

菠萝雅思阅读 7 月 passage1 补丁

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一、美国西部尘埃 (Dust and the American West)

A Images of deserts in the United States show dusty, barren landscapes, but the land may not always have been this way. Ever since settlers moved west across the US, there has been dust, clouds of it, everywhere. It was part of the landscape, or so it seemed to them. But there were no records of the landscape of the West until the settlers arrived. Now, evidence is starting to emerge which suggests that before the settlers, there was very little dust.

B The evidence comes from the San Juan Mountains of southwest Colorado, downwind of Arizona and New Mexico. There, Jason Neff, a geochemist from the University of Colorado, has been analyzing sediments, the sand, stones and mud,

laid down over the past 5,000 years. Atmospheric dust was minimal throughout those five millennia until the mid-19th century, he says, but then, from about 1860 to 1900, dust deposition rates shot up.

C This is surprising because usually dry means dusty, and the American West has almost always been dry, often drier than today. There was a near-permanent drought between 900 and 1300 which was so intense that it destroyed a series of Native American civilizations, including the Anasazi, whose cliff homes are now US national treasures. Yet the evidence from the San Juan lakes is that it was not dusty. Even as their civilization was collapsing, the Anasazi seem to have protected their soils from erosion.

D This was not the case with the European settlers once they brought their cows. The landscape the cattle were introduced to was remarkably ill-equipped to cope with grazing animals, says Neff. Unlike most other parts of the US, there were few grazers in the American Southwest until the Europeans came. No bison and few antelope or deer.

E In the Great Plains to the east and north, bison roamed in vast herds. Their regular grazing had created tough grass, while the herds manured the soil. In the Southwest, the land had few defenses against a sudden invasion of millions of livestock, whose teeth stripped the grass and whose hooves punctured the hard crust of desert soils that protected them from the wind. The invasion was sudden, funded by a bubble of speculative investment, much of it from Britain. The money went into railroads and herds of cattle and sheep that rode the rails to the wide open pastures. By 1900, when sedimentation rates peaked, there were 20 million cattle and 25 million sheep in the West.

F One of the biggest ranches was owned by the Aztec Land and Cattle Company, which owned a million acres of land by 1884. Each acre had cost the company a mere 50 cents, and like many other speculators, it was only interested in quick profits and had little incentive to protect the soils from overgrazing. By the time Aztec sold the ranch in 1901, it was barren, with cattle carcasses scattered across the exhausted land. Such was the damage to the grasslands that even now few of the pastures have recovered. The parched and exposed soil simply blew away. The 1862 Homestead Act was passed in order to encourage the populating of the West. Any family willing to make the journey was entitled to claim 160 acres and farm it. Yet by the time people moved west in large numbers, the cattle companies had taken most of the land and surrounded it with barbed wire. The water sources were therefore cut off, and were aggressively guarded. It was only in the 1930s, with the passage of the Taylor Grazing Act, that federal authorities finally sought to limit cattle herds.

G Soil scientists have known for a while about the importance of the hard crust that forms on arid soils. "These crusts can survive winds of up to a hundred miles an hour, but cattle hooves break the crust," says Jayne Belnap, a soil ecologist at the US Geological Survey, Utah. The scale of the dust clouds created by the livestock invasion has until now been largely unknown. When Neff first discovered dust in Colorado lake sediments laid down in the 19th century, he was initially unsure where

it came from. Maybe it had crossed the Pacific from China's Gobi Desert.

H But after investigating the size and chemical composition of the dust, Neff was clear that it mostly came from the American Southwest, mainly Arizona and New Mexico. Now, with the soil crusts gone, dust clouds still head north and are having significant ecological effects in the Colorado mountains. They carry nutrients with them into areas which previously evolved and survived without them. But perhaps the most dramatic impact of the dust has been on snowfields in the Rocky Mountain Range. Even a thin sprinkling of dark material means snow absorbs more solar radiation, meaning that snowmelt occurs far more rapidly during springtime. The impact on the ski tourism industry is obvious.

I The loss of snow and the shrinking of glaciers across the American West in the past century have been dramatic. Glacier National Park in Montana, for example, has lost three-quarters of its snow cover since 1910. All this is frequently attributed to global warming. While this almost certainly plays a role, Neff's findings suggest that dust may also contribute.

Questions 1-7

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

In boxes 1-7 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. Jason Neff discovered there had been a dramatic rise in dust levels in the second half of the nineteenth century.

