DeClerck
E	Carsten De Dreu
F	Sue Carter

Questions 21–26

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 21–26 on your answer sheet.

Oxytocin research

The earliest findings about oxytocin and bonding came from research involving **21** ..... . It was also discovered that humans produce oxytocin during **22** ..... . An experiment in 2005, in which participants were given either oxytocin or a **23** ..... , reinforced the belief that the hormone had a positive effect.

However, later research suggests that this is not always the case. A study at the University of Haifa where participants took part in a **24** ..... revealed the negative emotions which oxytocin can trigger. A study at the University of Antwerp showed people's lack of willingness to help **25** ..... while under the influence of oxytocin. Meanwhile, research at the University of Amsterdam revealed that people who have been given oxytocin consider **26** ..... that are familiar to them in their own country to have more positive associations than those from other cultures.

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

剑13T4P2

SAVING THE SOIL

More than a third of the Earth's top layer is at risk. Is there hope for our planet's most precious resource?

A More than a third of the world's soil is endangered, according to a recent UN report. If we don't slow the decline, all farmable soil could be gone in 60 years. Since soil grows 95% of our food, and sustains human life in other more surprising ways, that is a huge problem.

B Peter Groffman, from the Cary Institute of Ecosystem Studies in New York, points out that soil scientists have been warning about the degradation of the world's soil for decades. At the same time, our understanding of its importance to humans has grown. A single gram of healthy soil might contain 100 million bacteria, as well as other microorganisms such as viruses and fungi, living amid decomposing plants and various minerals.

That means soils do not just grow our food, but are the source of nearly all our existing antibiotics, and could be our best hope in the fight against antibiotic-resistant bacteria. Soil is also an ally against climate change: as microorganisms within soil digest dead animals and plants, they lock in their carbon content, holding three times the amount of carbon as does the entire atmosphere. Soils also store water, preventing flood damage: in the UK, damage to buildings, roads and bridges from floods caused by soil degradation costs £233 million every year.

C If the soil loses its ability to perform these functions, the human race could be in big trouble. The danger is not that the soil will disappear completely, but that the microorganisms that give it its special properties will be lost. And once this has happened, it may take the soil thousands of years to recover.

Agriculture is by far the biggest problem. In the wild, when plants grow they remove nutrients from the soil, but then when the plants die and decay these nutrients are returned directly to the soil. Humans tend not to return unused parts of harvested crops directly to the soil to enrich it, meaning that the soil gradually becomes less fertile. In the past we developed strategies to get around the problem, such as regularly varying the types of crops grown, or leaving fields uncultivated for a season.

D But these practices became inconvenient as populations grew and agriculture had to be run on more commercial lines. A solution came in the early 20th century with the Haber-Bosch process for manufacturing ammonium nitrate. Farmers have been putting this synthetic fertiliser on their fields ever since.

But over the past few decades, it has become clear this wasn't such a bright idea. Chemical fertilisers can release polluting nitrous oxide into the atmosphere and excess is often washed away with the rain, releasing nitrogen into rivers. More recently, we have found that indiscriminate use of fertilisers hurts the soil itself, turning it acidic and salty, and degrading the soil they are supposed to nourish.

E One of the people looking for a solution to this problem is Pius Floris, who started out running a tree-care business in the Netherlands, and now advises some of the world's top soil scientists. He came to realise that the best way to ensure his trees flourished was to take care of the soil, and has developed a cocktail of beneficial bacteria, fungi and humus* to do this. Researchers at the University of Valladolid in Spain recently used this cocktail on soils destroyed by years of fertiliser overuse. When they applied Floris's mix to the desert-like test plots, a good crop of plants emerged that were not just healthy at the surface, but had roots strong enough to pierce dirt as hard as rock. The few plants that grew in the control plots, fed with traditional fertilisers, were small and weak.

F However, measures like this are not enough to solve the global soil degradation problem. To assess our options on a global scale we first need an accurate picture of what types of soil are out there, and the problems they face. That's not easy. For one thing, there is no agreed international system for classifying soil. In an attempt to unify the different approaches, the UN has created the Global Soil Map project. Researchers from nine countries are working together to create a map linked to a database that can be fed measurements from field surveys, drone surveys, satellite imagery, lab analyses and so on to provide real-time data on the state of the soil. Within the next four years, they aim to have mapped soils worldwide to a depth of 100 metres, with the results freely accessible to all.

G But this is only a first step. We need ways of presenting the problem that bring it home to governments and the wider public, says Pamela Chasek at the International Institute for Sustainable Development, in Winnipeg, Canada. 'Most scientists don't speak language that policy-makers can understand, and vice versa.' Chasek and her colleagues have proposed a goal of 'zero net land degradation'. Like the idea of carbon neutrality, it is an easily understood target that can help shape expectations and encourage action.

For soils on the brink, that may be too late. Several researchers are agitating for the immediate creation of protected zones for endangered soils. One difficulty here is defining what these areas should conserve: areas where the greatest soil diversity is present? Or areas of unspoilt soils that could act as a future benchmark of quality?

Whatever we do, if we want our soils to survive, we need to take action now.

Questions 14–17

Complete the summary below.

*Write **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 14–17 on your answer sheet.

Why soil degradation could be a disaster for humans

Healthy soil contains a large variety of bacteria and other microorganisms, as well as plant remains and **14** ..... . It provides us with food and also with antibiotics, and its function in storing **15** ..... has a significant effect on the climate. In addition, it prevents damage to property and infrastructure because it holds **16** ..... .

If these microorganisms are lost, soil may lose its special properties. The main factor contributing to soil degradation is the **17** ..... carried out by humans.

Questions 18–21

*Complete each sentence with the correct ending, **A–F**, below.*

*Write the correct letter, **A–F**, in boxes 18–21 on your answer sheet.*

18 Nutrients contained in the unused parts of harvested crops

19 Synthetic fertilisers produced with the Haber-Bosch process

20 Addition of a mixture developed by Pius Floris to the soil

21 The idea of zero net soil degradation

A	may improve the number and quality of plants growing there.
B	may contain data from up to nine countries.
C	may not be put back into the soil.
D	may help governments to be more aware of soil-related issues.
E	may cause damage to different aspects of the environment.
F	may be better for use at a global level.

Questions 22–26

Reading Passage 2 has seven paragraphs, ***A–G****.*

Which section contains the following information?

Write the correct letter, ***A–G****, in boxes 22–26 on your answer sheet.*

NB *You may use any letter more than once.*

22 a reference to one person's motivation for a soil-improvement project

23 an explanation of how soil stayed healthy before the development of farming

24 examples of different ways of collecting information on soil degradation

25 a suggestion for a way of keeping some types of soil safe in the near future

26 a reason why it is difficult to provide an overview of soil degradation

Passage2
组合训练2

剑14T2P2

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

Back to the future of skyscraper design

Answers to the problem of excessive electricity use by skyscrapers and large public buildings can be found in ingenious but forgotten architectural designs of the 19th and early-20th centuries

A *The Recovery of Natural Environments in Architecture* by Professor Alan Short is the culmination of 30 years of research and award-winning green building design by Short and colleagues in Architecture, Engineering, Applied Maths and Earth Sciences at the University of Cambridge.

'The crisis in building design is already here,' said Short. 'Policy makers think you can solve energy and building problems with gadgets. You can't. As global temperatures continue to rise, we are going to continue to squander more and more energy on keeping our buildings mechanically cool until we have run out of capacity.'

