HACKERS PRACTICE

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

List of Headings

i. Opposing views on microfibres
ii. The need to expand the uses of microfibres
iii. The development of a new manmade material
iv. The future applications of a new product

1 Paragraph **A**

2 Paragraph **B**

A In the 20th century, a pioneer in Japan made a technological breakthrough in the production of soft, and extremely thin, synthetic fibres. These microfibres are finer than a silk thread, or one hundred times thinner than a human hair. Industrialist Miyoshi Okamoto first produced these fibres by squeezing two kinds of plastic threads, polyester and nylon, through a small pipe and heating them so that they weave together. Subsequently, microfibre technology took hold in the United States and Sweden, where refinements continued to be made, expanding its potential uses. Today, a wide variety of materials, including rayon and acrylic, have been used to produce microfibres, which are used in a tremendous number of practical applications, such as apparel, cleaning cloths, and vehicle upholstery.

B However, this synthetic technology has also become the source of tremendous controversy. On the one hand, many people have praised its virtues. For example, cleaning cloths weaved from these fibres can absorb up to seven times their weight in liquid, and most do not even require cleaning chemicals. Animal rights activists have even embraced it for limiting dependence on silk and wool. On the other hand, some people believe that microfibres are damaging our environment and should be banned. This is because the fine fibres are entering our water systems in great quantities. In fact, nearly 16 per cent of the plastic recovered from Lake Michigan was in the form of these petroleum-based plastic filaments.

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microfibre n. một loại sợi tổng hợp có cấu trúc nhỏ pioneer n. người tiên phong, người mở đường synthetic adj. tổng hợp, nhân tạo fine adj. nhỏ, mảnh weave v. đan vào take hold v. thâm nhập refinement n. sự cải tiến apparel n. trang phục upholstery n. thảm, bọc virtue n. điểm mạnh, ưu điểm embrace v. nắm lấy filament n. sợi nhỏ

LIVEWORKSHEETS

2 *Choose the correct heading for sections A and B from the list of headings below.*

List of Headings

i. Differing views on why ancient megafauna died out
ii. Why marsupials are so abundant in Australia
iii. How marsupials avoided extinction
iv. Why Australian mammals are unique

3 Section A

4 Section B

A A special feature of the mammals of Australia is that they all happen to be marsupials. A total of 159 Australian marsupial species are currently identified, an overwhelming number that is unique in the world. Another distinctive characteristic is that the mammalian megafauna of Australia tend to be smaller than other large mammals around the world. Commonly, the term *megafauna* refers to animals that weigh over 100 kilograms. But because Australian mammals are smaller, biologists have amended that threshold to include the Australian fauna that have a body mass of 45 kilos or greater.

B However, this diminutive size has not always been the case. The fossil record shows that megafauna in Australia once thrived, but the largest animals died out around 45,000 years ago. For years, the leading theory was that humans killed off the megafauna by overhunting. This hypothesis is accepted by professor Gifford Miller, who participated in a study of sediment core samples. His team focused on the presence of a fungus spore in the dung of large herbivores, and found that the spores were abundant before plummeting in the few thousand years leading up to the extinctions. Because the region also shows signs of human habitation by 50,000 years ago, the researchers inferred a causal relationship between human settlement and loss of megafauna.

More recent arguments blame climate change. Larisa DeSantis of Vanderbilt University claims that climate change led to the demise of megafauna. She and her team studied changing patterns in fossil teeth of large herbivores. By comparing the isotopes stored in the tooth enamel, they deduced the average temperature in the environment as the teeth were formed. She therefore could determine that their diets began to shift suddenly as climate changed prior to their extinction, suggesting that the much drier climate left them without appropriate food.

megafauna n. động vật khổng lồ marsupial n. (động vật học) loài thú có túi (kangaroo) threshold n. ngưỡng cửa, tiêu chuẩn fauna n. hệ động vật sediment core phr. lõi trầm tích fungus spore phr. bào tử nấm isotope n. chất đồng vị (biến thể của một nguyên tố) deduce v. suy ra