2. The Anasazi civilization disappeared due to the impact of dust in the atmosphere.

3. Before cattle were introduced to the American Southwest, large numbers of bison occupied the area.

4. The bison population in the Great Plains diminished because European settlers found it easy to hunt them.

5. The development of railroads across the US was more expensive than originally expected.

6. The Aztec Land and Cattle Company worked hard to take care of the grazing land it owned.

7. Most of the land once owned by the Aztec Land and Cattle Company remains infertile today.

Questions 8-13

Complete the notes below.

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

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

American Southwest: 1860s to present day

1862 — Homestead Act was passed to encourage settlement in the West.

1930s — Laws were passed to control the size of 8.....

Today Jayne Belnap believes:

soil was not affected by high 9.....

soil was seriously affected by cattle hooves.

Jason Neff:

found that 10..... in the Colorado region contained dust

examined the dust for its chemical content as well as its 11.....

concluded that the dust was from the American Southwest

found that dust affects mountain environments by bringing in 12..... that are not normally found there, causing faster seasonal snowmelt

argues that dust is partly to blame for the gradual disappearance of some 13..... and snow.

答案

Question 1: TRUE

Question 2: FALSE

Question 3: FALSE

Question 4: NOT GIVEN

Question 5: NOT GIVEN

Question 6: FALSE

Question 7: TRUE

Question 8: cattle herds

Question 9: winds

Question 10: lake sediments

Question 11: size

Question 12: nutrients

Question 13: glaciers

二、恐龙脚印 (Footprints in the Mud)

A Everybody knows that the dinosaurs became extinct as a result of a large asteroid; something big hit the Earth 65 million years ago and, when the dust had fallen, so had the great reptiles. There is thus a nice, if ironic, symmetry in the idea that a similar impact brought about the dinosaurs' rise. That is the thesis proposed by Paul Olsen of Columbia University.

B Dinosaurs first appear in the fossil record 230 million years ago, during the Triassic period. But they were mostly small, and they shared the Earth with lots of other sorts of reptile. It was in the subsequent Jurassic period, which began 202 million years ago, that they overran the planet and turned into the monsters realistically depicted in modern books and movies. Dr Olsen and his colleagues are not the first to suggest that the dinosaurs inherited the Earth as the result of an asteroid strike. But they are the first to show that the takeover did, indeed, happen in a geological eye-blink.

C Dinosaur skeletons are rare. Dinosaur footprints are, however, surprisingly abundant. And the size of the prints is as good an indication of the size of the beasts as are the skeletons themselves. Dr Olsen and his colleagues therefore concentrated on prints, not bones. The prints in question were made in Eastern North America, a part of the world then full of rift valleys similar to those in East Africa today. Like the modern African rift valleys, the Triassic/Jurassic American ones contained lakes, and these lakes grew and shrank at regular intervals because of climatic changes. Rocks from this place and period can be dated to within a few thousand years. As a bonus, squishy lake-edge sediments are just the things for recording the tracks of passing animals.

D By dividing the labour between them, the research team were able to study such tracks at 80 sites and look at 18 so-called 'ichnotaxa'. These are recognisable types of footprint that cannot be matched precisely within the species of animal that left them. But they can be matched with a general sort of animal, and thus act as an indicator of the fate of that group, even when there are no bones to tell the story.

E Their findings show that five of the ichnotaxa disappear before the end of the Triassic, and four march confidently across the boundary into the Jurassic. Six, however, vanish at the boundary, or only just splutter across it; and three appear from nowhere, almost as soon as the Jurassic begins. That boundary itself is suggestive. The first geological indication of the impact that killed the dinosaurs was an unusually high level of iridium in rocks at the end of the Cretaceous period, when the beasts disappear from the fossil record. Iridium is normally rare at the Earth's surface, but it is more abundant in meteorites. When people began to believe the impact theory, they started looking for other Cretaceous-end anomalies. One that turned up was a surprising abundance of fern spores in rocks just above the boundary layer - a phenomenon known as the 'fern spike'.

F That matched the theory nicely. Many modern ferns are opportunists. They cannot compete against plants with leaves, but if a piece of land is cleared by, say, a volcanic eruption, they are often the first things to set up shop there. An asteroid strike would have scoured much of the Earth of its vegetable cover, and provided a paradise for ferns. A fern spike in the rocks is thus a good indication that something terrible has happened.