B Short is calling for a sweeping reinvention of how skyscrapers and major public buildings are designed – to end the reliance on sealed buildings which exist solely via the 'life support' system of vast air conditioning units.

Instead, he shows it is entirely possible to accommodate natural ventilation and cooling in large buildings by looking into the past, before the widespread introduction of air conditioning systems, which were 'relentlessly and aggressively marketed' by their inventors.

C Short points out that to make most contemporary buildings habitable, they have to be sealed and air conditioned. The energy use and carbon emissions this generates is spectacular and largely unnecessary. Buildings in the West account for 40–50% of electricity usage, generating substantial carbon emissions, and the rest of the world is catching up at a frightening rate. Short regards glass, steel and air-conditioned skyscrapers as symbols of status, rather than practical ways of meeting our requirements.

D Short's book highlights a developing and sophisticated art and science of ventilating buildings through the 19th and earlier-20th centuries, including the design of ingeniously ventilated hospitals. Of particular interest were those built to the designs of John Shaw Billings, including the first Johns Hopkins Hospital in the US city of Baltimore (1873–1889).

'We spent three years digitally modelling Billings' final designs,' says Short. 'We put pathogens* in the airstreams, modelled for someone with tuberculosis (TB) coughing in the wards and we found the ventilation systems in the room would have kept other patients safe from harm.

E 'We discovered that 19th-century hospital wards could generate up to 24 air changes an hour – that's similar to the performance of a modern-day, computer-controlled operating theatre. We believe you could build wards based on these principles now.

Single rooms are not appropriate for all patients. Communal wards appropriate for certain patients – older people with dementia, for example – would work just as well in today's hospitals, at a fraction of the energy cost.'

Professor Short contends the mindset and skill-sets behind these designs have been completely lost, lamenting the disappearance of expertly designed theatres, opera houses, and other buildings where up to half the volume of the building was given over to ensuring everyone got fresh air.

F Much of the ingenuity present in 19th-century hospital and building design was driven by a panicked public clamouring for buildings that could protect against what was thought to be the lethal threat of miasmas – toxic air that spread disease. Miasmas were feared as the principal agents of disease and epidemics for centuries, and were used to explain the spread of infection from the Middle Ages right through to the cholera outbreaks in London and Paris during the 1850s. Foul air, rather than germs, was believed to be the main driver of 'hospital fever', leading to disease and frequent death. The prosperous steered clear of hospitals.

While miasma theory has been long since disproved, Short has for the last 30 years advocated a return to some of the building design principles produced in its wake.

G Today, huge amounts of a building's space and construction cost are given over to air conditioning. 'But I have designed and built a series of buildings over the past three decades which have tried to reinvent some of these ideas and then measure what happens.

'To go forward into our new low-energy, low-carbon future, we would be well advised to look back at design before our high-energy, high-carbon present appeared. What is surprising is what a rich legacy we have abandoned.'

H Successful examples of Short's approach include the Queen's Building at De Montfort University in Leicester. Containing as many as 2,000 staff and students, the entire building is naturally ventilated, passively cooled and naturally lit, including the two largest auditoria, each seating more than 150 people. The award-winning building uses a fraction of the electricity of comparable buildings in the UK.

Short contends that glass skyscrapers in London and around the world will become a liability over the next 20 or 30 years if climate modelling predictions and energy price rises come to pass as expected.

I He is convinced that sufficiently cooled skyscrapers using the natural environment can be produced in almost any climate. He and his team have worked on hybrid buildings in the harsh climates of Beijing and Chicago – built with natural ventilation assisted by back-up air conditioning – which, surprisingly perhaps, can be switched off more than half the time on milder days and during the spring and autumn.

Short looks at how we might reimagine the cities, offices and homes of the future. Maybe it's time we changed our outlook.

Questions 14–18

Reading Passage 2 has nine sections, **A–I**.

Which section contains the following information?

*Write the correct letter, **A–I**, in boxes 14–18 on your answer sheet.*

14 why some people avoided hospitals in the 19th century

15 a suggestion that the popularity of tall buildings is linked to prestige

16 a comparison between the circulation of air in a 19th-century building and modern standards

17 how Short tested the circulation of air in a 19th-century building

18 an implication that advertising led to the large increase in the use of air conditioning

Questions 19–26

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 19–26 on your answer sheet.

Ventilation in 19th-century hospital wards

Professor Alan Short examined the work of John Shaw Billings, who influenced the architectural **19** ..... of hospitals to ensure they had good ventilation. He calculated that **20** ..... in the air coming from patients suffering from **21** ..... would not have harmed other patients. He also found that the air in **22** ..... in hospitals could change as often as in a modern operating theatre. He suggests that energy use could be reduced by locating more patients in **23** ..... areas.

A major reason for improving ventilation in 19th-century hospitals was the demand from the **24** ..... for protection against bad air, known as **25** ..... . These were blamed for the spread of disease for hundreds of years, including epidemics of **26** ..... in London and Paris in the middle of the 19th century.

剑14T3P2

Saving bugs to find new drugs

Zoologist Ross Piper looks at the potential of insects in pharmaceutical research

A More drugs than you might think are derived from, or inspired by, compounds found in living things. Looking to nature for the soothing and curing of our ailments is nothing new – we have been doing it for tens of thousands of years. You only have to look at other primates – such as the capuchin monkeys who rub themselves with toxin-oozing millipedes to deter mosquitoes, or the chimpanzees who use noxious forest plants to rid themselves of intestinal parasites – to realise that our ancient ancestors too probably had a basic grasp of medicine.

B Pharmaceutical science and chemistry built on these ancient foundations and perfected the extraction, characterisation, modification and testing of these natural products. Then, for a while, modern pharmaceutical science moved its focus away from nature and into the laboratory, designing chemical compounds from scratch. The main cause of this shift is that although there are plenty of promising chemical compounds in nature, finding them is far from easy. Securing sufficient numbers of the organism in question, isolating and characterising the compounds of interest, and producing large quantities of these compounds are all significant hurdles.

C Laboratory-based drug discovery has achieved varying levels of success, something which has now prompted the development of new approaches focusing once again on natural products. With the ability to mine genomes for useful compounds, it is now evident that we have barely scratched the surface of nature's molecular diversity. This realisation, together with several looming health crises, such as antibiotic resistance, has put bioprospecting – the search for useful compounds in nature – firmly back on the map.

D Insects are the undisputed masters of the terrestrial domain, where they occupy every possible niche. Consequently, they have a bewildering array of interactions with other organisms, something which has driven the evolution of an enormous range of very interesting compounds for defensive and offensive purposes. Their remarkable diversity exceeds that of every other group of animals on the planet combined. Yet even though insects are far and away the most diverse animals in existence, their potential as sources of therapeutic compounds is yet to be realised.

E From the tiny proportion of insects that have been investigated, several promising compounds have been identified. For example, alloferon, an antimicrobial compound produced by blow fly larvae, is used as an antiviral and antitumor agent in South Korea and Russia. The larvae of a few other insect species are being investigated for the potent antimicrobial compounds they produce. Meanwhile, a compound from the venom of the wasp *Polybia paulista* has potential in cancer treatment.

F Why is it that insects have received relatively little attention in bioprospecting? Firstly, there are so many insects that, without some manner of targeted approach, investigating this huge variety of species is a daunting task. Secondly, insects are generally very small, and the glands inside them that secrete potentially useful compounds are smaller still. This can make it difficult to obtain sufficient quantities of the compound for subsequent testing. Thirdly, although we consider insects to be everywhere, the reality of this ubiquity is vast numbers of a few extremely common species. Many insect species are infrequently encountered and very difficult to rear in captivity, which, again, can leave us with insufficient material to work with.

