

Kho 20 bài tập mẫu luyện dạng Matching Headings IELTS Reading

Phần 1: Đề bài

1. Bài tập 1

LAST MAN STANDING

Some 50,000 years ago, Homo sapiens beat other hominids to become the only surviving species. Kate Ravillious reveals how we did it.

A. Today, there are over seven billion people living on Earth. No other species has exerted as much influence over the planet as us. But turn the clock back 80,000 years and we were one of a number of species roaming the Earth. Our own species, Homo sapiens (Latin for 'wise man'), was most successful in Africa. In western Eurasia, the Neanderthals dominated, while Homo erectus may have lived in Indonesia. Meanwhile, an unusual finger bone and tooth, discovered in Denisova cave in Siberia in 2008, have led scientists to believe that yet another human population - the Denisovans - may also have been widespread across Asia. Somewhere along the line, these other human species died out, leaving Homo sapiens as the sole survivor. So what made us the winners in the battle for survival?

B. Some 74,000 years ago, the Toba 'supervolcano' on the Indonesian island of Sumatra erupted. The scale of the event was so great that ash from the eruption was flung as far as eastern India, more than 2,000 kilometres away. Oxford archaeologist Mike Petraglia and his team have uncovered thousands of stone tools buried underneath the Toba ash. The mix of hand axes and spear tips have led Petraglia to speculate that Homo sapiens and Homo erectus were both living in eastern India prior to the Toba eruption. Based on careful examination of the tools and dating of the sediment layers where they were found, Petraglia and his team suggest that Homo sapiens arrived in eastern India around 78,000 years ago, migrating out of Africa and across Arabia during a favourable climate period. After their arrival, the simple tools belonging to Homo erectus seemed to lessen in number and eventually disappear completely. 'We think that Homo sapiens had a more efficient hunting technology, which could have given them the edge', says Petraglia, 'Whether the eruption of Toba also played a role in the extinction of the Homo erectus-like species is unclear to us.'

C. Some 45,000 years later, another fight for survival took place. This time, the location was Europe and the protagonists were another species, the Neanderthals. They were a highly successful species that dominated the European landscape for 300,000 years. Yet within just a few thousand years of the arrival of Homo sapiens, their numbers plummeted. They eventually disappeared from the landscape around 30,000 years ago, with their last known refuge being southern Iberia, including Gibraltar. Initially, Homo sapiens and Neanderthals lived alongside each other and had no reason to compete. But then Europe's climate swung into a cold, inhospitable, dry phase. 'Neanderthal and Homo

sapiens populations had to retreat to refugia (pockets of habitable land). This heightened competition between the two groups,' explains Chris Stringer, an anthropologist at the Natural History Museum in London.

D. Both species were strong and stockier than the average human today, but Neanderthals were particularly robust, 'Their skeletons show that they had broad shoulders and thick necks,' says Stringer. 'Homo sapiens, on the other hand, had longer forearms, which undoubtedly enabled them to throw a spear from some distance, with less danger and using relatively little energy,' explains Stringer. This long-range ability may have given Homo sapiens an advantage in hunting. When it came to keeping warm, Homo sapiens had another skill: weaving and sewing. Archaeologists have uncovered simple needles fashioned from ivory and bone alongside Homo sapiens, dating as far back as 35,000 years ago. 'Using this technology, we could use animal skins to make ourselves tents, warm clothes and fur boots,' says Stringer. In contrast, Neanderthals never seemed to master sewing skills, instead relying on pinning skins together with thorns.

E. A thirst for exploration provided Homo sapiens with another significant advantage over Neanderthals. Objects such as shell beads and flint tools, discovered many miles from their source, show that our ancestors travelled over large distances, in order to barter and exchange useful materials, and share ideas and knowledge. By contrast, Neanderthals tended to keep themselves to themselves, living in small groups. They misdirected their energies by only gathering resources from their immediate surroundings and perhaps failing to discover new technologies outside their territory.

F. Some of these differences in behaviour may have emerged because the two species thought in different ways. By comparing skull shapes, archaeologists have shown that Homo sapiens had a more developed temporal lobe - the regions at the side of the brain, associated with listening, language and long-term memory. 'We think that Homo sapiens had a significantly more complex language than Neanderthals and were able to comprehend and discuss concepts such as the distant past and future', says Stringer. Penny Spikins, an archaeologist at the University of York, has recently suggested that Homo sapiens may also have had a greater diversity of brain types than Neanderthals. 'Our research indicates that high-precision tools, new hunting technologies and the development of symbolic communication may all have come about because they were willing to include people with "different" minds and specialised roles in their society,' she explains. 'We see similar kinds of injuries on male and female Neanderthal skeletons, implying there was no such division of labour,' says Spikins.

G. Thus by around 30,000 years ago, many talents and traits were well established in Homo sapiens societies but still absent from Neanderthal communities. Stringer thinks that the Neanderthals were just living in the wrong place at the wrong time. 'They had to compete with Homo sapiens during a phase of very unstable climate across Europe. During each rapid climate fluctuation, they may have suffered greater losses of people than Homo sapiens, and thus were slowly worn down,' he says. 'If the climate had remained stable throughout, they might still be here.'

Adapted from Focus Magazine

The reading passage has seven paragraphs, A-G. Which paragraph contains the following information?

NB You may use any letter more than once.

1. a comparison of a range of physical features of Neanderthals and Homo sapiens
2. reference to items that were once used for trade
3. mention of evidence for the existence of a previously unknown human species
4. mention of the part played by ill fortune in the downfall of Neanderthal society
5. reference to the final geographical location of Neanderthals

2. Bài tập 2

OUT OF AFRICA: SOLAR ENERGY FROM THE SAHARA

Vivienne Wait reports on how the Sahara Desert could offer a truly green solution to Europe's energy problems.

A. For years, the Sahara has been regarded by many Europeans as a terra incognita* of little economic value or importance. But this idea may soon change completely. Politicians and scientists on both sides of the Mediterranean are beginning to focus on the Sahara's potential to provide power for Europe in the future. They believe the desert's true value comes from the fact that it is dry and empty. Some areas of the Sahara reach 45 degrees centigrade on many afternoons. It is, in other words, a gigantic natural storehouse of solar energy.

B. A few years ago, scientists began to calculate just how much energy the Sahara holds. They were astonished at the answer. In theory, a 90,600 square kilometre chunk of the Sahara - smaller than Portugal and a little over 1% of its total area - could yield the same amount of electricity as all the world's power plants combined. A smaller square of 15,500 square kilometres - about the size of Connecticut - could provide electricity for Europe's 500 million people. 'I admit I was sceptical until I did the calculations myself,' says Michael Pawlyn, director of Exploration Architecture, one of three British environmental companies comprising the Sahara Forest Project, which is testing solar plants in Oman and the United Arab Emirates. Pawlyn calls the Sahara's potential 'staggering'.

C. At the moment, no one is proposing the creation of a solar power station the size of a small country. But a relatively well-developed technology exists, which proponents say could turn the Sahara's heat and sunlight into a major source of electricity - Concentrating Solar Power (CSP). Unlike solar panels, which convert sunlight directly into electricity, CSP utilises mirrors which focus light on water pipes or boilers to produce very hot steam to operate the turbines of generators. Small CSP plants have produced power in California's Mojave Desert since the 1980s. The Sahara Forest Project proposes building CSP plants in areas below sea level (the Sahara has several such depressions) so that sea

water can flow into them. This water would then be purified and used for powering turbines and washing dust off the mirrors. Waste water would then supply irrigation to areas around the stations, creating lush oases - hence the 'forest' in the group's name.

D. But producing Significant quantities of electricity means building huge arrays of mirrors and pipes across hundreds of miles of remote desert, which is expensive. Gerry Wolff, an engineer who heads DESERTEC, an international consortium of solar-power scientists, says they have estimated it will cost about \$59 billion to begin transmitting power from the Sahara by 2020.

E. Building plants is just part of the challenge. One of the drawbacks to CSP technology is that it works at maximum efficiency only in sunny, hot climates - and deserts tend to be distant from population centres. To supply Europe with 20% of its electricity needs, more than 19,300 kilometres of cables would need to be laid under the Mediterranean, says Gunnar Asplund, head of HVDC research at ABB Power Technologies in Ludvika, Sweden. Indeed, to use renewable sources of power, including solar, wind and tidal, Europe will need to build completely new electrical grids. That's because existing infrastructures, built largely for the coal-fired plants that supply 80% of Europe's power, would not be suitable for carrying the amount of electricity generated by the Sahara. Germany's government-run Aerospace Centre, which researches energy, estimates that replacing those lines could raise the cost of building solar plants in the Sahara and sending significant amounts of power to Europe to about \$485 billion over the next 40 years. Generous government subsidies will be needed. 'Of course it costs a lot of money,' says Asplund. 'It's a lot cheaper to burn coal than to make solar power in the Sahara.'

F. Meanwhile, some companies are getting started. Seville engineering company Abengoa is building one solar - thermal plant in Algeria and another in Morocco, while a third is being built in Egypt by a Spanish-Japanese joint venture. The next step will be to get cables in place. Although the European Parliament has passed a law that aids investors who help the continent reach its goal of getting 20% of its power from renewable energy by 2020, it could take years to create the necessary infrastructure.

G. Nicholas Dunlop, secretary-general of the London-based NGO e-Parliament, thinks companies should begin transmitting small amounts of solar power as soon as the North African plants begin operating, by linking a few cable lines under the Med. 'I call it the Lego method,' he says. 'Build it piece by piece.' If It can be shown that power from the Sahara can be produced profitably, he says, companies and governments will soon jump in. If they do, perhaps airplane passengers flying across the Sahara will one day count the mirrors and patches of green instead of staring at sand.

adapted from Time Magazine

*terra incognita - Latin, meaning 'an unknown land'

The reading passage has seven paragraphs, **A-G**.

Which paragraph contains the following information? Write the correct letter, **A-G**.

NB You may use any letter more than once.

1. a mention of systems which could not be used
2. estimates of the quantity of power the Sahara could produce
3. a suggestion for how to convince organisations about the Sahara's potential
4. a short description of the Sahara at present
5. a comparison of the costs of two different energy sources

3. Bài tập 3

THE BURDEN OF THIRST

By Tina Rosenberg

Millions of women carry water long distances. If they had a tap by their door, whole societies would be transformed.

A. Aylito Binayo's feet know the mountain. Even at four in the morning, she can run down the rocks to the river by starlight alone and climb the steep mountain back up to her village with a container of water on her back. She has made this journey three times a day since she was a small child.

So has every other woman in her village of Foro, in the Konso district of south-western Ethiopia in Africa. Binayo left school when she was eight years old, in part because she had to help her mother fetch water from the Toiro River. The water is unsafe to drink; every year that the drought continues, the river carries less water, and its flow is reduced. But it is the only water Foro has ever had.