G The surprises are how rapidly the new ichnotaxa appeared and how quickly they increased in size. Dr Olsen and his colleagues suggest that the explanation for this may be a phenomenon called ecological release. This is seen today when reptiles (which in modern times tend to be small creatures) reach islands where they face no competitors. The most spectacular example is on the Indonesian island of Komodo, where local lizards have grown so large that they are often referred to as dragons. The dinosaurs, in other words, could flourish only when the competition had been knocked out.

H That leaves the question of where the impact happened. No large hole in the Earth's crust seems to be 202 million years old. It may, of course, have been overlooked. Old craters are eroded and buried, and not always easy to find. Alternatively, it may have vanished. Although continental crust is more or less permanent, the ocean floor is constantly recycled by the tectonic processes that bring about continental drift. There is no ocean floor left that is more than 200 million years old, so a crater that formed in the ocean would have been swallowed up by now.

I There is a third possibility, however. This is that the crater is known, but has been misdated. The Manicouagan 'structure', a crater in Quebec, is thought to be 214 million years old. It is huge - some 100 kilometres across - and seems to be the largest of between three and five craters that formed within a few hours of each other as the lumps of disintegrated comet hit the Earth one by one. Such an impact would surely have had a perceptible effect on the world, but the rocks from 214 million years ago do not record one. It is possible, therefore, that Manicouagan has been misdated. That will be the next thing to check.

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1?
In boxes 1-6 on your answer sheet, write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. There is still doubt about the theory that an asteroid strike killed the dinosaurs.
2. Books and the cinema have exaggerated the size of dinosaurs.
3. Other scientists have rejected Olsen's idea of a sudden dinosaur occupation of the Earth.
4. Dinosaur footprints are found more frequently than dinosaur skeletons.
5. Ichnotaxa offer an exact identification of a dinosaur species.
6. There is evidence that some groups of dinosaurs survived from the Triassic period into the Jurassic period.

Questions 7-13

Complete the summary below.

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

Write your answers in boxes 7-13 on your answer sheet.

Dr Olsen's group believe that the sudden increase in the size of dinosaurs may have been due to something known as 7..... A current example of this can be found on Komodo Island in Indonesia, where some of the lizards are commonly called 8..... because of their size. Apparently, they have grown this big because they do not have any 9..... The asteroid strike that may have cleared the way for dinosaurs to become the dominant group probably occurred 202 million years ago.

According to the writer, there are three possible reasons why we have not found a large hole in the Earth's crust dating back 202 million years. First, it may have been 10..... by scientists, because craters are easily covered up. Or, it could have 11..... ; for example, if the hole had been in the ocean, it would no longer exist because of the 12..... that produce continental drift. Thirdly, the hole could still exist but have been 13.....

答案

Question 1: FALSE

Question 2: FALSE

Question 3: NOT GIVEN

Question 4: TRUE

Question 5: FALSE

Question 6: TRUE

Question 7: ecological release

Question 8: dragons

Question 9: competitors

Question 10: overlooked

Question 11: vanished

Question 12: tectonic processes

Question 13: misdated

三、好创意为何失败 (Why good ideas fail)

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

Why good ideas fail

As part of a marketing course, two marketing experts comment on a hypothetical case study involving TF, a fictional retail giant specializing in home furnishing. The experts give concrete solutions and advice to assist students.

Hypothetical case study:

TF became a retail success in the 1970s when it succeeded in spotting homeware trends and meeting the needs of its then trendy young customers. However, by 2004, the TF stores were failing and a rethink was clearly necessary. Tibal Fisher, TF's founder and CEO, decided to change its focus under a new brand name, TF's Nextstage. His aim was to recapture the now ageing customers that had given him his early success and target consumers aged 60+ with devices and gadgets specifically designed to assist them with the problems associated with ageing: mobile phones with screens that were easy to read; kitchen gadgets with comfortable grips; electronic devices that were easy to set and adjust. TF's market research proved to be very positive, showing strong consumer support for the products.

In 2007, the stores were remodelled at a cost of US \$40 million, and the new brand was launched. Each store was made more comfortable and featured a coffee shop to help increase traffic. Tibal had predicted that if they could get customers into the stores, then the products would sell themselves. However, by 2009 it was clear that the idea was a failure, and the stores consistently remained empty. Customers complained that the new stores felt like a senior centre and reminded them that they were growing old.

Feedback from experts:

Expert 1: Donna Sturgess, global head of innovation, GlaxoSmithKline

The team's customer research efforts are a classic case of missing the subconscious associations at work in consumers' minds. Tibal and his executives looked only at surface attitudes. Since those attitudes make up a relatively small part of the total consumer response, the executives are clueless about the reason for the poor sales. It's critical for companies to understand that every customer relates to a brand emotionally, and it's those emotions that trigger – or block – purchases.