G My colleagues and I at Aberystwyth University in the UK have developed an approach in which we use our knowledge of ecology as a guide to target our efforts. The creatures that particularly interest us are the many insects that secrete powerful poison for subduing prey and keeping it fresh for future consumption. There are even more insects that are masters of exploiting filthy habitats, such as faeces and carcasses, where they are regularly challenged by thousands of micro-organisms. These insects have many antimicrobial compounds for dealing with pathogenic bacteria and fungi, suggesting that there is certainly potential to find many compounds that can serve as or inspire new antibiotics.

H Although natural history knowledge points us in the right direction, it doesn't solve the problems associated with obtaining useful compounds from insects. Fortunately, it is now possible to snip out the stretches of the insect's DNA that carry the codes for the interesting compounds and insert them into cell lines that allow larger quantities to be produced. And although the road from isolating and characterising compounds with desirable qualities to developing a commercial product is very long and full of pitfalls, the variety of successful animal-derived pharmaceuticals on the market demonstrates there is a precedent here that is worth exploring.

I With every bit of wilderness that disappears, we deprive ourselves of potential medicines. As much as I'd love to help develop a groundbreaking insect-derived medicine, my main motivation for looking at insects in this way is conservation. I sincerely believe that all species, however small and seemingly insignificant, have a right to exist for their own sake. If we can shine a light on the darker recesses of nature's medicine cabinet, exploring the useful chemistry of the most diverse animals on the planet, I believe we can make people think differently about the value of nature.

Questions 14–20

Reading Passage 2 has nine paragraphs, **A–I**.

Which paragraph contains the following information?

*Write the correct letter, **A–I**, in boxes 14–20 on your answer sheet.*

14 mention of factors driving a renewed interest in natural medicinal compounds

15 how recent technological advances have made insect research easier

16 examples of animals which use medicinal substances from nature

17 reasons why it is challenging to use insects in drug research

18 reference to how interest in drug research may benefit wildlife

19 a reason why nature-based medicines fell out of favour for a period

20 an example of an insect-derived medicine in use at the moment

Questions 21 and 22

*Choose **TWO** letters, **A–E**.*

Write the correct letters in boxes 21 and 22 on your answer sheet.

Which **TWO** of the following make insects interesting for drug research?

A the huge number of individual insects in the world
B the variety of substances insects have developed to protect themselves
C the potential to extract and make use of insects' genetic codes
D the similarities between different species of insect
E the manageable size of most insects

Questions 23–26

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

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

Research at Aberystwyth University

Ross Piper and fellow zoologists at Aberystwyth University are using their expertise in **23** ..... when undertaking bioprospecting with insects. They are especially interested in the compounds that insects produce to overpower and preserve their **24** ..... . They are also interested in compounds which insects use to protect themselves from pathogenic bacteria and fungi found in their **25** ..... . Piper hopes that these substances will be useful in the development of drugs such as **26** ..... .

Why zoos are good

Scientist David Hone makes the case for zoos

A In my view, it is perfectly possible for many species of animals living in zoos or wildlife parks to have a quality of life as high as, or higher than, in the wild. Animals in good zoos get a varied and high-quality diet with all the supplements required, and any illnesses they might have will be treated. Their movement might be somewhat restricted, but they have a safe environment in which to live, and they are spared bullying and social ostracism by others of their kind. They do not suffer from the threat or stress of predators, or the irritation and pain of parasites or injuries. The average captive animal will have a greater life expectancy compared with its wild counterpart, and will not die of drought, of starvation or in the jaws of a predator. A lot of very nasty things happen to truly 'wild' animals that simply don't happen in good zoos, and to view a life that is 'free' as one that is automatically 'good' is, I think, an error. Furthermore, zoos serve several key purposes.

B Firstly, zoos aid conservation. Colossal numbers of species are becoming extinct across the world, and many more are increasingly threatened and therefore risk extinction. Moreover, some of these collapses have been sudden, dramatic and unexpected, or were simply discovered very late in the day. A species protected in captivity can be bred up to provide a reservoir population against a population crash or extinction in the wild. A good number of species only exist in captivity, with many of these living in zoos. Still more only exist in the wild because they have been reintroduced from zoos, or have wild populations that have been boosted by captive bred animals. Without these efforts there would be fewer species alive today. Although reintroduction successes are few and far between, the numbers are increasing, and the very fact that species have been saved or reintroduced as a result of captive breeding proves the value of such initiatives.

C Zoos also provide education. Many children and adults, especially those in cities, will never see a wild animal beyond a fox or pigeon. While it is true that television documentaries are becoming ever more detailed and impressive, and many natural history specimens are on display in museums, there really is nothing to compare with seeing a living creature in the flesh, hearing it, smelling it, watching what it does and having the time to absorb details. That alone will bring a greater understanding and perspective to many, and hopefully give them a greater appreciation for wildlife, conservation efforts and how they can contribute.

D In addition to this, there is also the education that can take place in zoos through signs, talks and presentations which directly communicate information to visitors about the animals they are seeing and their place in the world. This was an area where zoos used to be lacking, but they are now increasingly sophisticated in their communication and outreach work. Many zoos also work directly to educate conservation workers in other countries, or send their animal keepers abroad to contribute their knowledge and skills to those working in zoos and reserves, thereby helping to improve conditions and reintroductions all over the world.

E Zoos also play a key role in research. If we are to save wild species and restore and repair ecosystems we need to know about how key species live, act and react. Being able to undertake research on animals in zoos where there is less risk and fewer variables means real changes can be effected on wild populations. Finding out about, for example, the oestrus cycle of an animal or its breeding rate helps us manage wild populations. Procedures such as capturing and moving at-risk or dangerous individuals are bolstered by knowledge gained in zoos about doses for anaesthetics, and by experience in handling and transporting animals. This can make a real difference to conservation efforts and to the reduction of human–animal conflicts, and can provide a knowledge base for helping with the increasing threats of habitat destruction and other problems.

F In conclusion, considering the many ongoing global threats to the environment, it is hard for me to see zoos as anything other than essential to the long-term survival of numerous species. They are vital not just in terms of protecting animals, but as a means of learning about them to aid those still in the wild, as well as educating and informing the general population about these animals and their world so that they can assist or at least accept the need to be more environmentally conscious. Without them, the world would be, and would increasingly become, a much poorer place.

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.*

14 a reference to how quickly animal species can die out

15 reasons why it is preferable to study animals in captivity rather than in the wild

16 mention of two ways of learning about animals other than visiting them in zoos

17 reasons why animals in zoos may be healthier than those in the wild

Questions 18–22

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

In boxes 18–22 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*

18 An animal is likely to live longer in a zoo than in the wild.

19 There are some species in zoos which can no longer be found in the wild.

20 Improvements in the quality of TV wildlife documentaries have resulted in increased numbers of zoo visitors.

21 Zoos have always excelled at transmitting information about animals to the public.

22 Studying animals in zoos is less stressful for the animals than studying them in the wild.

Questions 23 and 24

*Choose **TWO** letters, **A–E**.*

Write the correct letters in boxes 23 and 24 on your answer sheet.

Which **TWO** of the following are stated about zoo staff in the text?

A Some take part in television documentaries about animals.
B Some travel to overseas locations to join teams in zoos.
C Some get experience with species in the wild before taking up zoo jobs.
D Some teach people who are involved with conservation projects.
E Some specialise in caring for species which are under threat.