B. In developed parts of the world, people turn on a tap and out pours abundant, clean water. Yet nearly 900 million people in the world have no access to clean water. Furthermore, 2.5 billion people have no safe way to get rid of human waste. Polluted water and lack of proper hygiene cause disease and kill 3.3 million people around the world annually, most of them children. In southern Ethiopia and in northern Kenya, a lack of rain over the past few years has made even dirty water hard to find. But soon, for the first time, things are going to change.

C. Bringing clean water close to villagers' homes is the key to the problem. Communities where clean water becomes accessible and plentiful are transformed. All the hours previously spent hauling water can be used to cultivate more crops, raise more animals or even start a business. Families spend less time sick or caring for family members who are unwell. Most important, not having to collect water means girls can go to school and get jobs. The need to fetch water for the family, or to take care of younger siblings while their mother goes, usually prevents them ever having this experience.

D. But the challenges of bringing water to remote villages like those in Konso are overwhelming. Locating water underground and then reaching it by means of deep wells requires geological expertise and expensive, heavy machines. Abandoned wells and water projects litter the villages of Konso. In similar villages around the developing world, the

biggest problem with water schemes is that about half of them break down soon after the groups that built them move on. Sometimes technology is used that can't be repaired locally, or spare parts are available only in the capital.

E. Today, a UK-based international non-profit organization called WaterAid is tackling the job of bringing water to the most remote villages of Konso. Their approach combines technologies proven to last - such as building a sand dam to capture and filter rainwater that would otherwise drain away. But the real innovation is that WaterAid believes technology is only part of the solution. Just as important is involving the local community in designing, building and maintaining new water projects. Before beginning any project, WaterAid asks the community to create a WASH (water, sanitation, hygiene) committee of seven people. The committee works with WaterAid to plan projects and involve the village in construction. Then it maintains and runs the project.

F. The people of Konso, who grow their crops on terraces they have dug into the sides of mountains, are famous for hard work. In the village of Orbesho, resident even constructed a road themselves so that drilling machinery could come in. Last summer, their pump, installed by the river, was being motorised to push its water to a newly built reservoir on top of a nearby mountain. From there, gravity will carry it down in pipes to villages on the other side of the mountain. Residents of those villages have each given some money to help fund the project. They have made concrete and collected stones for the structures. Now they are digging trenches to lay pipes. If all goes well, Aylito Binayo will have a tap with safe water just a three-minute walk from her front door.

Adapted from National Geographic magazine

Choose **TWO** letters, A-E.

Which **TWO** of these activities were performed by the villagers of Orbesho?

- A. building a transport route
- B. digging a reservoir
- C. gathering building materials
- D. making pipes
- E. fitting taps

4. Bài tập 4

LEARNING COLOR WORDS

Young children struggle with color concepts, and the reason for this may have something to do with how we use the words that describe them.

A. In the course of the first few years of their lives, children who are brought up in English- speaking homes successfully master the use of hundreds of words. Words for objects, actions, emotions, and many other aspects of the physical world quickly become

part of their infant repertoire. For some reason, however, when it comes to learning color words, the same children perform very badly. At the age of four months, babies can distinguish between basic color categories. Yet it turns out they do this in much the same way as blind children. "Blue" and "yellow" appear in older children's expressive language in answer to questions such as "What color is this?", but their mapping of objects to individual colors is haphazard and interchangeable. If shown a blue cup and asked about its color, typical two-year-olds seem as likely to come up with "red" as "blue." Even after hundreds of training trials, children as old as four may still end up being unable to accurately sort objects by color.

B. In an effort to work out why this is, cognitive scientists at Stanford University in California hypothesized that children's incompetence at color-word learning may be directly linked to the way these words are used in English. While word order for color adjectives varies, they are used overwhelmingly in pre-nominal position (e.g. "blue cup"); in other words, the adjective comes before the noun it is describing. This is in contrast to post-nominal position (e.g. "The cup is blue") where the adjective comes after the noun. It seems that the difficulty children have may not be caused by any unique property of color, or indeed, of the world. Rather, it may simply come down to the challenge of having to make predictions from color words to the objects they refer to, instead of being able to make predictions from the world of objects to the color words.

To illustrate, the word "chair" has a meaning that applies to the somewhat varied set of entities in the world that people use for sitting on. Chairs have features, such as arms and legs and backs, that are combined to some degree in a systematic way; they turn up in a range of chairs of different shapes, sizes, and ages. It could be said that children learn to narrow down the set of cues that make up a chair and in this way they learn the concept associated with that word. On the other hand, color words tend to be unique and not bound to other specific co-occurring features; there is nothing systematic about color words to help cue their meaning. In the speech that adults direct at children, color adjectives occur pre-nominally ("blue cup") around 70 percent of the time. This suggests that most of what children hear from adults will, in fact, be unhelpful in learning what color words refer to.

C. To explore this idea further, the research team recruited 41 English children aged between 23 and 29 months and carried out a three-phase experiment. It consisted of a pre-test, followed by training in the use of color words, and finally a post-test that was identical to the pre-test. The pre- and post-test materials comprised six objects that were novel to the children. There were three examples of each object in each of three colors—red, yellow, and blue. The objects were presented on trays, and in both tests, the children were asked to pick out objects in response to requests in which the color word was either a pre nominal ("Which is the red one?") or a post-nominal ("Which one is red?").

In the training, the children were introduced to a "magic bucket" containing five sets of items familiar to 26-month-olds (balls, cups, crayons, glasses, and toy bears) in each of the three colors. The training was set up so that half the children were presented with the

items one by one and heard them labelled with color words used pre-nominally ("This is a red crayon"), while the other half were introduced to the same items described with a post-nominal color word ("This crayon is red"). After the training, the children repeated the selection task on the unknown items in the post-test. To assess the quality of children's understanding of the color words, and the effect of each type of training, correct choices on items that were consistent across the pre- and post-tests were used to measure children's color knowledge.

D. Individual analysis of pre- and post-test data, which confirmed parental vocabulary reports, showed the children had at least some knowledge of the three colour words: they averaged two out of three correct choices in response to both pre- and post-nominal question types, which, it has been pointed out, is better than chance. When children's responses to the question types were assessed independently, performance was at its most consistent when children were both trained and tested on post-nominal adjectives, and worst when trained on pre-nominal adjectives and tested on post-nominal adjectives. Only children who had been trained with post-nominal color-word presentation and then tested with post-nominal question types were significantly more accurate than chance. Comparing the pre- and post-test scores across each condition revealed a significant decline in performance when children were both pre- and post-tested with questions that placed the color words pre-nominally.

As predicted, when children are exposed to color adjectives in post-nominal position, they learn them rapidly (after just five training trials per color); when they are presented with them pre-nominally, as English overwhelmingly tends to do, children show no signs of learning.

Choose **TWO** letters, **A-E**.

Questions 10-11

Which **TWO** of the following statements about the experiment are true?

- A. The children were unfamiliar with the objects used in the pre- and post-test.
- B. The children had to place the pre- and post-test objects onto coloured trays.
- C. The training was conducted by dividing the children into two groups.
- D. Pre-nominal questions were used less frequently than post-nominal questions in the training.
- E. The researchers were looking for inconsistencies in children's knowledge of word order.

Questions 12-13

Which **TWO** of the following outcomes are reported in the passage?

- A. Average results contradicted parental assessment of children's knowledge.

- B. Children who were post-tested using post-nominal adjectives performed well, regardless of the type of training.
- C. Greatest levels of improvement were achieved by children who were trained and post-tested using post-nominal adjectives.
- D. Some children performed less well in the post-test than in the pre-test.
- E. Some children were unable to accurately name any of the colours in the pre and post-tests.

5. Bài tập 5

ORGANIC FOOD: WHY?

By Rob Lyons and Jan Bowman

Today, many governments are promoting organic or natural farming methods that avoid the use of pesticides and other artificial products. The aim is to show that they care about the environment and about people's health. But is this the right approach?

A. Europe is now the biggest market for organic food in the world, expanding by 25 percent a year over the past 10 years. So what is the attraction of organic food for some people? The really important thing is that organic sounds more 'natural'. Eating organic is a way of defining oneself as natural, good, caring, different from the junk-food-scoffing masses. As one journalist puts it: 'It feels closer to the source, the beginning, the start of things.' The real desire is to be somehow close to the soil, to Mother Nature.

B. Unlike conventional farming, the organic approach means farming with natural, rather than man-made, fertilisers and pesticides. Techniques such as crop rotation improve soil quality and help organic farmers compensate for the absence of man-made chemicals. As a method of food production, organic is, however, inefficient in its use of labour and land; there are severe limits to how much food can be produced. Also, the environmental benefits of not using artificial fertiliser are tiny compared with the amount of carbon dioxide emitted by transporting food (a great deal of Britain's organic produce is shipped in from other countries and transported from shop to home by car).

C. Organic farming is often claimed to be safer than conventional farming - for the environment and for consumers. Yet studies into organic farming worldwide continue to reject this claim. An extensive review by the UK Food Standards Agency found that there was no statistically significant difference between organic and conventional crops. Even where results indicated there was evidence of a difference, the reviewers found no sign that these differences would have any noticeable effect on health.

D. The simplistic claim that organic food is more nutritious than conventional food was always likely to be misleading. Food is a natural product, and the health value of different foods will vary for a number of reasons, including freshness, the way the food is cooked, the type of soil it is grown in, the amount of sunlight and rain crops have received, and so on. Likewise, the flavour of a carrot has less to do with whether it was fertilised with

manure or something out of a plastic sack than with the variety of carrot and how long ago it was dug up. The differences created by these things are likely to be greater than any differences brought about by using an organic or non-organic system of production. Indeed, even some 'organic' farms are quite different from one another.

E. The notion that organic food is safer than 'normal' food is also contradicted by the fact that many of our most common foods are full of natural toxins. Parsnips cause blisters on the skin of agricultural workers. Toasting bread creates carcinogens. As one research expert says: 'People think that the more natural something is, the better it is for them. That is simply not the case. In fact, it is the opposite that is true: the closer a plant is to its natural state, the more likely it is that it will poison you. Naturally, many plants do not want to be eaten, so we have spent 10,000 years developing agriculture and breeding out harmful traits from crops.'

F. Yet educated Europeans are more scared of eating traces of a few, strictly regulated, man-made chemicals than they are of eating the ones that nature created directly. Surrounded by plentiful food, it's not nature they worry about, but technology. Our obsessions with the ethics and safety of what we eat - concerns about antibiotics in animals, additives in food, GM crops and so on - are symptomatic of a highly technological society that has little faith in its ability to use this technology wisely. In this context, the less something is touched by the human hand, the healthier people assume it must be.