That's why we've focused on using emotional strategies behind branding for a number of years now. A great example is Alli (pronounced 'ally'), a drug to aid weight loss. The product deals with a highly emotional issue, so in marketing it, we faced the same challenge that the new TF stores are facing: the very thought of buying the product reminds customers that they have problems they feel negatively about. In the case of TF's Nextstage, the problems are age and infirmity. In the case of Alli, the problems are excessive weight and its consequences. There's always a risk that consumers' negative feelings will discourage them from starting or staying on a diet. So, after extensive market research, we took a number of steps to inject emotions into the whole process of using the product.

First, we came up with a name that sounds like a helpful partner. We also aimed to make the container both beautiful and functional – something that didn't just hold pills but could later be used to store diet guides and recipes. Traditional market research is unlikely to uncover ideas like this, so we use a wide variety of techniques. Even simple techniques, such as one-on-one interviews, or ethnographic observation that involves going into people's houses to examine their behaviour, can provide valuable data.

Expert 2: Alex Lee, president of OxO International, maker of OxO Good Grips household products

This retailer can get back on track by remembering a principle that applies to consumers in general, and those aged 60+ in particular: they're attracted by brands they associate with the type of people they'd like to be – not the type they really are. That's why marketing campaigns for surf gear feature surfers, not the city dwellers who will wear the products while doing their shopping.

I was reminded of this principle a few years ago when we wanted to find out how far we could apply our design philosophy of making things easier to use in order to move from our core business, kitchen tools, into other products. We conducted what are known as focus groups, where participants were asked to look at photos of people and pick those they perceived to be users and non-users of our products. Consistently, they picked people who looked fit as the sort who would use our products, and people who looked old and boring as the sort who wouldn't. Yet the participants, all owners of our products, looked a lot more like the latter than the former.

Although the needs of elderly users and those with deteriorating vision or dexterity are very much taken into consideration when we develop new designs, we try to offer products that appeal to 20 and 30-year-olds. We believe that referring to these products as helping tools would serve only to harm the brand in our customers' eyes. That's why our philosophy of universal design, which involves creating products that are comfortably useable by the largest possible range of people, is never explicitly stated as part of our marketing position.

We've found that market research does not need to be very sophisticated. For instance, we have conducted simple surveys in the lobby of our building, offering free products in exchange for people's opinions. Some may call this unscientific, but we have uncovered great insights this way. Sometimes the most important signals come from an executive's own instincts. In Tibal Fisher's case, this could have told him what his surveys and focus groups didn't: 60-plus-year-olds won't support a business that expects them to act their age.

Questions 1-5

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

In boxes 1-5 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. The TF Nextstage stores planned to sell products to make life easier for older people.
2. TF's market research indicated that people liked the products.
3. It cost more than expected to remodel the TF stores.
4. The TF Nextstage coffee shops sold their own brand of food and drink.
5. TF Nextstage customers liked the atmosphere in the new stores.

Questions 6-13

Complete the notes below.

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

Write your answers in boxes 6-13 on your answer sheet.

Feedback from experts

Donna Sturgess

Problems with customer research:

The TF team limited their research to attitudes that occur at a 6 _____ level in customers' minds.

TF did not consider customers' emotions.

How my company dealt with a similar problem:

Product: Alli

Use: help people achieve 7 _____

Marketing aim: help customers see the product in a positive way by:

giving the product a 8 _____ that seems helpful and supportive

giving the product a reusable 9 _____

Market research:

does not need to be complex

good information can come from interviews or studying the 10 _____ of consumers in the home

Alex Lee

Problem:

customers are attracted to the ideal, not the reality, e.g. ads for surf gear

How my company dealt with a similar problem:

we organised 11 _____ to find out what images customers associate with our products

we do not call our products helping tools in our marketing campaigns

Market research:

can be basic, e.g. by doing 12 _____

company executives should follow their 13 _____

答案汇总

1. TRUE
2. TRUE
3. NOT GIVEN
4. NOT GIVEN
5. FALSE
6. surface
7. weight loss
8. name
9. container
10. behaviour
11. focus groups
12. simple surveys
13. instincts

四、名片的重要性 (The Importance of Business Cards)

The exchange of business cards is as close to a universal ritual as you can find in the business world.