Questions 25 and 26

*Choose **TWO** letters, **A–E**.*

Write the correct letters in boxes 25 and 26 on your answer sheet.

Which **TWO** of these beliefs about zoos does the writer mention in the text?

A They can help children overcome their fears of wild animals.
B They can increase public awareness of environmental issues.
C They can provide employment for a range of professional people.
D They can generate income to support wildlife conservation projects.
E They can raise animals which can later be released into the wild.

Passage3
组合训练1

Artificial artists

Can computers really create works of art?

The Painting Fool is one of a growing number of computer programs which, so their makers claim, possess creative talents. Classical music by an artificial composer has had audiences enraptured, and even tricked them into believing a human was behind the score. Artworks painted by a robot have sold for thousands of dollars and been hung in prestigious galleries. And software has been built which creates art that could not have been imagined by the programmer.

Human beings are the only species to perform sophisticated creative acts regularly. If we can break this process down into computer code, where does that leave human creativity? 'This is a question at the very core of humanity,' says Geraint Wiggins, a computational creativity researcher at Goldsmiths, University of London. 'It scares a lot of people. They are worried that it is taking something special away from what it means to be human.'

To some extent, we are all familiar with computerised art. The question is: where does the work of the artist stop and the creativity of the computer begin? Consider one of the oldest machine artists, Aaron, a robot that has had paintings exhibited in London's Tate Modern and the San Francisco Museum of Modern Art. Aaron can pick up a paintbrush and paint on canvas on its own. Impressive perhaps, but it is still little more than a tool to realise the programmer's own creative ideas.

Simon Colton, the designer of the Painting Fool, is keen to make sure his creation doesn't attract the same criticism. Unlike earlier 'artists' such as Aaron, the Painting Fool only needs minimal direction and can come up with its own concepts by going online for material. The software runs its own web searches and trawls through social media sites. It is now beginning to display a kind of imagination too, creating pictures from scratch. One of its original works is a series of fuzzy landscapes, depicting trees and sky. While some might say they have a mechanical look, Colton argues that such reactions arise from people's double standards towards software-produced and human-produced art. After all, he says, consider that the Painting Fool painted the landscapes without referring to a photo. 'If a child painted a new scene from its head, you'd say it has a certain level of imagination,' he points out. 'The same should be true of a machine.' Software bugs can also lead to unexpected results. Some of the Painting Fool's paintings of a chair came out in black and white, thanks to a technical glitch. This gives the work an eerie, ghostlike quality. Human artists like the renowned Ellsworth Kelly are lauded for limiting their colour palette – so why should computers be any different?

Researchers like Colton don't believe it is right to measure machine creativity directly to that of humans who 'have had millennia to develop our skills'. Others, though, are fascinated by the prospect that a computer might create something as original and subtle as our best artists. So far, only one has come close. Composer David Cope invented a program called Experiments in Musical Intelligence, or EMI. Not only did EMI create compositions in Cope's style, but also that of the most revered classical composers, including Bach, Chopin and Mozart. Audiences were moved to tears, and EMI even fooled classical music experts into thinking they were hearing genuine Bach. Not everyone was impressed however. Some, such as Wiggins, have blasted Cope's work as pseudoscience, and condemned him for his deliberately vague explanation of how the software worked. Meanwhile, Douglas Hofstadter of Indiana University said EMI created replicas which still rely completely on the original artist's creative impulses. When audiences found out the truth they were often outraged with Cope, and one music lover even tried to punch him. Amid such controversy, Cope destroyed EMI's vital databases.

But why did so many people love the music, yet recoil when they discovered how it was composed? A study by computer scientist David Moffat of Glasgow Caledonian University provides a clue. He asked both expert musicians and non-experts to assess six compositions. The participants weren't told beforehand whether the tunes were composed by humans or computers, but were asked to guess, and then rate how much they liked each one. People who thought the composer was a computer tended to dislike the piece more than those who believed it was human. This was true even among the experts, who might have been expected to be more objective in their analyses.

Where does this prejudice come from? Paul Bloom of Yale University has a suggestion: he reckons part of the pleasure we get from art stems from the creative process behind the work. This can give it an 'irresistible essence', says Bloom. Meanwhile, experiments by Justin Kruger of New York University have shown that people's enjoyment of an artwork increases if they think more time and effort was needed to create it. Similarly, Colton thinks that when people experience art, they wonder what the artist might have been thinking or what the artist is trying to tell them. It seems obvious, therefore, that with computers producing art, this speculation is cut short – there's nothing to explore. But as technology becomes increasingly complex, finding those greater depths in computer art could become possible. This is precisely why Colton asks the Painting Fool to tap into online social networks for its inspiration: hopefully this way it will choose themes that will already be meaningful to us.

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 What is the writer suggesting about computer-produced works in the first paragraph?

A People's acceptance of them can vary considerably.
B A great deal of progress has already been attained in this field.
C They have had more success in some artistic genres than in others.
D The advances are not as significant as the public believes them to be.

28 According to Geraint Wiggins, why are many people worried by computer art?

A It is aesthetically inferior to human art.
B It may ultimately supersede human art.
C It undermines a fundamental human quality.
D It will lead to a deterioration in human ability.

29 What is a key difference between Aaron and the Painting Fool?

A its programmer's background
B public response to its work
C the source of its subject matter
D the technical standard of its output

30 What point does Simon Colton make in the fourth paragraph?

A Software-produced art is often dismissed as childish and simplistic.
B The same concepts of creativity should not be applied to all forms of art.
C It is unreasonable to expect a machine to be as imaginative as a human being.
D People tend to judge computer art and human art according to different criteria.

31 The writer refers to the paintings of a chair as an example of computer art which

A achieves a particularly striking effect.
B exhibits a certain level of genuine artistic skill.
C closely resembles that of a well-known artist.
D highlights the technical limitations of the software.

Questions 32–37

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

Write the correct letter, ***A–G****, in boxes 32–37 on your answer sheet.*

32 Simon Colton says it is important to consider the long-term view when

33 David Cope's EMI software surprised people by

34 Geraint Wiggins criticised Cope for not

35 Douglas Hofstadter claimed that EMI was

36 Audiences who had listened to EMI's music became angry after

37 The participants in David Moffat's study had to assess music without

List of Ideas

A generating work that was virtually indistinguishable from that of humans.

B knowing whether it was the work of humans or software.

C producing work entirely dependent on the imagination of its creator.

D comparing the artistic achievements of humans and computers.

E revealing the technical details of his program.

F persuading the public to appreciate computer art.

G discovering that it was the product of a computer program.

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

剑13T2P3

MAKING THE MOST OF TRENDS

Experts from Harvard Business School give advice to managers

Most managers can identify the major trends of the day. But in the course of conducting research in a number of industries and working directly with companies, we have discovered that managers often fail to recognize the less obvious but profound ways these trends are influencing consumers' aspirations, attitudes, and behaviors. This is especially true of trends that managers view as peripheral to their core markets.

Many ignore trends in their innovation strategies or adopt a wait-and-see approach and let competitors take the lead. At a minimum, such responses mean missed profit opportunities. At the extreme, they can jeopardize a company by ceding to rivals the opportunity to transform the industry. The purpose of this article is twofold: to spur managers to think more expansively about how trends could engender new value propositions in their core markets, and to provide some high-level advice on how to make market research and product development personnel more adept at analyzing and exploiting trends.