G. Ultimately, the organic farming movement is an expensive luxury for shoppers in well-manicured Europe. For developing parts of the world, it is irrelevant. To European environmentalists, the fact that organic methods require more labour and land than conventional ones to get the same yields is a good thing; to a farmer in rural Africa, it is a disaster. Here, land tends to be so starved and crop yields so low that there simply is not enough organic matter to put back into the soil. Perhaps the focus should be on helping these countries to gain access to the most advanced farming techniques, rather than going back to basics.

Adapted from articles in Spiked

Choose **TWO** letters, **A-E**

Question 8-9

Which **TWO** of the following points does the writer mention in connection with organic farming?

- A. the occasional use of pesticides
- B. using the same field for different crops
- C. testing soil quality
- D. reducing the number of farm workers
- E. the production of greenhouse gases

Questions 10-11

According to the writer, which **TWO** factors affect the nutritional content of food?

- A. who prepares the food
- B. the weather conditions during growth
- C. where the food has been stored
- D. when the plants were removed from the earth
- E. the type of farm the food was grown on

Questions 12-13

Which **TWO** negative aspects of organic farming does the writer mention?

- A. Consumers complain about the extra cost.
- B. Organic food may make people ill.
- C. Farm workers have to be specially trained.
- D. It requires too much technological expertise.
- E. It is not possible in some countries.

6. Bài tập 6

HUMPBACK WHALE BREAKS MIGRATION RECORD

A whale surprises researchers with her journey.

A lone humpback whale travelled more than 9,800 kilometres from breeding areas in Brazil to those in Madagascar, setting a record for the longest mammal migration ever documented.

Humpback whales (*Megaptera novaeangliae*) are known to have some of the longest migration distances of all mammals, and this huge journey is about 400 kilometres farther than the previous humpback record. The finding was made by Peter Stevick, a biologist at the College of the Atlantic in Bar Harbor, Maine.

The whale's journey was unusual not only for its length, but also because it travelled across almost 90 degrees of longitude from west to east. Typically, humpbacks move in a north-south direction between cold feeding areas and warm breeding grounds - and the longest journeys which have been recorded until now have been between breeding and feeding sites.

The whale, a female, was first spotted off the coast of Brazil, where researchers photographed its tail fluke and took skin samples for chromosome testing to determine the animal's sex. Two years later, a tourist on a whale-watching boat snapped a photo of the humpback near Madagascar.

To match the two sightings, Stevick's team used an extensive international catalogue of photographs of the undersides of tail flukes, which have distinctive markings. Researchers routinely compare the markings in each new photograph to those in the archive.

The scientists then estimated the animal's shortest possible route: an arc skirting the southern tip of South Africa and heading north-east towards Madagascar. The minimum distance is 9,800 kilometres, says Stevick, but this is likely to be an underestimate, because the whale probably took a detour to feed on krill in the Southern Ocean near Antarctica before reaching its destination.

Most humpback-whale researchers focus their efforts on the Northern Hemisphere because the Southern Ocean near the Antarctic is a hostile environment and it is hard to get to, explains Rochelle Constantine, who studies the ecology of humpback whales at the University of Auckland in New Zealand. But, for whales, oceans in the Southern Hemisphere are wider and easier to travel across, says Constantine. Scientists will probably observe more long-distance migrations in the Southern Hemisphere as satellite tracking becomes increasingly common, she adds.

Daniel Palacios, an oceanographer at the University of Hawaii at Manoa, says that the record-breaking journey could indicate that migration patterns are shifting as populations begin to recover from near-extinction and the population increases. But the reasons why the whale did not follow the usual migration routes remain a mystery. She could have been exploring new habitats, or simply have lost her way. 'We generally think of humpback whales as very well studied, but then they surprise us with things like this,' Palacios says. 'Undoubtedly there are a lot of things we still don't know about whale migration.'

By Janelle Weaver, published online in Nature

Question 1-7

1. What **TWO** aspects of the whale's journey surprised researchers?

- A. the destination
- B. the direction
- C. the distance
- D. the reason
- E. the season

2. The passage mentions reasons why whales generally migrate. What **TWO** reasons are given?

- A. to avoid humans
- B. to be safe
- C. to eat
- D. to keep warm

- E. to produce young
3. What **TWO** methods did researchers use to record the identity of the whale near Brazil?
- A. They analysed part of the whale's body.
 - B. They marked its tail.
 - C. They made notes of its behaviour.
 - D. They recorded the sounds it made.
 - E. They took a picture.
4. The passage mentions places the whale may have passed close to on its journey. Which **TWO** places may the whale have passed?
- A. Antarctica
 - B. Hawaii
 - C. Maine
 - D. New Zealand
 - E. South Africa
5. The passage says that more research is done in the Northern Hemisphere. Which **TWO** reasons are given for this?
- A. It contains more whales.
 - B. It has friendlier surroundings.
 - C. There are more samples available.
 - D. It is easier to reach.
 - E. It contains smaller whales.
6. The passage suggests why the whale made a different journey from usual. Which **TWO** reasons does it suggest?
- A. She did not know where she was going.
 - B. She did not want to breed.
 - C. She wanted to escape a danger.
 - D. She was looking for a new place to live.
 - E. She was recovering from an illness.
7. Which **TWO** methods of finding out where whales migrate are mentioned in the passage?
- A. attaching radio transmitters
 - B. comparing pictures taken in different place

- C. following them in boats
- D. placing cameras in key positions
- E. following their movements from space.

7. Bài tập 7

THE TRUTH ABOUT LYING

By Dan Roberts

Over the years Richard Wiseman has tried to unravel the truth about deception - investigating the signs that give away a liar.

A. In the 1970s, as part of a large-scale research programme exploring the area of Interspecies communication, Dr Francine Patterson from Stanford University attempted to teach two lowland gorillas called Michael and Koko a simplified version of Sign Language. According to Patterson, the great apes were capable of holding meaningful conversations, and could even reflect upon profound topics, such as love and death. During the project, their trainers believe they uncovered instances where the two gorillas' linguistic skills seemed to provide reliable evidence of intentional deceit. In one example, Koko broke a toy cat, and then signed to indicate that the breakage had been caused by one of her trainers. In another episode, Michael ripped a jacket belonging to a trainer and, when asked who was responsible for the incident, signed 'Koko'. When the trainer expressed some scepticism, Michael appeared to change his mind, and indicated that Dr Patterson was actually responsible, before finally confessing.

B. Other researchers have explored the development of deception in children. Some of the most interesting experiments have involved asking youngsters not to take a peek at their favourite toys. During these studies, a child is led into a laboratory and asked to face one of the walls. The experimenter then explains that he is going to set up an elaborate toy a few feet behind them. After setting up the toy, the experimenter says that he has to leave the laboratory, and asks the child not to turn around and peek at the toy. The child is secretly filmed by hidden cameras for a few minutes, and then the experimenter returns and asks them whether they peeked. Almost all three-year-olds do, and then half of them lie about it to the experimenter. By the time the children have reached the age of five, all of them peek and all of them lie. The results provide compelling evidence that lying starts to emerge the moment we learn to speak.

C. So what are the tell-tale signs that give away a lie? In 1994, the psychologist Richard Wiseman devised a large-scale experiment on a TV programme called *Tomorrow's World*. As part of the experiment, viewers watched two interviews in which Wiseman asked a presenter in front of the cameras to describe his favourite film. In one interview, the presenter picked *Some Like It Hot* and he told the truth; in the other interview, he picked *Gone with the Wind* and lied. The viewers were then invited to make a choice - to telephone in to say which film he was lying about. More than 30,000 calls were received,

but viewers were unable to tell the difference and the vote was a 50/50 split. In similar experiments, the results have been remarkably consistent - when it comes to lie detection, people might as well simply toss a coin. It doesn't matter if you are male or female, young or old; very few people are able to detect deception.

D. Why is this? Professor Charles Bond from the Texas Christian University has conducted surveys into the sorts of behaviour people associate with lying. He has interviewed thousands of people from more than 60 countries, asking them to describe how they set about telling whether someone is lying. People's answers are remarkably consistent. Almost everyone thinks liars tend to avert their gaze, nervously wave their hands around and shift about in their seats. There is, however, one small problem. Researchers have spent hour upon hour carefully comparing films of liars and truth-tellers. The results are clear. Liars do not necessarily look away from you; they do not appear nervous and move their hands around or shift about in their seats. People fail to detect lies because they are basing their opinions on behaviours that are not actually associated with deception.

E. So what are we missing? It is obvious that the more information you give away, the greater the chances of some of it coming back to haunt you. As a result, liars tend to say less and provide fewer details than truth-tellers. Looking back at the transcripts of the interviews with the presenter, his lie about *Gone with the Wind* contained about 40 words, whereas the truth about *Some Like It Hot* was nearly twice as long. People who lie also try psychologically to keep a distance from their falsehoods, and so tend to include fewer references to themselves in their stories. In his entire interview about *Gone with the Wind*, the presenter only once mentioned how the film made him feel, compared with the several references to his feelings when he talked about *Some Like It Hot*.

F. The simple fact is that the real clues to deceit are in the words that people use, not the body language. So do people become better lie detectors when they listen to a liar, or even just read a transcript of their comments? The interviews with the presenter were also broadcast on radio and published in a newspaper, and although the lie-detecting abilities of the television viewers were no better than chance, the newspaper readers were correct 64% of the time, and the radio listeners scored an impressive 73% accuracy rate.

The reading passage has six paragraphs, A-F. Choose the correct heading for each paragraph from the list of headings below.

List of headings

- i. Some of the things liars really do
- ii. When do we begin to lie?
- iii. How wrong is it to lie?
- iv. Exposing some false beliefs
- v. Which form of communication best exposes a lie?
- vi. Do only humans lie?

- vii. Dealing with known liars
- viii. A public test of our ability to spot a lie

- 1. Paragraph A _____
- 2. Paragraph B _____
- 3. Paragraph C _____
- 4. Paragraph D _____
- 5. Paragraph E _____
- 6. Paragraph F _____

8. Bài tập 8

THE BURDEN OF THIRST

Millions of women carry water long distances. If they had a tap by their door, whole societies would be transformed.

By Tina Rosenberg

A. Aylito Binayo's feet know the mountain. Even at four in the morning, she can run down the rocks to the river by starlight alone and climb the steep mountain back up to her village with a container of water on her back. She has made this journey three times a day since she was a small child.

So has every other woman in her village of Foro, in the Konso district of south-western Ethiopia in Africa. Binayo left school when she was eight years old, in part because she had to help her mother fetch water from the Toiro River. The water is unsafe to drink; every year that the drought continues, the river carries less water, and its flow is reduced. But it is the only water Foro has ever had.