LIVEWORKSHEETS

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

List of Headings

i. Reasons for the rise in automobile sales
ii. Changes in automobile use in the United States
iii. The history of transportation in America
iv. Problems with car ownership
v. Seeking solutions for a transportation problem
vi. The impact of the automobile on America

5 Paragraph **A**

6 Paragraph **B**

7 Paragraph **C**

A During American history, perhaps nothing has had such an immense influence on the American lifestyle than the growth of personal car ownership. The automobile allowed Americans to easily travel across their immense nation and came to symbolise freedom. Car ownership became a rite of passage and as more and more Americans bought them, this caused a great shift in demographics in the country. With their increased mobility, Americans were able to move out of the cities and into the suburbs. For many, owning a suburban home with a yard and white picket fence came to symbolise the 'American Dream'.

B However, some do not see the automobile as a great symbol of freedom. In fact, they consider our reliance upon automobiles to be a burden. For most people, the ever-increasing prices of automobiles make them large investments. Further, fuel, insurance, and maintenance costs can make them even more unaffordable. While this may seem like an individual problem, it has had a major negative impact on society as a whole. When the previously mentioned suburban flight drained cities of middle and upper class citizens who could afford private transportation, the overall income levels of the cities dropped. This led to a decline in tax revenue and caused widespread urban decay.

C Interestingly, with more than 250 million cars currently on the roads of America, some believe that the country has reached what professor Phil Goodwin refers to as 'peak car'. This basically means that Americans are travelling less by car than they were before. One of the most commonly cited reasons for this is that people are moving back into the cities. With this reurbanisation, citizens have increased access to affordable public transportation. After comparing the costs of purchasing and maintaining a car to this public transportation, many Americans have begun to forego car ownership altogether.

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immense adj. to lớn symbolise v. tượng trưng cho rite of passage phr. dấu mốc quan trọng demographics n. nhân khẩu học mobility n. tính lưu động, sự di chuyển drain v. bòn rút, tiêu hao income level phr. mức thu nhập tax revenue phr. tiền thu thuế decay n. tình trạng suy tàn forego v. từ bỏ

LIVEWORKSHEETS

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

List of Headings

i. Current views about a style of business administration
ii. The need to develop new management styles
iii. Conditions required to succeed in business management
iv. The contribution of the Industrial Revolution to business
v. The development of a new scheme for workplace organisation
vi. An explanation of early labour movements

8 Paragraph **A**

9 Paragraph **B**

10 Paragraph **C**

A The Industrial Revolution caused a great shift in manufacturing from the late 18th to early 19th centuries. During this time, manufacturing moved from small home-based enterprises to large factories with many employees working with machines. Unfortunately, this change was not accompanied by a shift in management styles to maximise the new systems' efficiency. It was soon clear that mismanagement was resulting in financial losses that reduced the benefits of the increased output. Therefore, there was a pressing need for a new way of management.

B One of the first people to address this problem was American engineer Frederick Winslow Taylor, whose experiments brought about a new way to direct the workforce - 'scientific management'. This new management style sought to organise companies in a more efficient and rational way. Through his work, Taylor identified several problems with management styles of the time. The lack of knowledge of the entire production process was the most basic of these. By giving managers more knowledge, Taylor felt they could better understand all aspects of the business and identify the inefficiencies of some manufacturing processes. He also thought the basic role of supervisors was incorrect. He preferred a white-collar managerial style, in which supervisors controlled employees' roles, methods, and time. Further, he developed formulas to determine peak employee efficiency by studying tasks and calculating the most efficient means of doing them. This included determining the ideal size of a shovelful of dirt and the speed at which employees should move when pushing a wheelbarrow.

C Taylor's work led to a micromanaged hierarchy of power, but contemporary opinions do not suggest that this was a positive outcome. They claim that Taylor's management style leads to dehumanised and dissatisfied workers. And they also point out that it was exactly these feelings that led to workers movements in the early 1900s and brought about the first labour unions.

administration n. quản trị, quản lý scheme n. chiến lược, kế hoạch workforce n. lực lượng lao động rational adj. hợp lý supervisor n. quản lí, người giám sát white-collar adj. (thuộc) công chức, văn phòng wheelbarrow n. xe đẩy, xe kéo micromanaged adj. quản lí, kiểm soát từng chi tiết nhỏ hierarchy n. hệ thống cấp bậc dehumanise v. hạ thấp nhân phẩm