One strategy, known as 'infuse and augment', is to design a product or service that retains most of the attributes and functions of existing products in the category but adds others that address the needs and desires unleashed by a major trend. A case in point is the Poppy range of handbags, which the firm Coach created in response to the economic downturn of 2008. The Coach brand had been a symbol of opulence and luxury for nearly 70 years, and the most obvious reaction to the downturn would have been to lower prices. However, that would have risked cheapening the brand's image. Instead, they initiated a consumer-research project which revealed that customers were eager to lift themselves and the country out of tough times. Using these insights, Coach launched the lower-priced Poppy handbags, which were in vibrant colors, and looked more youthful and playful than conventional Coach products. Creating the sub-brand allowed Coach to avert an across-the-board price cut. In contrast to the many companies that responded to the recession by cutting prices, Coach saw the new consumer mindset as an opportunity for innovation and renewal.

A further example of this strategy was supermarket Tesco's response to consumers' growing concerns about the environment. With that in mind, Tesco, one of the world's top five retailers, introduced its Greener Living program, which demonstrates the company's commitment to protecting the environment by involving consumers in ways that produce tangible results. For example, Tesco customers can accumulate points for such activities as reusing bags, recycling cans and printer cartridges, and buying home-insulation materials. Like points earned on regular purchases, these green points can be redeemed for cash. Tesco has not abandoned its traditional retail offerings but augmented its business with these innovations, thereby infusing its value proposition with a green streak.

A more radical strategy is 'combine and transcend'. This entails combining aspects of the product's existing value proposition with attributes addressing changes arising from a trend, to create a novel experience – one that may land the company in an entirely new market space. At first glance, spending resources to incorporate elements of a seemingly irrelevant trend into one's core offerings sounds like it's hardly worthwhile. But consider Nike's move to integrate the digital revolution into its reputation for high-performance athletic footwear. In 2006, they teamed up with technology company Apple to launch Nike+, a digital sports kit comprising a sensor that attaches to the running shoe and a wireless receiver that connects to the user's iPod. By combining Nike's original value proposition for amateur athletes with one for digital consumers, the Nike+ sports kit and web interface moved the company from a focus on athletic apparel to a new plane of engagement with its customers.

A third approach, known as 'counteract and reaffirm', involves developing products or services that stress the values traditionally associated with the category in ways that allow consumers to oppose – or at least temporarily escape from – the aspects of trends they view as undesirable. A product that accomplished this is the ME2, a video game created by Canada's iToys. By reaffirming the toy category's association with physical play, the ME2 counteracted some of the widely perceived negative impacts of digital gaming devices. Like other handheld games, the device featured a host of exciting interactive games, a full-color LCD screen, and advanced 3D graphics. What set it apart was that it incorporated the traditional physical component of children's play: it contained a pedometer, which tracked and awarded points for physical activity (walking, running, biking, skateboarding, climbing stairs). The child could use the points to enhance various virtual skills needed for the video game. The ME2, introduced in mid-2008, catered to kids' huge desire to play video games while countering the negatives, such as associations with lack of exercise and obesity.

Once you have gained perspective on how trend-related changes in consumer opinions and behaviors impact on your category, you can determine which of our three innovation strategies to pursue. When your category's basic value proposition continues to be meaningful for consumers influenced by the trend, the infuse-and-augment strategy will allow you to reinvigorate the category. If analysis reveals an increasing disparity between your category and consumers' new focus, your innovations need to transcend the category to integrate the two worlds. Finally, if aspects of the category clash with undesired outcomes of a trend, such as associations with unhealthy lifestyles, there is an opportunity to counteract those changes by reaffirming the core values of your category.

Trends – technological, economic, environmental, social, or political – that affect how people perceive the world around them and shape what they expect from products and services present firms with unique opportunities for growth.

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 In the first paragraph, the writer says that most managers

A fail to spot the key consumer trends of the moment.
B make the mistake of focusing only on the principal consumer trends.
C misinterpret market research data relating to current consumer trends.
D are unaware of the significant impact that trends have on consumers' lives.

28 According to the third paragraph, Coach was anxious to

A follow what some of its competitors were doing.
B maintain its prices throughout its range.
C safeguard its reputation as a manufacturer of luxury goods.
D modify the entire look of its brand to suit the economic climate.

29 What point is made about Tesco's Greener Living programme?

A It did not require Tesco to modify its core business activities.
B It succeeded in attracting a more eco-conscious clientele.
C Its main aim was to raise consumers' awareness of environmental issues.
D It was not the first time that Tesco had implemented such an initiative.

30 What does the writer suggest about Nike's strategy?

A It was an extremely risky strategy at the time.
B It was a strategy that only a major company could afford to follow.
C It was the type of strategy that would not have been possible in the past.
D It was the kind of strategy which might appear to have few obvious benefits.

31 What was original about the ME2?

A It contained technology that had been developed for the sports industry.
B It appealed to young people who were keen to improve their physical fitness.
C It took advantage of a current trend for video games with colourful 3D graphics.
D It was a handheld game that addressed people's concerns about unhealthy lifestyles.

Questions 32–37

Look at the following statements (Questions 32–37) and the list of companies below.

*Match each statement with the correct company, **A**, **B**, **C** or **D**.*

*Write the correct letter, **A**, **B**, **C** or **D**, in boxes 32–37 on your answer sheet.*

NB *You may use any letter more than once.*

32 It turned the notion that its products could have harmful effects to its own advantage.

33 It extended its offering by collaborating with another manufacturer.

34 It implemented an incentive scheme to demonstrate its corporate social responsibility.

35 It discovered that customers had a positive attitude towards dealing with difficult circumstances.

36 It responded to a growing lifestyle trend in an unrelated product sector.

37 It successfully avoided having to charge its customers less for its core products.

List of companies

A	Coach
B	Tesco
C	Nike
D	iToys

Questions 38–40

*Complete each sentence with the correct ending, **A**, **B**, **C** or **D** below.*

*Write the correct letter, **A**, **B**, **C** or **D**, in boxes 38–40 on your answer sheet.*

38 If there are any trend-related changes impacting on your category, you should

39 If a current trend highlights a negative aspect of your category, you should

40 If the consumers' new focus has an increasing lack of connection with your offering, you should

A	employ a combination of strategies to maintain your consumer base.
B	identify the most appropriate innovation strategy to use.
C	emphasise your brand's traditional values with the counteract-and-affirm strategy.
D	use the combine-and-transcend strategy to integrate the two worlds.

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

剑13T3P3

Whatever happened to the Harappan Civilisation?

New research sheds light on the disappearance of an ancient society

A The Harappan Civilisation of ancient Pakistan and India flourished 5,000 years ago, but a thousand years later their cities were abandoned. The Harappan Civilisation was a sophisticated Bronze Age society who built 'megacities' and traded internationally in luxury craft products, and yet seemed to have left almost no depictions of themselves. But their lack of self-imagery – at a time when the Egyptians were carving and painting representations of themselves all over their temples – is only part of the mystery.

B 'There is plenty of archaeological evidence to tell us about the rise of the Harappan Civilisation, but relatively little about its fall,' explains archaeologist Dr Cameron Petrie of the University of Cambridge. 'As populations increased, cities were built that had great baths, craft workshops, palaces and halls laid out in distinct sectors. Houses were arranged in blocks, with wide main streets and narrow alleyways, and many had their own wells and drainage systems. It was very much a "thriving" civilisation.' Then around 2100 BC, a transformation began. Streets went uncleaned, buildings started to be abandoned, and ritual structures fell out of use. After their final demise, a millennium passed before really large-scale cities appeared once more in South Asia.