B. In developed parts of the world, people turn on a tap and out pours abundant, clean water. Yet nearly 900 million people in the world have no access to clean water. Furthermore, 2.5 billion people have no safe way to get rid of human waste. Polluted water and lack of proper hygiene cause disease and kill 3.3 million people around the world annually, most of them children. In southern Ethiopia and in northern Kenya, a lack of rain over the past few years has made even dirty water hard to find. But soon, for the first time, things are going to change.

C. Bringing clean water close to villagers' homes is the key to the problem. Communities where clean water becomes accessible and plentiful are transformed. All the hours previously spent hauling water can be used to cultivate more crops, raise more animals or even start a business. Families spend less time sick or caring for family members who are unwell. Most important, not having to collect water means girls can go to school and get

jobs. The need to fetch water for the family, or to take care of younger siblings while their mother goes, usually prevents them ever having this experience.

D. But the challenges of bringing water to remote villages like those in Konso are overwhelming. Locating water underground and then reaching it by means of deep wells requires geological expertise and expensive, heavy machines. Abandoned wells and water projects litter the villages of Konso. In similar villages around the developing world, the biggest problem with water schemes is that about half of them break down soon after the groups that built them move on. Sometimes technology is used that can't be repaired locally, or spare parts are available only in the capital.

E. Today, a UK-based international non-profit organization called WaterAid is tackling the job of bringing water to the most remote villages of Konso. Their approach combines technologies proven to last - such as building a sand dam to capture and filter rainwater that would otherwise drain away. But the real innovation is that WaterAid believes technology is only part of the solution. Just as important is involving the local community in designing, building and maintaining new water projects. Before beginning any project, WaterAid asks the community to create a WASH (water, sanitation, hygiene) committee of seven people. The committee works with WaterAid to plan projects and involve the village in construction. Then it maintains and runs the project.

F. The people of Konso, who grow their crops on terraces they have dug into the sides of mountains, are famous for hard work. In the village of Orbesho, resident even constructed a road themselves so that drilling machinery could come in. Last summer, their pump, installed by the river, was being motorised to push its water to a newly built reservoir on top of a nearby mountain. From there, gravity will carry it down in pipes to villages on the other side of the mountain. Residents of those villages have each given some money to help fund the project. They have made concrete and collected stones for the structures. Now they are digging trenches to lay pipes. If all goes well, Aylito Binayo will have a tap with safe water just a three-minute walk from her front door.

Adapted from National Geographic magazine

Questions 1-6

The reading passage has six paragraphs, A-F.

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

List of Headings

- i. Why some plans have failed
- ii. A rural and urban problem
- iii. A possible success
- iv. Explaining a new management style
- v. Some relevant statistics

- vi. A regular trip for some people
- vii. Treating people for disease
- viii. How water can change people's lives

1. Paragraph A _____
2. Paragraph B _____
3. Paragraph C _____
4. Paragraph D _____
5. Paragraph E _____
6. Paragraph F _____

9. Bài tập 9

THE IMPACT OF TECHNOLOGY ON EDUCATION

In the modern era, technology has become an integral part of education, revolutionizing the way students learn and teachers instruct. This article explores the various ways in which technology has impacted education and transformed traditional teaching methods.

A. Enhancing Accessibility Technology has significantly increased the accessibility of education. Online courses and digital resources have made learning available to individuals worldwide, breaking down geographical barriers and providing opportunities for those who might not have access to traditional educational institutions.

B. Personalized Learning One of the notable benefits of technology in education is the ability to tailor learning experiences to individual students. Adaptive learning platforms use data analytics to assess students' strengths and weaknesses, allowing for customized lesson plans that cater to each student's learning pace and style.

C. Interactive Learning Technology has introduced interactive learning tools, such as educational apps, simulations, and virtual reality, making the learning process more engaging and dynamic. These tools encourage students to actively participate in their education, fostering a deeper understanding of the subjects.

D. Collaboration and Communication The integration of technology has improved communication and collaboration among students and teachers. Online platforms, forums, and video conferencing tools enable seamless interaction, making it easier for students to connect with their peers and teachers both inside and outside the classroom.

E. Real-world Application Technology facilitates the integration of real-world applications into the curriculum. Students can now explore practical, industry-specific scenarios through virtual simulations, enabling them to apply theoretical knowledge to real-life situations.

F. Global Learning Communities The internet has given rise to global learning communities where students can connect with peers from different cultures and backgrounds. This exposure enhances their understanding of global perspectives and promotes cultural diversity in the learning process.

G. Challenges and Concerns While technology has brought about numerous positive changes, it also presents challenges such as the digital divide, privacy concerns, and the need for proper teacher training. Addressing these issues is crucial to ensuring that the benefits of technology in education are accessible to all.

List of Headings:

1. *Increasing Connectivity*
2. *Concerns and Challenges*
3. *Customized Learning*
4. *Interactive Educational Tools*
5. *Globalization of Education*
6. *Real-world Application of Knowledge*
7. *Breaking Geographical Barriers*
8. *Enhanced Communication in Education*
9. *Technology's Impact on Teacher Training*
10. *Fostering Global Learning Communities*

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

10. Bài tập 10

GOOD FOR YOU OR NOT GOOD FOR YOU? THAT IS THE QUESTION

A At no time in history has the world's population ever been so well-informed about nutrition and health. Consumers in the developed world are constantly bombarded with advertising messages which promote the health benefits of a wide range of food products. However, they are also exposed to the constant promotion of junk food as well. Fast food

companies have become sensitive to the criticisms they face over the potential damage their food causes and have begun to vigorously defend the nutritional value of the meals they serve. With this constant flow of messages – often contradictory – how are today’s consumers supposed to determine precisely what is healthy to eat?

B According to nutritionist Susan McCaskill, many people today intend to eat healthily, but have become confused about how to do so. “It is not just that the traditional definitions of a healthy diet have changed, though this is certainly significant. Many grew up being told that the more milk you drank, the healthier you would be. Then dairy foods became ‘bad’ in the eyes of many health professionals and many people sought alternatives to it. Now these alternatives are coming under the same sort of criticism.”

C The alternative McCaskill is referring to is soya milk. A generation of consumers who were labeled allergic to cow’s milk products embraced soya substitutes enthusiastically. In fact, the soya bean itself was promoted as a kind of miracle food overall. Claims were made it had the potential to not only provide all the protein required for a healthy diet, but that it could prevent heart disease and cancer. Slogans such as “It’s Soy Good for you...” began to appear in nutritional advice columns.

D Now suddenly you can find messages on health-related websites claiming “It’s not soy good” and even “It’s SOY bad for you.” A generation of health-conscious eaters who previously abandoned milk products for soy are now worried and confused. The same chemicals (known as isoflavones) in soya beans which were claimed to fight cancer and other diseases are now listed as the cause of some cancers, and are also implicated in hormonal problems and thyroid gland disorders. Dr David Steinman of the Eastern Sydney University Medical School considers the praise of soya products in many alternative health circles to be without scientific foundation. “Soya proponents suggest we look to the health statistics of Asian countries as proof of the benefits of soy. When we look closely at the countries where soya products are consumed regularly, it is clear that though they are widely used, they are also eaten in very moderate quantities. Many people seeking a healthy diet today are eating ten times that much soy, particularly through drinking vast amounts of soya milk and eating other non-traditional foods such as soya-based ice-cream.”

E Susan McCaskill considers the latest negative publicity about soy to be exaggerated, but she admits that it does raise some very relevant questions. “It still appears to me that soya beans have many notable nutritional benefits to offer, but the key thing here is moderation. What frequently happens now is that people go from eating much too much of one thing to eating too much of something else.”v

F Both McCaskill and Steinman concede that the recent soya controversy is just one example of how food fashions are confusing the health-conscious today. Red meat has often been blamed for high rates of heart disease and other health problems, then has been praised for its high iron content. Carbohydrate rich foods such as pasta, rice and potatoes have been promoted since the seventies as healthy staples of our diet, and then recently have received the blame for the growing numbers of people who are seriously overweight.

G Dr Steinman echoes the words of McCaskill on one key point - moderation is the most significant factor in any healthy diet. However, he fears that modern obsessions with perfect food habits can simply leave people so discouraged that they give up completely. “If you rush to a new diet because you’ve been told your old one was bad, then find the new one has its own critics, what do you do next? I worry that many will simply stop thinking about healthy eating habits and head to the nearest fast food outlet.”

H It is certainly undeniable that the fast food industry is booming. Whether this is because of confused and discouraged eaters of health food is difficult to determine. What is clear, however, is that advertisers are working harder and harder to influence the world’s eating habits, and that the needs of both health enthusiasts and fast food customers are now coming together: the fastest growing customer base in many major fast food chains is now people attracted by their new “healthy choices.” The question remains: who will decide in the end precisely what a healthy choice is?

List of headings

- i. A healthier option*
- ii. Asian countries know best*
- iii. Fast food companies go healthy*
- iv. A growing business*
- v. Importance of good eating habits*
- vi. Mixed messages*
- vii. A return to dairy products*
- viii. Healthy becomes unhealthy*
- ix. Allergies to dairy*
- x. Concern over negative reaction to mixed messages*

1. Paragraph C _____
2. Paragraph D _____
3. Paragraph E _____
4. Paragraph G _____
5. Paragraph H _____

11. Bài tập 11

CLIMATE CHANGE AND THE INUIT

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

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

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

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

D. Life for the descendants of the Thule people is still harsh. Nunavut is 1.9 million square kilometres of rock and ice, and a handful of islands around the North Pole. It’s currently home to 2,500 people, all but a handful of the indigenous Inuit. Over the past 40 years, most have abandoned their nomadic ways and settled in the territory’s 28 isolated communities, but they still rely heavily on nature to provide food and clothing. Provisions available in local shops have to be flown into Nunavut on one of the most costly air networks in the world, or brought by supply ship during the few ice-free weeks of summer. It would cost a family around £7,000 a year to replace meat they obtained themselves through hunting with imported meat. Economic opportunities are scarce, and for many people, state benefits are their only income.

E. While the Inuit may not actually starve if hunting and trapping are curtailed by climate change, there has certainly been an impact on people’s health. Obesity, heart disease and diabetes are beginning to appear in a people for whom these have never before been

problems. There has been a crisis of identity as the traditional skills of hunting, trapping and preparing skins have begun to disappear. In Nuvavut's igloo and email' society, where adults who were born in igloos have children who may never have been out on the land, there's a high incidence of depression.