A The ritual may be universal, but the details of business cards and how they are swapped vary across countries. Americans throw their cards casually across a table; the Japanese make the exchange of cards a formal ceremony. While there are cards that are discreet and understated, others are crammed full of details and titles. Some businesspeople hand out 24-carat gold cards, and there are kindergarten children who have cards with not only their own contact details, but also with the job descriptions of their parents and even grandparents. This practice has become so common in parts of New York, for example, that the use of such cards is now prohibited by some of these institutions.

B Cards have been around a long time in one form or another. The Chinese invented calling cards in the 15th century to give people notice that they intended to pay them a visit, but these were for social purposes only. Then, in the 17th century, European businesspeople invented a new type of card to act as miniature advertisements, signalling the advent of the business card. In today's world, business cards can cause people to have strong emotional reactions. According to one experienced company director, very few things can provoke more heated discussion at a board meeting than the composition of the company's business cards.

C Lots of companies try to promote themselves by altering the form of the card. Employees at one famous toy company give out little plastic figures with their contact details stamped on them. One fast-food company has business cards which are shaped like a portion of French fries. A Canadian divorce lawyer once gave out cards that could be torn in two one half for each of the spouses. For many business commentators, such gimmicky business cards prove that the use of a physical business card is nearly at an end. After all, why bother exchanging bits of thick paper at all when you can simply swap electronic versions by smartphone?

D However, one can just as well argue the opposite: that business cards are here to stay, and, in a business world full of meetings and correspondence, it is more important than ever that your card is unique. Attempts to reinvent business cards for the digital age have not been successful. Even at the latest technology conferences, people still greet each other by handing out little rectangles made from paper rather than using a digital alternative.

E To understand business cards, it is necessary to understand how business works. That business cards are thriving in a digital age is a forceful reminder that there is much about business that is timeless. According to Kate Jones, a business lecturer, there is one eternal and inescapable issue. Her 2006 study of more than 200

business executives in North America found that trust was the key element for running a successful business. It is vital to be able to look someone in the eye and decide what sort of person they are. In this way, you can transform acquaintanceships into relationships. A good proportion of business life will always be about building social connections having dinner or playing sport with clients and colleagues and while computers can deal with administrative tasks, it is still human beings that have to focus on the emotional.

F The rapid advance of globalisation means that this relationship-building process is becoming ever more demanding. Managers have to put more effort in when dealing with international counterparts, especially when there is not a common language, which is so often the case these days. A recent UK survey showed that chief executives of global organisations now routinely spend three out of every four weeks on international travel. It is in these situations that business cards are doubly useful, as they are a quick way of establishing connections. Cards can also remind you that you have actually met someone in a face-to-face meeting rather than just searched for them on the Internet. Looking through piles of different cards can enhance your memory in ways that simply looking through uniform electronic lists would never do.

G Janet McIntyre is a leading expert on business cards in today's world. She maintains that as companies become more complex, cards are essential in determining the exact status of every contact you meet in multinational corporations. Janet also explains how exchanging business cards can be an effective way of initiating a conversation, because it gives people a ritual to follow when they first meet a new business contact.

H The business world is obsessed with the idea of creating and inventing new things that will change the way we do everything, and this does lead to progress. But there are lots of things that do not need to be changed and, in Janet McIntyre's view, tradition also has an equally valuable role to play. Therefore the practice of exchanging business cards is likely to continue in the business world.

Questions 1-5

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

In boxes 1-5 on your answer sheet, write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. Children's business cards have been banned in some kindergartens. _____
2. It was the Chinese who first began the practice of using business cards. _____
3. Designing business cards can be a controversial process for some companies.

4. A famous toy company has boosted its sales by using one type of unusual business card. _____
5. Some business commentators predict a decline in the use of paper business cards. _____

Questions 6-13

Complete the notes below.

Choose ONE WORD ONLY from the passage for each answer.

Write your answers in boxes 6-13 on your answer sheet.

How business works

Kate Jones's research

The most important aspect of business is having 6 _____ in others.

7 _____ do not have the ability to establish the good relationships essential to business.

Business and globalisation

Managers must work harder when they don't share the same 8 _____ with their contacts.

A UK survey indicates that 9 _____ takes up the largest part of business leaders' time.

A business person's 10 _____ of a meeting can be improved by looking at business cards.

Janet McIntyre

Business cards clearly show the 11 _____ of each person in a large company.

The ritual of swapping business cards is a good way of starting a 12 _____ at the beginning of a business relationship.

Janet feels that in the business world, 13 _____ is just as important as innovation.