C Some have claimed that major glacier-fed rivers changed their course, dramatically affecting the water supply and agriculture; or that the cities could not cope with an increasing population, they exhausted their resource base, the trading economy broke down or they succumbed to invasion and conflict; and yet others that climate change caused an environmental change that affected food and water provision. 'It is unlikely that there was a single cause for the decline of the civilisation. But the fact is, until now, we have had little solid evidence from the area for most of the key elements,' said Petrie. 'A lot of the archaeological debate has really only been well-argued speculation.'

D A research team led by Petrie, together with Dr Ravindanath Singh of Banaras Hindu University in India, found early in their investigations that many of the archaeological sites were not where they were supposed to be, completely altering understanding of the way that this region was inhabited in the past. When they carried out a survey of how the larger area was settled in relation to sources of water, they found inaccuracies in the published geographic locations of ancient settlements ranging from several hundred metres to many kilometres. They realised

that any attempts to use the existing data were likely to be fundamentally flawed. Over the course of several seasons of fieldwork they carried out new surveys, finding an astonishing 198 settlement sites that were previously unknown.

E Now, research published by Dr Yama Dixit and Professor David Hodell, both from Cambridge's Department of Earth Sciences, has provided the first definitive evidence for climate change affecting the plains of north-western India, where hundreds of Harappan sites are known to have been situated. The researchers gathered shells of *Melanoides tuberculata* snails from the sediments of an ancient lake and used geochemical analysis as a means of tracing the climate history of the region. 'As today, the major source of water into the lake is likely to have been the summer monsoon,' says Dixit. 'But we have observed that there was an abrupt change about 4,100 years ago, when the amount of evaporation from the lake exceeded the rainfall – indicative of a drought.' Hodell adds: 'We estimate that the weakening of the Indian summer monsoon climate lasted about 200 years before recovering to the previous conditions, which we still see today.'

F It has long been thought that other great Bronze Age civilisations also declined at a similar time, with a global-scale climate event being seen as the cause. While it is possible that these local-scale processes were linked, the real archaeological interest lies in understanding the impact of these larger-scale events on different environments and different populations. 'Considering the vast area of the Harappan Civilisation with its variable weather systems,' explains Singh, 'it is essential that we obtain more climate data from areas close to the two great cities at Mohenjodaro and Harappa and also from the Indian Punjab.'

G Petrie and Singh's team is now examining archaeological records and trying to understand details of how people led their lives in the region five millennia ago. They are analysing grains cultivated at the time, and trying to work out whether they were grown under extreme conditions of water stress, and whether they were adjusting the combinations of crops they were growing for different weather systems. They are also looking at whether the types of pottery used, and other aspects of their material culture, were distinctive to specific regions or were more similar across larger areas. This gives us insight into the types of interactive networks that the population was involved in, and whether those changed.

H Petrie believes that archaeologists are in a unique position to investigate how past societies responded to environmental and climatic change. 'By investigating responses to environmental pressures and threats, we can learn from the past to engage with the public, and the relevant governmental and administrative bodies, to be more proactive in issues such as the management and administration of water supply, the balance of urban and rural development, and the importance of preserving cultural heritage in the future.'

Questions 27–31

Reading Passage 3 has eight paragraphs, **A–H**.

Which paragraph contains the following information?

*Write the correct letter, **A–H**, in boxes 27–31 on your answer sheet.*

NB *You may use any letter more than once.*

27 proposed explanations for the decline of the Harappan Civilisation

28 reference to a present-day application of some archaeological research findings

29 a difference between the Harappan Civilisation and another culture of the same period

30 a description of some features of Harappan urban design

31 reference to the discovery of errors made by previous archaeologists

Questions 32–36

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 32–36 on your answer sheet.

Looking at evidence of climate change

Yama Dixit and David Hodell have found the first definitive evidence of climate change affecting the plains of north-western India thousands of years ago. By collecting the **32** ..... of snails and analysing them, they discovered evidence of a change in water levels in a **33** ..... in the region. This occurred when there was less **34** ..... than evaporation, and suggests that there was an extended period of drought.

Petrie and Singh's team are using archaeological records to look at **35** ..... from five millennia ago, in order to know whether people had adapted their agricultural practices to changing climatic conditions. They are also examining objects including **36** ..... , so as to find out about links between inhabitants of different parts of the region and whether these changed over time.

Questions 37–40

Look at the following statements (Questions 37–40) and the list of researchers below.

Match each statement with the correct researcher, ***A****,* ***B****,* ***C*** *or* ***D****.*

Write the correct letter, ***A****,* ***B****,* ***C*** *or* ***D****, in boxes 37–40 on your answer sheet.*

NB *You may use any letter more than once.*

37 Finding further information about changes to environmental conditions in the region is vital.

38 Examining previous patterns of behaviour may have long-term benefits.

39 Rough calculations indicate the approximate length of a period of water shortage.

40 Information about the decline of the Harappan Civilisation has been lacking.

List of Researchers

A	Cameron Petrie
B	Ravindanath Singh
C	Yama Dixit
D	David Hodell

Passage3
组合训练2

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

剑14T1P3

Motivational factors and the hospitality industry

A critical ingredient in the success of hotels is developing and maintaining superior performance from their employees. How is that accomplished? What Human Resource Management (HRM) practices should organizations invest in to acquire and retain great employees?

Some hotels aim to provide superior working conditions for their employees. The idea originated from workplaces – usually in the non-service sector – that emphasized fun and enjoyment as part of work–life balance. By contrast, the service sector, and more specifically hotels, has traditionally not extended these practices to address basic employee needs, such as good working conditions.

Pfeffer (1994) emphasizes that in order to succeed in a global business environment, organizations must make investment in Human Resource Management (HRM) to allow them to acquire employees who possess better skills and capabilities than their competitors. This investment will be to their competitive advantage. Despite this recognition of the importance of employee development, the hospitality industry has historically been dominated by underdeveloped HR practices (Lucas, 2002).

Lucas also points out that 'the substance of HRM practices does not appear to be designed to foster constructive relations with employees or to represent a managerial approach that enables developing and drawing out the full potential of people, even though employees may be broadly satisfied with many aspects of their work' (Lucas, 2002). In addition, or maybe as a result, high employee turnover has been a recurring problem throughout the hospitality industry. Among the many cited reasons are low compensation, inadequate benefits, poor working conditions and compromised employee morale and attitudes (Maroudas et al., 2008).

Ng and Sorensen (2008) demonstrated that when managers provide recognition to employees, motivate employees to work together, and remove obstacles preventing effective performance, employees feel more obligated to stay with the company. This was succinctly summarized by Michel et al. (2013): '[P]roviding support to employees gives them the confidence to perform their jobs better and the motivation to stay with the organization.' Hospitality organizations can therefore enhance employee motivation and retention through the development and improvement of their working conditions. These conditions are inherently linked to the working environment.

While it seems likely that employees' reactions to their job characteristics could be affected by a predisposition to view their work environment negatively, no evidence exists to support this hypothesis (Spector et al., 2000). However, given the opportunity, many people will find

something to complain about in relation to their workplace (Poulston, 2009). There is a strong link between the perceptions of employees and particular factors of their work environment that are separate from the work itself, including company policies, salary and vacations.