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

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

READING PASSAGE 3

Question 1-6

Reading Passage 3 has seven paragraphs, A-G

Choose the correct heading for paragraphs B-G from the list of headings below

Write the correct number, i-ix, in boxes 1-6 on your answer sheet

List of Headings

- i. The reaction of the Inuit community to climate change
- ii. Understanding of climate change remains limited
- iii. Alternative sources of essential supplies
- iv. Respect for Inuit opinion grows
- v. A healthier choice of food
- vi. A difficult landscape
- vii. Negative effects on well-being

- viii. Alarm caused by unprecedented events in the Arctic
ix. The benefits of an easier existence

1. Paragraph B _____
2. Paragraph C _____
3. Paragraph D _____
4. Paragraph E _____
5. Paragraph G _____

12. Bài tập 12

Questions 1 – 5

Sample Passage 6 has six sections A–F.

Choose the correct heading for sections A–D and F from the list of headings below.

Write the correct number i–ix in boxes 1–5 on your answer sheet.

List of Headings

- i The probable effects of the new international trade agreement
- ii The environmental impact of modern farming
- iii Farming and soil erosion
- iv The effects of government policy in rich countries
- v Governments and management of the environment
- vi The effects of government policy in poor countries
- vii Farming and food output
- viii The effects of government policy on food output
- ix The new prospects for world trade

- 1 Section A
- 2 Section B
- 3 Section C
- 4 Section D

Example
Section E vi

5 Section F

Section A

The role of governments in environmental management is difficult but inescapable. Sometimes, the state tries to manage the resources it owns, and does so badly. Often, however, governments act in an even more harmful way. They actually subsidise the exploitation and consumption of natural resources. A whole range of policies, from farm-price support to protection for coal-mining, do environmental damage and (often) make no economic sense. Scrapping them offers a two-fold bonus: a cleaner environment and a more efficient economy. Growth and environmentalism can actually go hand in hand, if politicians have the courage to confront the vested interest that subsidies create.

Section B

No activity affects more of the earth's surface than farming. It shapes a third of the planet's land area, not counting Antarctica, and the proportion is rising. World food output per head has risen by 4 per cent between the 1970s and 1980s mainly as a result of increases in yields from land already in cultivation, but also because more land has been brought under the plough. Higher yields have been achieved by increased irrigation, better crop breeding, and a doubling in the use of pesticides and chemical fertilisers in the 1970s and 1980s.

Section C

All these activities may have damaging environmental impacts. For example, land clearing for agriculture is the largest single cause of deforestation; chemical fertilisers and pesticides may contaminate water supplies; more intensive farming and the abandonment of fallow periods tend to exacerbate soil erosion; and the spread of monoculture and use of high-yielding varieties of crops have been accompanied by the disappearance of old varieties of food plants which might have provided some insurance against pests or diseases in future. Soil erosion threatens the productivity of land in both rich and poor countries. The United States, where the most careful measurements have been done, discovered in 1982 that about one-fifth of its farmland was losing topsoil at a rate likely to diminish the soil's productivity. The country subsequently embarked upon a program to convert 11 per cent of its cropped land to meadow or forest. Topsoil in India and China is vanishing much faster than in America.

Section D

Government policies have frequently compounded the environmental damage that farming can cause. In the rich countries, subsidies for growing crops and price supports for farm output drive up the price of land. The annual value of these subsidies is immense: about \$250 billion, or more than all World Bank lending in the 1980s. To increase the output of crops per acre, a farmer's easiest option is to use more of the most readily available inputs: fertilisers and pesticides. Fertiliser use doubled in Denmark in the period 1960-1985 and increased in The Netherlands by 150 per cent. The quantity of pesticides applied has risen too: by 69 per cent in 1975-1984 in Denmark, for example, with a rise of 115 per cent in the frequency of application in the three years from 1981.

In the late 1980s and early 1990s some efforts were made to reduce farm subsidies. The most dramatic example was that of New Zealand, which scrapped most farm support in 1984. A study of the effects of these changes, conducted in 1993, found that the end of fertiliser subsidies had been followed by a fall in fertiliser use (a fall accompanied by the decline in wool prices which hurt farm incomes). The removal of subsidies also stopped land-clearing and over-stocking of sheep, and reduced the need to use pesticides.

In less enlightened countries, and in the European Union, the trend has been to reduce rather than eliminate subsidies, and to introduce new payments to encourage farmers to treat their land in environmentally friendlier ways, or to leave it fallow. It may sound strange but such payments need to be higher than the existing incentives for farmers to grow food crops. Farmers, however, dislike being paid to do nothing. In several countries they have become interested in the possibility of using fuel produced from crop residues either as a replacement for petrol (as ethanol) or as fuel for power stations (as biomass). Such fuels produce far less carbon dioxide than coal or oil, and absorb carbon dioxide as they grow. They are therefore less likely to contribute to the greenhouse effect. But they are rarely competitive with fossil fuels unless subsidised – and growing them does no less environmental harm than other crops.

Section E

In poor countries, governments aggravate other sorts of damage. Subsidies for pesticides and artificial fertilisers encourage farmers to use greater quantities than are needed to get the highest economic crop yield. A study by the International Rice Research Institute of pesticide use by farmers in South East Asia found that, with pest-resistant varieties of rice, even moderate applications of pesticide frequently cost farmers more than they saved. Such waste puts farmers on a chemical treadmill: bugs and weeds become resistant to poisons, so next year's poisons must be more lethal. One cost is to human health. Every year some 10,000 people die from pesticide poisoning, almost all of them in the developing countries, and another 400,000 become seriously ill. As for artificial fertilisers, their use world-wide increased by 40 per cent per unit of farmed land between the mid 1970s and late 1980s, mostly in the developing countries. Overuse of fertilisers may cause farmers to stop rotating crops or leaving their land fallow. That, in turn, may make soil erosion worse.

Section F

A result of the Uruguay Round of world trade negotiations is likely to be a reduction of 36 per cent in the average levels of farm subsidies paid by the rich countries in 1986-1990. Some of the world's food production will move from Western Europe to regions where subsidies are lower or non-existent, such as the former communist countries and parts of the developing world. Some environmentalists worry about this outcome. It will undoubtedly mean more pressure to convert natural habitat into farmland. But it will also have many desirable environmental effects. The intensity of farming in the rich world should decline, and the use of chemical inputs will diminish. Crops are more likely to be grown in the environments to which they are naturally suited. And more farmers in poor countries will have the money and the incentive to manage their land in ways that are sustainable in the

long run. That is still important. To feed an increasingly hungry world, farmers need every incentive to use their soil and water effectively and efficiently.

13. Bài tập 13

Reading Passage: THE GREENHOUSE EFFECT

Choose the correct heading (I-IX) for paragraphs A, B, C and D in the passage below.

- I Changing temperatures
- II The greenhouse
- III Global warming
- IV Use of a greenhouse
- V Werne's research
- VI Earth's atmosphere
- VII Our choices
- VIII Effects of carbon dioxide
- IX Climates around the world

A. A greenhouse is a house made entirely of glass: both walls and roof are glass. One of the main purposes of a greenhouse is to grow tomatoes, flowers and other plants that might struggle to grow outside. A greenhouse stays warm inside, even during winter. Sunlight shines in and warms the plants and air inside. But the heat is trapped by the glass and cannot escape. So during the daylight hours, it gets warmer and warmer inside a greenhouse, and stays quite warm at night too.

B. The Earth experiences a similar thing to a greenhouse. Gases in the atmosphere such as carbon dioxide do what the roof of a greenhouse does. During the day, the Sun shines through the atmosphere. Earth's surface warms up in the sunlight. At night, Earth's surface cools, releasing the heat back into the air. But some of the heat is trapped by the greenhouse gases in the atmosphere. That is what keeps our Earth a warm and comfortable 59 degrees Fahrenheit, on average.

C. However, gas molecules, called greenhouse gases, which absorb thermal infrared radiation, are rising and this is what is altering the climate system. Carbon dioxide (CO₂) and other greenhouse gases act like a blanket, absorbing IR radiation and preventing it from escaping into outer space. The greenhouse effect, combined with increasing levels of greenhouse gases, produces climate change on a global scale, which is expected to have profound implications for all countries around the world.

D. Many scientists agree that the damage to the Earth's atmosphere and climate is past the point of no return or that the damage is near the point of no return. In Josef Werne's opinion, an associate professor at the department of geology & planetary science at the University of Pittsburgh told Live Science, we have three ways to move forward. Firstly to do nothing and live with the consequences. Secondly, to adapt to the changing climate (which includes things like rising sea level and related flooding protection).

Thirdly, mitigate the impact of climate change by aggressively enacting policies that actually reduce the concentration of CO₂ in the atmosphere.

14. Bài tập 14

Reading Passage: THE HISTORY OF PASTA

A. Worldwide, pasta has become synonymous with Italian cuisine. Italian immigrants themselves brought pasta everywhere they went. While it is true that the most famous varieties and recipes of cooking pasta really do come from Italy, surprisingly, the actual origin of pasta lies elsewhere!

B. One of the more popular theories of the arrival of pasta in Italy was published in the ‘Macaroni Journal’ by the Association of Food Industries. It states that pasta was brought to Italy by Marco Polo via China. Polo ventured to China in the time of the Yuan Dynasty (1271-1368) and the Chinese had been consuming noodles as early as 3000 B.C. in the Qinghai province. There is even some evidence there of 4,000-year-old noodles made from foxtail and broomcorn millet.

C. Unfortunately, there are problems with this theory, least of which is that the noodles they were making in China aren’t technically considered pasta. Polo also described Chinese noodles as being like “lagana”, which implies he was possibly already familiar with a pasta-like food before going to China. Further, in 1279, there was a Italian Genoese soldier that listed in the inventory of his estate a basket of dried pasta. However, Polo did not come back from China until 1295. Furthermore, the modern pasta we know today was first described in 1154 by an Arab geographer, Idrisi, as being common in Sicily. So Marco Polo could not have brought pasta to Italy via China. It was already in Italy at that time.

D. Most food historians believe that Arabs (specifically from Libya) are to be credited for bringing pasta, along with spinach, eggplant and sugar cane, to the Mediterranean. In the Talmud, written in Aramaic in the 5th century AD, there is a reference to pasta being cooked by boiling. It is thought, then, that pasta was introduced to Italy during the Arab conquests of Sicily in the 9th century AD, which had the interesting side effect of drastically influencing the region’s cuisine. It also known that by the 12th century, the Italians had learned from the Arabs methods for drying pasta to preserve it while traveling. Further support for this theory can be found by the fact that, in many old Sicilian pasta recipes, there are Arab gastronomic introductions. One example of cross cultural recipes is Barida, which is an old Arab recipe with Roman clear roots.

Choose the correct heading (I–VII) for paragraphs A, B, C and D in the passage above.