答案

Question 1: TRUE

Question 2: FALSE

Question 3: TRUE

Question 4: NOT GIVEN

Question 5: TRUE

Question 6: trust

Question 7: computers

Question 8: language

Question 9: travel

Question 10: memory

Question 11: status

Question 12: conversation

Question 13: tradition

五、卡拉尔古城 (Caral: an ancient South American city)

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

Caral: an ancient South American city

Huge earth and rock mounds rise out of the desert of the Supe Valley near the coast of Peru in South America. These immense mounds appear simply to be part of the geographical landscape in this arid region squeezed between the Pacific Ocean and the Andes mountains. But looks deceive. These are actually human-made pyramids. Strong evidence indicates they are the remains of a city known as Caral that flourished nearly 5,000 years ago. If true, it would be the oldest known urban center in the Americas and among the most ancient in the world.

Research undertaken by Peruvian archaeologist Ruth Shady suggests that the 150-acre complex of pyramids, plazas and residential buildings was a thriving metropolis when Egypt's great pyramids were still being built. Though discovered in 1905, for years Caral attracted little attention, largely because archaeologists believed the structures were fairly recent. But the monumental scale of the pyramids had long interested Shady, who began excavations at the site in 1996, about 22 kilometers from the coast and 190 kilometers north of Peru's capital city of Lima.

Shady and her crew searched for broken remains of the pots and containers that most such sites contain. Not finding any only made her more excited; it meant Caral could be what archaeologists term pre-ceramic, that is, existing before the advent in the area of pot-firing techniques. Shady's team undertook the task of excavating Piramide Mayor, the largest of the pyramids. After carefully clearing away many hundreds of years' worth of rubble and sand, they identified staircases, walls covered with remnants of colored woven bags and brickwork. In the foundations, they found the remains of grass-like reeds woven into bags. The original workers, she surmised, must have filled these bags with stones from a nearby quarry and laid them atop one another inside retaining walls, gradually giving rise to the pyramid's immense structure. Shady had samples of the reeds subjected to radiocarbon dating and found that the reeds were 4,600 years old. This evidence indicated that Caral was, in fact, more than 1,000 years older than what had previously been thought to be the oldest urban center in the Americas.

What amazed archaeologists was not just the age, but the complexity and scope of Caral. Piramide Mayor alone covers an area nearly the size of four football fields and is 18 meters tall. A nine-meter-wide staircase rises from a circular plaza at the foot of the pyramid, passing over three terraced levels until it reaches the top. Thousands of manual laborers would have been needed to build such a project, not counting the many architects, craftsmen, and managers. Shady's team found the remains of a large amphitheater, containing almost 70 musical instruments made of bird and deer bones. Clearly, music played an important role in Caral's society. Around the perimeter of Caral are a series of smaller mounds and various buildings. These indicate a hierarchy of living arrangements: large, well-kept rooms atop pyramids for the elite, ground-level quarters for craftsmen, and shabbier outlying dwellings for workers.

But why had Caral been built in the first place? Her excavations convinced Shady that Caral once served as a trade center for the region, which extends from the rainforests of the Amazon to the high forests of the Andes. Shady found evidence of a rich trading environment, including seeds of the cocoa bush and necklaces of shells, neither of which was native to the immediate Caral area. This environment gave rise to people who did not take part in the production of food, allowing them to

become priests and planners, builders and designers. Thus occupational specialization, elemental to an urban society, emerged.

But what sustained such a trading center and drew travelers to it? Was it food? Shady and her team found the bones of small edible fish, which must have come from the Pacific coast to the west, in the excavations. But they also found evidence of squash, sweet potatoes and beans having been grown locally. Shady theorized that Caral's early farmers diverted the area's rivers into canals, which still cross the Supe Valley today, to irrigate their fields. But because she found no traces of maize, which can be traded or stored and used in times of crop failure, she concluded that Caral's trade leverage was not based on stockpiling food supplies.

It was evidence of another crop in the excavations that gave Shady the best clue to Caral's success. In nearly every excavated building, her team discovered evidence of cottonseeds, fibers and textiles. Her theory fell into place when a large fishing net made of those fibers, unearthed in an unrelated dig on Peru's coast, turned out to be as old as Caral. 'The farmers of Caral grew the cotton that the fishermen needed to make their nets,' Shady speculates. 'And the fishermen gave them shellfish and dried fish in exchange for these nets.' In essence, the people of Caral enabled fishermen to work with larger and more effective nets, which made the resources of the sea more readily available, and the fishermen probably used dried squash grown by the Caral people as flotation devices for their nets.