LIVEWORKSHEETS

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

List of Headings

i. Explanation of unique aspects of human language
ii. A description of less common language development theories
iii. Various theories based on one idea of language origin
iv. Difficulty in determining the birth of language
v. Discovery of physical evidence of early human communication
vi. Methods used to communicate with non-verbal species

11 Paragraph **A**
12 Paragraph **B**
13 Paragraph **C**

A Researchers have tried to understand the origin of human language for millennia. However, this job is quite difficult as there is little physical evidence to be studied. Because of this, linguists must use modern languages, theories of language acquisition, and studies of language systems to infer information about how, when, and why human linguistic communication began. Using these techniques, two main theories have been developed. These are continuity theory, which states that language evolved from previous forms of communication and appeared gradually over time, and discontinuity theory, according to which human language is a unique form of communication and probably appeared suddenly.

B Continuity theories are often divided into vocal, gestural, and social origin theories. Under vocal theory, language originated from primates mimicking natural sounds and using them to identify objects. Gestural theories, on the other hand, posit that as humans became bipedal they developed a form of sign language, but over time this was replaced by sounds. Although both theories have their merits, many sociolinguists believe that language developed as a survival mechanism along with societal complexity. By spreading information about other society members, early humans could form alliances and identify friends and foes.

C Conversely, the relatively fewer discontinuity theories point to a sudden development of language. This is most commonly seen to be the result of divine intervention. Many traditional stories explain how language was given to humans by gods or other supernatural deities. However, other proponents of a genetic discontinuity theory have come to believe that humans have an innate capacity for language. This, according to Noam Chomsky, means that language likely appeared instantly due to an evolutionary mutation. Many linguists originally dismissed this theory, but mounting evidence of the relationships between languages is increasing its popularity.

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physical adj. (thuộc) vật chất acquisition n. sự tiếp nhận, sự thu được vocal adj. bằng lời, được nói ra bằng lời primate n. động vật linh trưởng mimic v. bắt chước posit v. ấn định, cho rằng bipedal adj. (động vật) có hai chân alliance n. liên minh foe n. kẻ thù divine adj. thiêng liêng, thần thánh supernatural adj. siêu nhiên deity n. thần proponent n. người ủng hộ mutation n. sự biến đổi, đột biến dismiss v. gạt bỏ, phủ định mounting adj. tăng lên, thêm nhiều

LIVEWORKSHEETS

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

List of Headings

i. The effect of geographic location on an animal group
ii. The impact of climate change on the tuatara
iii. Evidence of the reproduction of a species
iv. The consequences of human intervention
v. Two keys that have led to the tuatara's survival
vi. Explanations for a low reproductive rate

14 Paragraph **A**

15 Paragraph **B**

16 Paragraph **C**

17 Paragraph **D**

A Recently, researchers from the University of Otago made a surprising discovery. They found the remains of eggs from the tuatara on New Zealand's South Island. This was important because tuatara had not reproduced on either of New Zealand's two main islands in over a century. The new discovery has conservationists excited because it shows that efforts to reintroduce breeding populations on the mainland have been successful.

B These small reptiles have a crest of triangular skin folds down their backs and can grow to approximately 75 centimetres. They are the only living species of the order Rhynchocephalia, which flourished over 200 million years ago. This may be attributable to living on remote islands with no large predators. These islands have large seabird populations that produce guano, which attracts the parasites that the tuataras eat. Both of these factors allowed them to flourish for hundreds of millions of years.

C Unfortunately, human activity greatly affected the tuatara populations. This is because non-native animals, such as rats, that ate the tuataras' eggs were introduced when humans arrived on the islands. This devastated the population due to their low reproductive rate. It is estimated that around 25 per cent of the Tuatara died due to these rats.

D Surprisingly, climate change also has a strong influence on the numbers of the tuatara. Tuatara gender, like that of some other reptiles, is dependent upon nest temperature. When nests are 21°C or below, the hatchlings will be female but even a 1° increase in temperature will produce males. Rising temperatures are now reducing the likelihood of new hatchlings being female. Because of this, researchers must find innovative conservation techniques to save this ancient species.