- | | |
|----|---------------------|
| I | A theory dismissed |
| II | Marco Polo in China |

- III Is pasta really a popular Italian dish?
- IV China is the origin of pasta
- V The real roots
- VI An Arab taste sensation
- VII The common belief of the origins of pasta
- VIII How about China?

15. Bài tập 15

PANGOLINS

A. Pangolins, often called “scaly anteaters,” are covered in tough, overlapping scales. These burrowing mammals eat ants and termites using an extraordinarily long, sticky tongue, and are able to quickly roll themselves up into a tight ball when threatened. Eight different pangolin species can be found across Asia and sub-Saharan Africa. Poaching for illegal wildlife trade and habitat loss have made these incredible creatures one of the most endangered groups of mammals in the world.

B. Pangolin species vary in size from about 1.6kg (~3.5 lbs) to a maximum of about 33kg (~73 lbs). They vary in color from light to yellowish brown through olive to dark brown. Protective, overlapping scales cover most of their bodies. These scales are made from keratin — the same protein that forms human hair and finger nails. Overlapping like artichoke leaves, the scales grow throughout the life of a pangolin just like hair; scale edges are constantly filed down as pangolins dig burrows and tunnel through the soil in search of termites and ants. Pangolin undersides do not have scales, and are covered with sparse fur. Unlike African pangolins, Asian pangolins also have thick bristles that emerge from between their scales. With small conical heads and jaws lacking teeth, pangolins have amazingly long, muscular, and sticky tongues that are perfect for reaching and lapping up ants and termites in deep cavities. Pangolins have poor vision, so they locate termite and ant nests with their strong sense of smell.

C. There are eight pangolin species. All pangolins belong to the genus *Manis* in the family Manidae, which is the only family within the order Pholidota. Pangolins’ closest living relatives are the Xenarthrans – anteaters, armadillos, and sloths.

D. Pangolins are found in a variety of habitats including tropical and flooded forests, thick brush, cleared and cultivated areas, and savannah grassland; in general they occur where large numbers of ants and termites are found. Asian pangolins in particular are threatened by loss of habitat due to expanding agriculture and other human uses. Pangolins dig deep burrows for sleeping and nesting that contain circular chambers. Large chambers have been discovered in terrestrial pangolin burrows that were big enough for a human to crawl inside and stand up. Some pangolin species such as the Malayan pangolin also sleep in the hollows and forks of trees and logs.

E. These solitary mammals are nocturnal and highly secretive, thus it is difficult for scientists to study them in the wild, and many mysteries remain about their habits. Some pangolin species such as the Chinese pangolin sleep in underground burrows during the day, and others including African tree pangolins and Malayan pangolins are known to sleep in trees. They emerge in the evening to forage for insects. Pangolins are well adapted for digging: they dig burrows with their strong front legs and claws, using their tails and rear legs for support and balance. Tunneling underground, they excavate the sides and roofs of passages by pushing up and from side to side with their tough scaled bodies. They use their front and hind feet to back accumulated soil toward the burrow entrance, and vigorously kick dirt out of the entrance up to a meter or more. Pangolin scales provide good defense against predators. When threatened, pangolins can quickly curl into a ball, protecting their defenseless undersides. They also deter predators by hissing and puffing, and lashing their sharp edged tails.

F. Pangolins live predominantly on a diet of ants and termites, which they may supplement with various other invertebrates including bee larvae, flies, worms, earthworms, and crickets. This specialist diet makes them extremely difficult to maintain in captivity—they often reject unfamiliar insect species or become ill when fed foreign food. Wild pangolins locate insect nests using a well developed sense of smell. Voraciously digging ants and termites from mounds, stumps, and fallen logs with their claws, they use their extremely long sticky tongues to capture and eat them.

G. Pangolins are hunted for food, for use in traditional medicine and as fashion accessories, and for a rampant illegal international trade in scales, skins, and meat. There is high demand for nearly all of their body parts, principally from China. The large-scale illegal trade in Asian pangolins is drastically driving down their numbers throughout Southeast Asia. Rapid

loss and deterioration of available habitat places added pressure on the dwindling numbers of remaining pangolins.

Matching Headings

Choose the correct heading from the list below (i – xi) for each of the above paragraphs (A–G).

- i) The Asian pangolin
- ii) Distribution and habitat
- iii) Pangolin behaviour
- iv) Taxonomy
- v) Pangolin burrows
- vi) The pangolin trade
- vii) Comparison of pangolin species
- viii) What is a pangolin?
- ix) Description of a pangolin
- x) Why pangolins are endangered
- xi) The pangolin diet

Questions 1–7

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

16. Bài tập 16

THE PHYSICS OF TRAFFIC BEHAVIOR

A Some years ago, when several theoretical physicists, principally Dirk Helbing and Boris Kerner of Stuttgart, Germany, began publishing papers on traffic flow in publications normally read by traffic engineers, they were clearly working outside their usual sphere of

investigation. They had noticed that if they simulated the movement of vehicles on a highway, using the equations that describe how the molecules of a gas move, some very strange results emerged. Of course, vehicles do not behave exactly like gas molecules: for example, drivers try to avoid collisions by slowing down when they get too near another vehicle, whereas gas molecules have no such concern. However, the physicists modified the equations to take the differences into account and their overall description of traffic as a flowing gas has proved to be a very good one; the moving-gas model of traffic reproduces many phenomena seen in real-world traffic.

The strangest thing that came out of these equations, however, was the implication that congestion can arise completely spontaneously; no external causes are necessary. Vehicles can be flowing freely along, at a density still well below what the road can handle, and then suddenly get into a slow-moving zone. Under the right conditions a brief and local fluctuation in the speed or the distance between vehicles is all it takes to trigger a system-wide breakdown that persists for hours. In fact, the physicists' analysis suggested such spontaneous breakdowns in traffic flow probably occur quite frequently on the highways.

B Though a decidedly unsettling discovery, this showed striking similarities to the phenomena popularized as 'chaos theory'. This theory has arisen from the understanding that in any complex interacting system which is made of many parts, each part affects the others. Consequently, tiny variations in one part of a complex system can grow in huge but unpredictable ways. This type of dramatic change from one state to another is similar to what happens when a chemical substance changes phase — as happens when water in a cloud remains a gas even after its temperature and density have reached the point where it could condense into water droplets. However, if the vapor encounters a solid surface, even something as small as a speck of dust, condensation can take place and the transition from vapor to liquid finally occurs. Helbing and Kerner see traffic as a complex interacting system. They found that small fluctuations in traffic density can act as the 'speck of dust' causing change from freely flowing traffic to synchronized traffic, when vehicles in all lanes abruptly slow down and start moving at the same speed, making passing impossible.

C The physicists have challenged proposals to set a maximum capacity for vehicles on highways. They believe that it may not be enough simply to limit the rate at which vehicles are allowed to enter a highway, rather, it may be necessary to time each vehicle's entry onto a highway precisely to coincide with a temporary drop in the density of vehicles along the road.

They believe that such timing may be more important than any possible fluctuations in the road conditions that can trigger a change in traffic behaviour and result in congestion. They further suggest that preventing traffic jams in the flow of traffic could ultimately require implementing the practical idea that has been suggested by traffic engineers: directly regulating the rate of entry of individual cars along a highway with central traffic computers and sensors that communicate with each car's engine and brake controls.

D However, research into traffic control is generally centered in civil engineering departments and here the theories of the physicists have been received with some skepticism. Civil engineers favor a practical approach to problems and believe traffic congestion is the result of poor road construction (two lanes becoming one lane or dangerous curves), which constricts the flow of traffic. Engineers questioned how well the physicists' theoretical results relate to traffic in the real world. Indeed, some engineering researchers questioned whether elaborate chaos-theory interpretations are needed at all, since at least some of the traffic phenomena the physicists' theories predicted seemed to be similar to observations that had been appearing in traffic engineering literature under other names for years; observations which had straightforward cause-and-effect explanations.

E James Banks, a professor of civil and environmental engineering at San Diego State University in the US, suggested that a sudden slowdown in traffic may have less to do with chaos theory than with driver psychology. As traffic gets heavier and the passing lane gets more crowded, aggressive drivers move to other lanes to try to pass, which also tends to even out the speed between lanes. He also felt that another leveling force is that when a driver in a fast lane brakes a little to maintain a safe distance between vehicles, the shock wave travels back much more rapidly than it would in the other slower lanes, because each following driver has to react more quickly. Consequently, as a road becomes congested, the faster moving traffic is the first to slow down.

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

Write the correct number, i–viii, in boxes 1–4 on your answer sheet.

List of Headings

- | |
|---|
| <p>i Dramatic effects can result from small changes in traffic just as in nature</p> <p>ii How a maths experiment actually reduced traffic congestion</p> |
|---|

- iii How a concept from one field of study was applied in another
- iv A lack of investment in driver training
- v Areas of doubt and disagreement between experts
- vi How different countries have dealt with traffic congestion
- vii The impact of driver behaviour on traffic speed
- viii A proposal to take control away from the driver

Example: Section B i

- 1 Section A
- 2 Section C
- 3 Section D
- 4 Section E

17. Bài tập 17

A BAR AT THE FOLIES

A One of the most critically renowned paintings of the 19th-century modernist movement is the French painter Edouard Manet's masterwork, *A Bar at the Folies*. Originally belonging to the composer Emmanuel Chabrier, it is now in the possession of The Courtauld Gallery in London, where it has also become a favourite with the crowds.

B The painting is set late at night in a nineteenth-century Parisian nightclub. A barmaid stands alone behind her bar, fitted out in a black bodice that has a frilly white neckline, and with a spray of flowers sitting across her décolletage. She rests her hands on the bar and gazes out forlornly at a point just below the viewer, not quite making eye contact. Also on the bar are some bottles of liquor and a bowl of oranges, but much of the activity in the room takes place in the reflection of a mirror behind the barmaid. Through this mirror we see an auditorium, bustling with blurred figures and faces: men in top hats, a woman examining the scene below her through binoculars, another in long gloves, even the feet of a trapeze artist demonstrating acrobatic feats above his adoring crowd. In the foreground of the reflection a man with a thick moustache is talking with the barmaid.

C Although the Folies (-Bergère) was an actual establishment in late nineteenth-century Paris, and the subject of the painting was a real barmaid who worked there, Manet did not attempt to recapture every detail of the bar in his rendition. The painting was largely completed in a private studio belonging to the painter, where the barmaid posed with a number of bottles, and this was then integrated with quick sketches the artist made at the Folies itself.