Questions 1-6

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

In boxes 1-6 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. Caral was built at the same time as the construction of the Egyptian pyramids.
2. The absence of pottery at the archaeological dig gave Shady a significant clue to the age of the site.
3. The stones used to build Piramide Mayor came from a location far away.
4. The huge and complicated structures of Piramide Mayor suggest that its

construction required an organised team of builders.

5. Archaeological evidence shows that the residents of Caral were highly skilled musicians.
6. The remains of housing areas at Caral suggest that there were no class distinctions in residential areas.

Questions 7-13

Complete the notes below.

Choose ONE WORD ONLY from the passage for each answer.

Write your answers in boxes 7-13 on your answer sheet.

Caral as a trading centre

Items discovered at Caral but not naturally occurring in the area

the 7 _____ of a certain plant

8 _____ used to make jewellery

the remains of certain food such as 9 _____

Clues to farming around Caral

10 _____ still in existence today indicate water diverted from rivers

no evidence that 11 _____ was grown

Evidence of relationship with fishing communities

the excavation findings and fishing nets found on the coast suggest Caral farmers traded 12 _____

dried squash may have been used to aid 13 _____ of fishing nets

答案汇总

1. FALSE
2. TRUE
3. FALSE
4. TRUE
5. NOT GIVEN
6. FALSE

7. seeds
8. shells
9. fish
10. canals
11. maize
12. cotton
13. flotation

六、广告吸引力(Advertising Needs Attention)

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

Advertising Needs Attention

The harder advertisers try to get your attention, the more your brain ignores them.

Jane Raymond, a consumer psychologist at the University of Wales in Bangor, is carefully holding and gazing at a bottle of Chillz mineral water like a baby. Despite being made of clear plastic, it looks as if it has been carved from ice. This simple feature means shoppers are drawn to this bottle over the others on the shelf and cannot resist picking it up, Raymond says. She studies the subtle factors that motivate us to buy what we buy and advises big companies on how powerful an advertisement is and how it could be designed to stick more firmly in a consumer's memory. Most of all, she works out how to attract your attention.

In today's fast-paced consumer world, attention is in short supply. Whether we are taking our time shopping in a mall, surfing the Internet for information, or just watching television as a form of passive entertainment, consumers are surrounded by messages—one every 15 seconds of our waking lives, according to some estimates. Last year, companies worldwide spent \$401 billion on advertising, according to the independent World Advertising Research Centre in the UK. But as the graveyard of failed products shows, they usually get it wrong.

Nine out of ten new products meet an early death, says Jamie Rayner, director of research at ID Magasin, a UK consultancy specialising in consumer behaviour. And

the reason, he explains, is simple: conventional advertising has ceased to work. Rayner and his colleagues have measured how consumers—particularly regular commuters—react to advertising, and their conclusion should alarm many executives. They used a camera embedded in a pair of glasses worn to and from work to record commuters' gaze as they glanced at advertisements on their journey. After analysing the recordings and questioning the subjects, they found that most of the advertisements made no impression at all: only about one per cent could be recalled without prompting. It seems that although we may be looking at brands and advertisements all day long, most of the time we're not taking anything in.

Raymond thinks she knows why. Her move from research in visual processing into consumer psychology began in the early 1990s, when she discovered some strange behaviours in the brain's attentional system. She showed people a stream of letters and numbers on a screen and asked them to look out for a letter X. When she asked her volunteers afterwards what they had seen, she found that if the X appeared up to half a second or so after the white letter, or vice versa, people failed to see it. She concluded that if something catches your attention, your brain is blind to anything else for a short period afterwards. She called this effect the 'attentional blink'. 'In short, the reason most advertising doesn't work is that we're in a severe state of attentional overload. Unless advertising is presented in a way the brain can absorb, it is simply not seen,' Raymond says.

So what does this mean for advertisers? A typical television advertisement consists of a series of attention-grabbing images interspersed with the product. But unless the scenes in the advertisement are cut to take account of attentional blinks, the brain is likely to ignore the information the advertiser wants to get across. The same applies to magazine advertisements, where viewers often register the main image but fail to pick up on the secondary images—the bits advertisers often desperately want us to see. Raymond says advertisers consistently fail to consider how easily the brain misses the point. It's not that they haven't realised that the space and time they have to get their message across has shrunk. But advertisers respond by cramming in ever more complex information. Raymond is opposed to this and her advice is simple: deliver your message in a straightforward manner and do so slowly, gently and concisely.