Such conditions are particularly troubling for the luxury hotel market, where high-quality service, requiring a sophisticated approach to HRM, is recognized as a critical source of competitive advantage (Maroudas et al., 2008). In a real sense, the services of hotel employees represent their industry (Schneider and Bowen, 1993). This representation has commonly been limited to guest experiences. This suggests that there has been a dichotomy between the guest environment provided in luxury hotels and the working conditions of their employees.

It is therefore essential for hotel management to develop HRM practices that enable them to inspire and retain competent employees. This requires an understanding of what motivates employees at different levels of management and different stages of their careers (Enz and Siguaw, 2000). This implies that it is beneficial for hotel managers to understand what practices are most favorable to increase employee satisfaction and retention.

Herzberg (1966) proposes that people have two major types of needs, the first being extrinsic motivation factors relating to the context in which work is performed, rather than the work itself. These include working conditions and job security. When these factors are unfavorable, job dissatisfaction may result. Significantly, though, just fulfilling these needs does not result in satisfaction, but only in the reduction of dissatisfaction (Maroudas et al., 2008).

Employees also have intrinsic motivation needs or motivators, which include such factors as achievement and recognition. Unlike extrinsic factors, motivator factors may ideally result in job satisfaction (Maroudas et al., 2008). Herzberg's (1966) theory discusses the need for a 'balance' of these two types of needs.

The impact of fun as a motivating factor at work has also been explored. For example, Tews, Michel and Stafford (2013) conducted a study focusing on staff from a chain of themed restaurants in the United States. It was found that fun activities had a favorable impact on performance and manager support for fun had a favorable impact in reducing turnover. Their findings support the view that fun may indeed have a beneficial effect, but the framing of that fun must be carefully aligned with both organizational goals and employee characteristics. 'Managers must learn how to achieve the delicate balance of allowing employees the freedom to enjoy themselves at work while simultaneously maintaining high levels of performance' (Tews et al., 2013).

Deery (2008) has recommended several actions that can be adopted at the organizational level to retain good staff as well as assist in balancing work and family life. Those particularly appropriate to the hospitality industry include allowing adequate breaks during the working day, staff functions that involve families, and providing health and well-being opportunities.

Questions 27–31

Look at the following statements (Questions 27–31) and the list of researchers below.

Match each statement with the correct researcher, ***A–F****.*

Write the correct letter, ***A–F****, in boxes 27–31 on your answer sheet.*

NB *You may use any letter more than once.*

27 Hotel managers need to know what would encourage good staff to remain.

28 The actions of managers may make staff feel they shouldn't move to a different employer.

29 Little is done in the hospitality industry to help workers improve their skills.

30 Staff are less likely to change jobs if cooperation is encouraged.

31 Dissatisfaction with pay is not the only reason why hospitality workers change jobs.

List of Researchers

A	Pfeffer
B	Lucas
C	Maroudas et al.
D	Ng and Sorensen
E	Enz and Siguaw
F	Deery

Questions 32–35

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

In boxes 32–35 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 One reason for high staff turnover in the hospitality industry is poor morale.

33 Research has shown that staff have a tendency to dislike their workplace.

34 An improvement in working conditions and job security makes staff satisfied with their jobs.

35 Staff should be allowed to choose when they take breaks during the working day.

Questions 36–40

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 36–40 on your answer sheet.

Fun at work

Tews, Michel and Stafford carried out research on staff in an American chain of **36** ..... . They discovered that activities designed for staff to have fun improved their **37** ..... , and that management involvement led to lower staff **38** ..... . They also found that the activities needed to fit with both the company's **39** ..... and the **40** ..... of the staff. A balance was required between a degree of freedom and maintaining work standards.

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

剑14T3P3

The power of play

Virtually every child, the world over, plays. The drive to play is so intense that children will do so in any circumstances, for instance when they have no real toys, or when parents do not actively encourage the behavior. In the eyes of a young child, running, pretending, and building are fun. Researchers and educators know that these playful activities benefit the development of the whole child across social, cognitive, physical, and emotional domains. Indeed, play is such an instrumental component to healthy child development that the United Nations High Commission on Human Rights (1989) recognized play as a fundamental right of every child.

Yet, while experts continue to expound a powerful argument for the importance of play in children's lives, the actual time children spend playing continues to decrease. Today, children play eight hours less each week than their counterparts did two decades ago (Elkind 2008). Under pressure of rising academic standards, play is being replaced by test preparation in kindergartens and grade schools, and parents who aim to give their preschoolers a leg up are led to believe that flashcards and educational 'toys' are the path to success. Our society has created a false dichotomy between play and learning.

Through play, children learn to regulate their behavior, lay the foundations for later learning in science and mathematics, figure out the complex negotiations of social relationships, build a repertoire of creative problem-solving skills, and so much more. There is also an important role for adults in guiding children through playful learning opportunities.

Full consensus on a formal definition of play continues to elude the researchers and theorists who study it. Definitions range from discrete descriptions of various types of play such as physical, construction, language, or symbolic play (Miller & Almon 2009), to lists of broad criteria, based on observations and attitudes, that are meant to capture the essence of all play behaviors (e.g. Rubin et al. 1983).

A majority of the contemporary definitions of play focus on several key criteria. The founder of the National Institute for Play, Stuart Brown, has described play as 'anything that spontaneously is done for its own sake'. More specifically, he says it 'appears purposeless, produces pleasure and joy, [and] leads one to the next stage of mastery' (as quoted in Tippett 2008). Similarly, Miller and Almon (2009) say that play includes 'activities that are freely chosen and directed by children and arise from intrinsic motivation'. Often, play is defined along a continuum as more or less playful using the following set of behavioral and dispositional criteria (e.g. Rubin et al. 1983):

> Play is pleasurable: Children must enjoy the activity or it is not play. It is intrinsically motivated: Children engage in play simply for the satisfaction the behavior itself brings. It has no extrinsically motivated function or goal. Play is process oriented: When children

play, the means are more important than the ends. It is freely chosen, spontaneous and voluntary. If a child is pressured, they will likely not think of the activity as play. Play is actively engaged: Players must be physically and/or mentally involved in the activity. Play is non-literal. It involves make-believe.

According to this view, children's playful behaviors can range in degree from 0% to 100% playful. Rubin and colleagues did not assign greater weight to any one dimension in determining playfulness; however, other researchers have suggested that process orientation and a lack of obvious functional purpose may be the most important aspects of play (e.g. Pellegrini 2009).

From the perspective of a continuum, play can thus blend with other motives and attitudes that are less playful, such as work. Unlike play, work is typically not viewed as enjoyable and it is extrinsically motivated (i.e. it is goal oriented). Researcher Joan Goodman (1994) suggested that hybrid forms of work and play are not a detriment to learning; rather, they can provide optimal contexts for learning. For example, a child may be engaged in a difficult, goal-directed activity set up by their teacher, but they may still be actively engaged and intrinsically motivated. At this mid-point between play and work, the child's motivation, coupled with guidance from an adult, can create robust opportunities for playful learning.

Critically, recent research supports the idea that adults can facilitate children's learning while maintaining a playful approach in interactions known as 'guided play' (Fisher et al. 2011). The adult's role in play varies as a function of their educational goals and the child's developmental level (Hirsch-Pasek et al. 2009).

Guided play takes two forms. At a very basic level, adults can enrich the child's environment by providing objects or experiences that promote aspects of a curriculum. In the more direct form of guided play, parents or other adults can support children's play by joining in the fun as a co-player, raising thoughtful questions, commenting on children's discoveries, or encouraging further exploration or new facets to the child's activity. Although playful learning can be somewhat structured, it must also be child-centered (Nicolopolou et al. 2006). Play should stem from the child's own desire.