D Even more confounding than Manet's relaxed attention to detail, however, is the relationship in the painting between the activity in the mirrored reflection and that which we see in the unreflected foreground. In a similar vein to Diego Velazquez' much earlier work Las Meninas, Manet uses the mirror to toy with our ideas about which details are true to life and which are not. In the foreground, for example, the barmaid is positioned upright, her face betraying an expression of lonely detachment, yet in the mirrored reflection she appears to be leaning forward and to the side, apparently engaging in conversation with her moustachioed customer. As a result of this, the customer's stance is also altered. In the mirror, he should be blocked from view as a result of where the barmaid is standing, yet Manet has re-positioned him to the side. The overall impact on the viewer is one of a dreamlike disjuncture between reality and illusion.

E Why would Manet engage in such deceit? Perhaps for that very reason: to depict two different states of mind or emotion. Manet seems to be conveying his understanding of the modern workplace, a place – from his perspective – of alienation, where workers felt torn from their 'true' selves and forced to assume an artificial working identity. What we see in the mirrored reflection is the barmaid's working self, busy serving a customer. The front-on view, however, bears witness to how the barmaid truly feels at work: hopeless, adrift, and alone.

F Ever since its debut at the Paris Salon of 1882, art historians have produced reams of books and journal articles disputing the positioning of the barmaid and patron in A Bar at the Folies. Some have even conducted staged representations of the painting in order to ascertain whether Manet's seemingly distorted point of view might have been possible after all. Yet while academics are understandably drawn to the compositional enigma of the painting, the layperson is always likely to see the much simpler, more human story beneath. No doubt this is the way Manet would have wanted it.

Questions: Reading Passage 1 has six paragraphs, A–F.

Which paragraph contains the following information?

Write the correct letter, A–F, in boxes 1–5 on your answer sheet.

1. a description of how Manet created the painting
2. aspects of the painting that scholars are most interested in
3. the writer's view of the idea that Manet wants to communicate
4. examples to show why the bar scene is unrealistic
5. a statement about the popularity of the painting

18. Bài tập 18

ELECTRORECEPTION

A. Open your eyes in sea water and it is difficult to see much more than a murky, bleary green colour. Sounds, too, are garbled and difficult to comprehend. Without specialised equipment humans would be lost in these deep sea habitats, so how do fish make it seem so easy? Much of this is due to a biological phenomenon known as electroreception – the ability to perceive and act upon electrical stimuli as part of the overall senses. This ability is only found in aquatic or amphibious species because water is an efficient conductor of electricity.

B. Electroreception comes in two variants. While all animals (including humans) generate electric signals, because they are emitted by the nervous system, some animals have the ability – known as passive electroreception – to receive and decode electric signals generated by other animals in order to sense their location.

C. Other creatures can go further still, however. Animals with active electroreception possess bodily organs that generate special electric signals on cue. These can be used for mating signals and territorial displays as well as locating objects in the water. Active electroreceptors can differentiate between the various resistances that their electrical currents encounter. This can help them identify whether another creature is prey, predator or something that is best left alone. Active electroreception has a range of about one body length – usually just enough to give its host time to get out of the way or go in for the kill.

D. One fascinating use of active electroreception – known as the Jamming Avoidance Response mechanism – has been observed between members of some species known as the

weakly electric fish. When two such electric fish meet in the ocean using the same frequency, each fish will then shift the frequency of its discharge so that they are transmitting on different frequencies. Doing so prevents their electroreception faculties from becoming jammed. Long before citizens' band radio users first had to yell "Get off my frequency!" at hapless novices cluttering the air waves, at least one species had found a way to peacefully and quickly resolve this type of dispute.

E. Electroreception can also play an important role in animal defences. Rays are one such example. Young ray embryos develop inside egg cases that are attached to the sea bed. The embryos keep their tails in constant motion so as to pump water and allow them to breathe through the egg's casing. If the embryo's electroreceptors detect the presence of a predatory fish in the vicinity, however, the embryo stops moving (and in so doing ceases transmitting electric currents) until the fish has moved on. Because marine life of various types is often travelling past, the embryo has evolved only to react to signals that are characteristic of the respiratory movements of potential predators such as sharks.

F. Many people fear swimming in the ocean because of sharks. In some respects, this concern is well grounded – humans are poorly equipped when it comes to electroreceptive defence mechanisms. Sharks, meanwhile, hunt with extraordinary precision. They initially lock onto their prey through a keen sense of smell (two thirds of a shark's brain is devoted entirely to its olfactory organs). As the shark reaches proximity to its prey, it tunes into electric signals that ensure a precise strike on its target; this sense is so strong that the shark even attacks blind by letting its eyes recede for protection.

G. Normally, when humans are attacked it is purely by accident. Since sharks cannot detect from electroreception whether or not something will satisfy their tastes, they tend to "try before they buy", taking one or two bites and then assessing the results (our sinewy muscle does not compare well with plumper, softer prey such as seals). Repeat attacks are highly likely once a human is bleeding, however; the force of the electric field is heightened by salt in the blood which creates the perfect setting for a feeding frenzy. In areas where shark attacks on humans are likely to occur, scientists are exploring ways to create artificial electroreceptors that would disorient the sharks and repel them from swimming beaches.

H. There is much that we do not yet know concerning how electroreception functions. Although researchers have documented how electroreception alters hunting, defence and communication systems through observation, the exact neurological processes that encode

and decode this information are unclear. Scientists are also exploring the role electroreception plays in navigation. Some have proposed that salt water and magnetic fields from the Earth's core may interact to form electrical currents that sharks use for migratory purposes.

Question: Reading Passage 1 has eight paragraphs, A–H.

Which paragraph contains the following information?

Write the correct letter, A–H, in boxes 1–6 on your answer sheet.

1. how electroreception can be used to help fish reproduce
2. a possible use for electroreception that will benefit humans
3. the term for the capacity which enables an animal to pick up but not send out electrical signals
4. why only creatures that live in or near water have electroreceptive abilities
5. how electroreception might help creatures find their way over long distances
6. a description of how some fish can avoid disrupting each other's electric signals

19. Bài tập 19

UK COMPANIES NEED MORE EFFECTIVE BOARDS OF DIRECTORS

A. After a number of serious failures of governance (that is, how they are managed at the highest level), companies in Britain, as well as elsewhere, should consider radical changes to their directors' roles. It is clear that the role of a board director today is not an easy one. Following the 2008 financial meltdown, which resulted in a deeper and more prolonged period of economic downturn than anyone expected, the search for explanations in the many post-mortems of the crisis has meant blame has been spread far and wide. Governments, regulators, central banks and auditors have all been in the frame. The role of bank directors and management and their widely publicised failures have been extensively picked over and examined in reports, inquiries and commentaries.

B. The knock-on effect of this scrutiny has been to make the governance of companies in general an issue of intense public debate and has significantly increased the pressures on, and the responsibilities of, directors. At the simplest and most practical level, the time involved in fulfilling the demands of a board directorship has increased significantly, calling into question the effectiveness of the classic model of corporate governance by part-time, independent non-executive directors. Where once a board schedule may have consisted of

between eight and ten meetings a year, in many companies the number of events requiring board input and decisions has dramatically risen. Furthermore, the amount of reading and preparation required for each meeting is increasing. Agendas can become overloaded and this can mean the time for constructive debate must necessarily be restricted in favour of getting through the business.

C. Often, board business is devolved to committees in order to cope with the workload, which may be more efficient but can mean that the board as a whole is less involved in fully addressing some of the most important issues. It is not uncommon for the audit committee meeting to last longer than the main board meeting itself. Process may take the place of discussion and be at the expense of real collaboration, so that boxes are ticked rather than issues tackled.

D. A radical solution, which may work for some very large companies whose businesses are extensive and complex, is the professional board, whose members would work up to three or four days a week, supported by their own dedicated staff and advisers. There are obvious risks to this and it would be important to establish clear guidelines for such a board to ensure that it did not step on the toes of management by becoming too engaged in the day-to-day running of the company. Problems of recruitment, remuneration and independence could also arise and this structure would not be appropriate for all companies. However, more professional and better-informed boards would have been particularly appropriate for banks where the executives had access to information that parttime non-executive directors lacked, leaving the latter unable to comprehend or anticipate the 2008 crash.

E. One of the main criticisms of boards and their directors is that they do not focus sufficiently on longer-term matters of strategy, sustainability and governance, but instead concentrate too much on short-term financial metrics. Regulatory requirements and the structure of the market encourage this behaviour. The tyranny of quarterly reporting can distort board decision-making, as directors have to ‘make the numbers’ every four months to meet the insatiable appetite of the market for more data. This serves to encourage the trading methodology of a certain kind of investor who moves in and out of a stock without engaging in constructive dialogue with the company about strategy or performance, and is simply seeking a short-term financial gain. This effect has been made worse by the changing profile of investors due to the globalisation of capital and the increasing use of automated trading systems. Corporate culture adapts and management teams are largely incentivised to meet financial goals.

F. Compensation for chief executives has become a combat zone where pitched battles between investors, management and board members are fought, often behind closed doors but increasingly frequently in the full glare of press attention. Many would argue that this is in the interest of transparency and good governance as shareholders use their muscle in the area of pay to pressure boards to remove underperforming chief executives. Their powers to vote down executive remuneration policies increased when binding votes came into force. The chair of the remuneration committee can be an exposed and lonely role, as Alison Carnwath, chair of Barclays Bank's remuneration committee, found when she had to resign, having been roundly criticised for trying to defend the enormous bonus to be paid to the chief executive; the irony being that she was widely understood to have spoken out against it in the privacy of the committee.

G. The financial crisis stimulated a debate about the role and purpose of the company and a heightened awareness of corporate ethics. Trust in the corporation has been eroded and academics such as Michael Sandel, in his thoughtful and bestselling book *What Money Can't Buy*, are questioning the morality of capitalism and the market economy. Boards of companies in all sectors will need to widen their perspective to encompass these issues and this may involve a realignment of corporate goals. We live in challenging times.

Question 1 -7

Reading Passage has seven paragraphs, A-G. Choose the correct heading for each paragraph from the list of headings below. Write the correct number, i-viii.

List of Headings

- i. Disputes over financial arrangements regarding senior managers
- ii. The impact on companies of being subjected to close examination
- iii. The possible need for fundamental change in every area of business
- iv. Many external bodies being held responsible for problems
- v. The falling number of board members with broad enough experience
- vi. A risk that not all directors take part in solving major problems
- vii. Boards not looking far enough ahead
- viii. A proposal to change the way the board operates

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

20. Bài tập 20

Miles Davis - Icon and iconoclast

An iconoclast is somebody who challenges traditional beliefs or customs

A At the age of thirteen, Miles Davis was given his first trumpet, lessons were arranged with a local trumpet player, and a musical odyssey began. These early lessons, paid for and supported by his father, had a profound effect on shaping Davis' signature sound. Whereas most trumpeters of the era favoured the use of vibrato (a wobbly quiver in pitch inflected in the instrument's tone), Davis was taught to play with a long, straight tone, a preference his instructor reportedly drilled into the young trumpeter with a rap on the knuckles every time Davis began using vibrato. This clear, distinctive style never left Davis. He continued playing with it for the rest of his career, once remarking, 'If I can't get that sound, I can't play anything.'