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tuatara n. thằn lằn tuatara **reproduce** v. sinh sản **breeding** n. sự sinh sản, sự nhân giống **crest** n. mào, bờm **skin fold** phr. nếp gấp, nếp nhăn ở da **order Rhynchocephalia** phr. bộ bò sát gai lưng (bộ bò sát giống thằn lằn) **guano** n. phân chim **parasite** n. đông, thực vật kí sinh **hatchling** n. con non

LIVEWORKSHEETS

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

List of Headings

i. Various types of care for PTSD patients
ii. Some symptoms of PTSD
iii. The difficulty of detecting PTSD
iv. The meaning and origin of the term PTSD
v. The effect on families
vi. Why meditation helps PTSD
vii. Causes of trauma that can lead to PTSD

18 Paragraph **A**

19 Paragraph **B**

20 Paragraph **C**

21 Paragraph **D**

LIVEWORKSHEETS

Post-Traumatic Stress Disorder

A Post-traumatic stress disorder is a clinical mental illness that was first observed in war veterans. The condition results from trauma that is either life threatening, the cause of a serious injury, or something that the affected person responded to with intense fear, helplessness or horror. In the 1970s, in the aftermath of the Vietnam War, a behavioural pattern was observable in many of the returning American soldiers. They were emotionally distant, irritable, had trouble sleeping and were prone to severe fits of anger. Anti-Vietnam War activists advocating the troubled veterans coined the term 'post-Vietnam Syndrome' to describe their array of severe psychological symptoms.

B The type of trauma that leads to PTSD is almost always unexpected, and leaves the person involved feeling powerless to stop the traumatic event. Situations that are likely to result in such trauma are varied. Accidents, serious crimes, combat experience, and the sudden death of loved ones can all lead to PTSD. However, not everyone who experiences trauma develops PTSD, and researchers are still trying to figure out why some people are more susceptible to this condition.

C Symptoms of PTSD can include persistent memories or nightmares about a traumatic event, dissociation from the surrounding world, avoidance of anything related to the trauma and increased anxiety or 'hyper arousal'. People with PTSD are constantly on guard for danger even when there is no indication of threat in their immediate environment. This heightened state of anxiety or irritability has other consequences as well, such as being prone to outbursts of anger or violent aggression, having difficulties concentrating, and having trouble sleeping.

D Contrary to common belief, PTSD is a treatable disorder, and there is a range of treatments available to PTSD sufferers. Once a patient is diagnosed with PTSD, they are almost always put on some form of anti-anxiety or anti-depressant medication, which will often be used in conjunction with some form of therapy. The most effective therapeutic models for PTSD sufferers are exposure therapy, eye movement desensitisation and reprocessing (EMDR), and cognitive-behavioural therapy (CBT). As the name suggests, exposure therapy involves exposing the patient to their trauma in a safe environment so that they can become desensitised. EMDR combines exposure therapy with guided eye movements that help individuals process traumatic memories. CBT, on the other hand, teaches patients skills such as relaxation and mindfulness techniques that help them deal with their memories of trauma more effectively. Although these treatments can be highly effective, many victims of PTSD will experience painful relapses during the course of their lives; ensuring the long-term availability of care and support is thus of paramount importance.

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post-traumatic stress disorder phr. hậu chấn tâm lý war veteran phr. cựu chiến binh aftermath n. hậu quả irritable adj. dễ cáu kỉnh prone adj. có xu hướng advocate v. ủng hộ susceptible adj. dễ bị ảnh hưởng, dễ bị tổn thương dissociation n. sự cô lập anxiety n. sự lo lắng, sự lo âu hyper arousal phr. kinh động quá độ on guard phr. cảnh giác để phòng heighten v. tăng cao irritability n. tính dễ cáu, tính dễ bị kích thích outburst n. sự bùng nổ, sự bộc phát desensitise v. làm giảm sự nhạy cảm mindfulness technique phr. kĩ thuật chánh niệm (tập trung hoàn toàn vào một sự việc) relapse n. sự tái phát bệnh paramount adj. tối quan trọng

LIVEWORKSHEETS