Both free and guided play are essential elements in a child-centered approach to playful learning. Intrinsically motivated free play provides the child with true autonomy, while guided play is an avenue through which parents and educators can provide more targeted learning experiences. In either case, play should be actively engaged, it should be predominantly child-directed, and it must be fun.

Questions 27–31

Look at the following statements (Questions 27–31) and the list of researchers below.

Match each statement with the correct researcher, ***A–G****.*

Write the correct letter, ***A–G****, in boxes 27–31 on your answer sheet.*

27 Play can be divided into a number of separate categories.

28 Adults' intended goals affect how they play with children.

29 Combining work with play may be the best way for children to learn.

30 Certain elements of play are more significant than others.

31 Activities can be classified on a scale of playfulness.

List of Researchers

A	Elkind
B	Miller & Almon
C	Rubin et al.
D	Stuart Brown
E	Pellegrini
F	Joan Goodman
G	Hirsch-Pasek et al.

Questions 32–36

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

In boxes 32–36 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 Children need toys in order to play.

33 It is a mistake to treat play and learning as separate types of activities.

34 Play helps children to develop their artistic talents.

35 Researchers have agreed on a definition of play.

36 Work and play differ in terms of whether or not they have a target.

Questions 37–40

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 37–40 on your answer sheet.

Guided play

In the simplest form of guided play, an adult contributes to the environment in which the child is playing. Alternatively, an adult can play with a child and develop the play, for instance by **37** ..... the child to investigate different aspects of their game. Adults can help children to learn through play, and may make the activity rather structured, but it should still be based on the child's **38** ..... to play.

Play without the intervention of adults gives children real **39** ..... ; with adults, play can be **40** ..... at particular goals. However, all forms of play should be an opportunity for children to have fun.

剑14T4P3

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

Chelsea Rochman, an ecologist at the University of California, Davis, has been trying to answer a dismal question: Is everything terrible, or are things just very, very bad?

Rochman is a member of the National Center for Ecological Analysis and Synthesis's marine-debris working group, a collection of scientists who study, among other things, the growing problem of marine debris, also known as ocean trash. Plenty of studies have sounded alarm bells about the state of marine debris; in a recent paper published in the journal *Ecology*, Rochman and her colleagues set out to determine how many of those perceived risks are real.

Often, Rochman says, scientists will end a paper by speculating about the broader impacts of what they've found. For example, a study could show that certain seabirds eat plastic bags, and go on to warn that whole bird populations are at risk of dying out. 'But the truth was that nobody had yet tested those perceived threats,' Rochman says. 'There wasn't a lot of information.'

Rochman and her colleagues examined more than a hundred papers on the impacts of marine debris that were published through 2013. Within each paper, they asked what threats scientists had studied – 366 perceived threats in all – and what they'd actually found.

In 83 percent of cases, the perceived dangers of ocean trash were proven true. In the remaining cases, the working group found the studies had weaknesses in design and content which affected the validity of their conclusions – they lacked a control group, for example, or used faulty statistics.

Strikingly, Rochman says, only one well-designed study failed to find the effect it was looking for, an investigation of mussels ingesting microscopic plastic bits. The plastic moved from the mussels' stomachs to their bloodstreams, scientists found, and stayed there for weeks – but didn't seem to stress out the shellfish.

While mussels may be fine eating trash, though, the analysis also gave a clearer picture of the many ways that ocean debris *is* bothersome.

Within the studies they looked at, most of the proven threats came from plastic debris, rather than other materials like metal or wood. Most of the dangers also involved large pieces of debris – animals getting entangled in trash, for example, or eating it and severely injuring themselves.

But a lot of ocean debris is 'microplastic', or pieces smaller than five millimeters. These may be ingredients used in cosmetics and toiletries, fibers shed by synthetic clothing in the wash, or eroded remnants of larger debris. Compared to the number of studies investigating large-scale debris, Rochman's group found little research on the effects of these tiny bits. 'There are a lot of open questions still for microplastic,' Rochman says, though she notes that more papers on the subject have been published since 2013, the cutoff point for the group's analysis.

There are also, she adds, a lot of open questions about the ways that ocean debris can lead to sea-creature death. Many studies have looked at how plastic affects an individual animal, or that animal's tissues or cells, rather than whole populations. And in the lab, scientists often use higher concentrations of plastic than what's really in the ocean. None of that tells us how many birds or fish or sea turtles could die from plastic pollution – or how deaths in one species could affect that animal's predators, or the rest of the ecosystem.

'We need to be asking more ecologically relevant questions,' Rochman says. Usually, scientists don't know exactly how disasters such as a tanker accidentally spilling its whole cargo of oil and polluting huge areas of the ocean will affect the environment until after they've happened. 'We don't ask the right questions early enough,' she says. But if ecologists can understand how the slow-moving effect of ocean trash is damaging ecosystems, they might be able to prevent things from getting worse.

Asking the right questions can help policy makers, and the public, figure out where to focus their attention. The problems that look or sound most dramatic may not be the best places to start. For example, the name of the 'Great Pacific Garbage Patch' – a collection of marine debris in the northern Pacific Ocean – might conjure up a vast, floating trash island. In reality though, much of the debris is tiny or below the surface; a person could sail through the area without seeing any trash at all. A Dutch group called 'The Ocean Cleanup' is currently working on plans to put mechanical devices in the Pacific Garbage Patch and similar areas to suck up plastic. But a recent paper used simulations to show that strategically positioning the cleanup devices closer to shore would more effectively reduce pollution over the long term.

'I think clearing up some of these misperceptions is really important,' Rochman says. Among scientists as well as in the media, she says, 'A lot of the images about strandings and entanglement and all of that cause the perception that plastic debris is killing everything in the ocean.' Interrogating the existing scientific literature can help ecologists figure out which problems really need addressing, and which ones they'd be better off – like the mussels – absorbing and ignoring.

Questions 27–33

Do the following statements agree with the information given in Reading Passage 3?

In boxes 27–33 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*

27 Rochman and her colleagues were the first people to research the problem of marine debris.

28 The creatures most in danger from ocean trash are certain seabirds.

29 The studies Rochman has reviewed have already proved that populations of some birds will soon become extinct.

30 Rochman analysed papers on the different kinds of danger caused by ocean trash.

31 Most of the research analysed by Rochman and her colleagues was badly designed.

32 One study examined by Rochman was expecting to find that mussels were harmed by eating plastic.

33 Some mussels choose to eat plastic in preference to their natural diet.

Questions 34–39

Complete the notes below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 34–39 on your answer sheet.

Findings related to marine debris

Studies of marine debris found the biggest threats were

- plastic (not metal or wood)
- bits of debris that were **34** ..... (harmful to animals)

There was little research into **35** ..... e.g. from synthetic fibres.

Drawbacks of the studies examined

- most of them focused on individual animals, not entire **36** .....
- the **37** ..... of plastic used in the lab did not always reflect those in the ocean
- there was insufficient information on
  - numbers of animals which could be affected
  - the impact of a reduction in numbers on the **38** ..... of that species
  - the impact on the ecosystem

Rochman says more information is needed on the possible impact of future **39** ..... (e.g. involving oil).

Question 40

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

Write the correct letter in box 40 on your answer sheet.

40 What would be the best title for this passage?

A Assessing the threat of marine debris
B Marine debris: who is to blame?
C A new solution to the problem of marine debris
D Marine debris: the need for international action