B Having graduated from high school in 1944, Davis moved to New York City, where he continued his musical education both in the clubs and in the classroom. His enrolment in the prestigious Julliard School of Music was short-lived, however – he soon dropped out, criticising what he perceived as an over-emphasis on the classical European repertoire and a neglect of jazz. Davis did later acknowledge, however, that this time at the school was invaluable in terms of developing his trumpet-playing technique and giving him a solid grounding in music theory. Much of his early training took place in the form of jam sessions and performances in the clubs of 52nd Street, where he played alongside both up-and-coming and established members of the jazz pantheon such as Coleman Hawkins, Eddie 'Lockjaw' Davis, and Thelonious Monk.

C In the late 1940s, Davis collaborated with nine other instrumentalists, including a French horn and a tuba player, to produce *The Birth of Cool*, an album now renowned for the inchoate sounds of what would later become known as ‘cool’ jazz. In contrast to popular jazz styles of the day, which featured rapid, rollicking beats, shrieking vocals, and short, sharp horn blasts, Davis’ album was the forerunner of a different kind of sound – thin, light horn-playing, hushed drums and a more restrained, formal arrangement. Although it received little acclaim at the time (the liner notes to one of Davis’ later recordings call it a ‘spectacular failure’), in hindsight *The Birth of Cool* has become recognised as a pivotal moment in jazz history, cementing – alongside his 1958 recording, *Kind of Blue* – Davis’ legacy as one of the most innovative musicians of his era.

D Though Davis’ trumpet playing may have sounded effortless and breezy, this ease rarely carried over into the rest of his life. The early 1950s, in particular, were a time of great personal turmoil. After returning from a stint in Paris, Davis suffered from prolonged depression, which he attributed to the unravelling of a number of relationships, including his romance with a French actress and some musical partnerships that ruptured as a result of creative disputes. Davis was also frustrated by his perception that he had been overlooked by the music critics, who were hailing the success of his collaborators and descendants in the ‘cool’ tradition, such as Gerry Mulligan and Dave Brubeck, but who afforded him little credit for introducing the cool sound in the first place.

E In the latter decades of his career, Davis broke out of exclusive jazz settings and began to diversify his output across a range of musical styles. In the 1960s, he was influenced by early funk performers such as Sly and the Family Stone, which then expanded into the jazz-rock fusion genre – of which he was a frontrunner – in the 1970s. Electronic recording effects and electric instruments were incorporated into his sound. By the 1980s, Davis was pushing the boundaries further, covering pop anthems such as Cyndi Lauper’s *Time After Time* and Michael Jackson’s *Human Nature*, dabbling in hip hop, and even appearing in some movies.

F Not everyone was supportive of Davis’ change of tune. Compared to the recordings of his early career, universally applauded as linchpins of the jazz oeuvre, trumpeter Wynton Marsalis derided his fusion work as being ‘not true jazz’, and pianist Bill Evans denounced the ‘corrupting influence’ of record companies, noting that rock and pop ‘draw wider audiences’. In the face of this criticism Davis remained defiant, commenting that his earlier recordings were part of a moment in time that he had no ‘feel’ for any more. He firmly believed that remaining stylistically inert would have hampered his ability to develop new

ways of producing music. From this perspective, Davis' continual revamping of genre was not merely a rebellion, but an evolution, a necessary path that allowed him to release his full musical potential.

Question: Reading Passage 2 has six paragraphs, A–F.

Choose the correct heading for paragraphs A–F from the list of headings below. Write the correct number, i–ix, in the space given for questions 1–6.

List of Headings

- i. A legacy is established
- ii. Formal education unhelpful
- iii. An education in two parts
- iv. Branching out in new directions
- v. Childhood and family life
- vi. Change necessary to stay creative
- vii. Conflicted opinions over Davis' earlier work
- viii. Davis' unique style of trumpet playing
- ix. Personal and professional struggles

- 1. Paragraph A _____
- 2. Paragraph B _____
- 3. Paragraph C _____
- 4. Paragraph D _____
- 5. Paragraph E _____
- 6. Paragraph F _____

ĐÁP ÁN

Bài tập 1: LAST MAN STANDING

1D

2E

3A

4G

5C

Bài tập 2: OUT OF AFRICA: SOLAR ENERGY FROM THE SAHARA

1E

2B

3G

4A

5E

Bài tập 3: THE BURDEN OF THIRST

A, C

Bài tập 4: LEARNING COLOR WORDS (Questions 10-13)

Questions 10-11: A, C

Questions 12-13: C, D

Bài tập 5: ORGANIC FOOD: WHY? (Questions 8-13)

Questions 8-9: B, E

Questions 10-11: B, D

Questions 12-13: E, A

Bài tập 6: HUMPBACK WHALE BREAKS MIGRATION RECORD (Questions 1-7)

1. B, C

2. C, E

3. A, E

4. A, E

5. B, D

6. A, D

7. B, E

Bài tập 7: THE TRUTH ABOUT LYING (Paragraph Headings)

1. Paragraph A — vi. Do only humans lie?
2. Paragraph B — ii. When do we begin to lie?
3. Paragraph C — viii. A public test of our ability to spot a lie
4. Paragraph D — iv. Exposing some false beliefs
5. Paragraph E — i. Some of the things liars really do
6. Paragraph F — v. Which form of communication best exposes a lie?

Bài tập 8: THE BURDEN OF THIRST (Paragraph Headings)

1. Paragraph A — vi. A regular trip for some people
2. Paragraph B — v. Some relevant statistics
3. Paragraph C — viii. How water can change people's lives
4. Paragraph D — i. Why some plans have failed
5. Paragraph E — iv. Explaining a new management style
6. Paragraph F — iii. A possible success

Bài tập 9: THE IMPACT OF TECHNOLOGY ON EDUCATION

1. Paragraph A — Breaking Geographical Barriers (Technology increases accessibility worldwide.)
2. Paragraph B — Customized Learning (Personalized learning through adaptive platforms.)
3. Paragraph C — Interactive Educational Tools (Apps, simulations, virtual reality making learning engaging.)
4. Paragraph D — Enhanced Communication in Education (Improved communication and collaboration via online platforms.)
5. Paragraph E — Real-world Application of Knowledge (Virtual simulations help apply theory to practice.)
6. Paragraph F — Fostering Global Learning Communities (Internet enables cultural exchange and global perspectives.)

7. Paragraph G — Concerns and Challenges (Digital divide, privacy, teacher training issues.)

Bài tập 10: GOOD FOR YOU OR NOT GOOD FOR YOU? THAT IS THE QUESTION

- | | | | |
|----------------|------|----------------|-----|
| 1. Paragraph C | i | 4. Paragraph G | x |
| 2. Paragraph D | viii | 5. Paragraph H | iii |
| 3. Paragraph E | v | | |

Bài tập 11: CLIMATE CHANGE AND THE INUIT

- | | | | | | |
|---|----|---|-----|---|----|
| 1 | i | 3 | iii | 5 | iv |
| 2 | vi | 4 | vii | 6 | ii |

Bài tập 12

Section A — v

Section B — vii

Section C — ii

Section D — iv

Section F — i

Bài tập 13: THE GREENHOUSE EFFECT

1. *Paragraph A = II*

- The answer can't be **IV**. The paragraph did contain information about how the greenhouse was used, such as growing vegetables. But that information was not the main aim of the paragraph, it was additional information. If the aim was about its uses, there would be more information about using it for various purposes – but that isn't the aim.
- The answer can't be **I** about Changing Temperatures. Although there is a lot of mention of temperatures it is only to illustrate how the green house works. The aim isn't to discuss temperatures and how they change.
- The paragraph actually talked about what it was made of, what it was used for and how it works. The best title would be "The greenhouse" because it gave a clear overview of it.

2. *Paragraph B = VI*

- The answer isn't **I** because the paragraph actually explains that this natural effect keeps the temperature of Earth stable
- The answer is **VI** which explains how Earth's atmosphere works to keep our planet at a stable temperature.

3. *Paragraph C = III*

- The answer isn't **VIII** (Effects of carbon dioxide) because the paragraph isn't not aimed at explaining carbon dioxide and in fact only mentions it alongside other greenhouse gases.
- The answer isn't **IX** (Effects of carbon dioxide) because although climates are affected around the world, the whole paragraph aim isn't to discuss climates in different countries.

4. *Paragraph D = VII*

- The answer isn't **V** because the paragraph doesn't actually discuss Werne's research (which means how he did his studies and the problems with his studies), but rather his opinion's about what options we have to deal with our changing climate.

Bài tập 14: THE HISTORY OF PASTA

1. Paragraph A = VII
2. Paragraph B = VIII
3. Paragraph C = I
4. Paragraph C = V

Bài tập 15: PANGOLINS

Paragraph A viii

Paragraph B ix

Paragraph C iv

Paragraph D ii

Paragraph E iii

Paragraph F xi

Paragraph G x

Bài tập 16: THE PHYSICS OF TRAFFIC BEHAVIOR

- 1 Section A - iii. How a concept from one field of study was applied in another
- 2 Section B - viii. A proposal to take control away from the driver
- 3 Section C - v. Areas of doubt and disagreement between experts
- 4 Section D - vii. The impact of driver behavior on traffic speed

Bài tập 17: A BAR AT THE FOLIES

- 1 C (Explains how Manet created the painting in his studio and later added sketches from the Folies.)
- 2 F (Discusses scholars' interest in the painting's compositional details.)
- 3 E (Describes the writer's interpretation of Manet's message about workers' emotions.)
- 4 D (Gives examples of inconsistencies between the foreground and mirror reflection.)
- 5 A (Mentions the painting's critical fame and popularity.)

Bài tập 18: ELECTRORECEPTION

- | | |
|-----|-----|
| 1 C | 4 A |
| 2 G | 5 H |
| 3 B | 6 D |

Bài tập 19: UK COMPANIES NEED MORE EFFECTIVE BOARDS OF DIRECTORS

1. iv Paragraph A
2. ii Paragraph B
3. vi Paragraph C
4. viii Paragraph D
5. vii Paragraph E
6. i Paragraph F
7. iii Paragraph G

Bài tập 20: MILE DAVIS - ICON AND ICONOCLAST

1. Paragraph A viii
2. Paragraph B iii
3. Paragraph C i
4. Paragraph D ix
5. Paragraph E iv
6. Paragraph F vi