After her research on the attentional blink, she wondered whether attention would be linked to other processes in the brain, particularly emotion. Could our attentional state influence whether we like or dislike a brand, for example? Today, companies are hugely interested in the emotional value of their brands as they want their products to make us feel good. It is well known that if something elicits positive emotions then you are more likely to take notice of it. But Raymond's further research also demonstrates that if people are distracted by an image or a brand when performing an intellectually demanding task, they tend to instantly dislike the brands,

regardless of their emotional value. So, for example, if you are reading a web page when a banner advertisement starts flashing, or are watching a film with intrusive product placement, it is probable you will come to dislike the brand whatever it is.

This contradicts the more-exposure-the-better rule most of the industry follows, says Raymond, and means that advertising can backfire horribly. Advertisers tend to buy as much exposure for a product as they can—through television and radio commercials, billboards, whatever they think will attract their target audiences—but again Raymond has found that this doesn't necessarily work in their favour. Perhaps the most dangerous time, says Raymond, is the holiday season when advertisers are madly competing to grab people's attention. 'Marketers don't realise that humans digest information like they do food. Once they are full, if they are shown any more food, they're disgusted,' she says.

Questions 1-7

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

In boxes 1-7 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement disagrees with the information

NOT GIVEN if there is no information on this

1. Jane Raymond states that Chillz mineral water is packaged in a way that is unattractive to consumers.
2. Consumers are still exposed to more advertising through television commercials than through the medium of the Internet.
3. Jamie Rayner says that people are no longer influenced by traditional advertisements.
4. According to Jamie Rayner, the reason that most products are discontinued is that advertising fails to attract consumers.
5. Jane Raymond believes that commercials should be simpler in their content.
6. Advertisements showing unfamiliar brands affect a person's concentration more than ones with familiar brands.
7. Jane Raymond suggests that a product should be advertised in as many ways as possible.

Questions 8-13

Complete the sentences below.

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

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

8. What group of consumers were specifically targeted in Jamie Rayner's research?

9. What subject did Jane Raymond study before focusing on the behaviour of consumers? _____
10. According to the writer, what important aspect of an advertisement in print do many people fail to notice? _____
11. According to the writer, what do companies today want their products to have in order to make consumers feel positive about themselves? _____
12. What does Jane Raymond say will annoy someone watching a movie? _____
13. According to Jane Raymond, when do advertisers promote their products most fiercely? _____

答案汇总

1. FALSE
2. NOT GIVEN
3. TRUE
4. TRUE
5. TRUE
6. NOT GIVEN
7. FALSE
8. regular commuters
9. visual processing
10. secondary images
11. emotional value
12. intrusive product placement
13. holiday season

七、天气预报的起源 (The Origins of Weather Forecasting)

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

The Origins of Weather Forecasting

The world's first public weather forecast appeared in *The Times* newspaper over 150 years ago: the beginning of a service that gives everyone something to comment on.

The pioneering forecast on August 1, 1861, was introduced with a deceptively simple heading: 'General weather probable during next two days.' But those few words started an ongoing controversy that still continues today – after all, everyone remembers the forecasts that go wrong, but rarely the ones that are right.

The first forecast was the idea of Admiral Robert FitzRoy, head of the newly founded Meteorological Department, and one of Britain's greatest but least-known heroes. It was a brave undertaking, because in those days predicting the weather had gained a reputation similar to astrology or fortune-telling. The few people who attempted it had become a national joke when their forecasts inevitably went wrong.

FitzRoy was different, though. His background was faultless, most famously his captaining of the ship HMS *Beagle* on Charles Darwin's voyage around the world, which eventually led to the publication of Darwin's well-known book *'On the Origin of Species'*. When FitzRoy retired from active service as an admiral in Britain's navy, he was looking for a new direction. He subsequently secured a job as chief statistician at the Meteorological Department, part of the Board of Trade. Parliament had voted to set up and fund the Meteorological Department on June 30, 1854, to chart the safest sailing routes across the Atlantic Ocean. However, the British Government was not impressed with the idea of collecting weather reports and establishing a weather forecast, and the suggestion by one Member of Parliament for this was met with laughter from the other MPs.

FitzRoy was given a staff of three clerks in a small office in London, but he soon grew bored with the tedium of transcribing thousands of ships' reports. Instead, he focused on a much more pressing issue – the huge loss of life at sea from storms. This problem came to a head in 1859, when gale-force winds sank the ship named *'Royal Charter'*, with the loss of 430 lives, within sight of the shore. Even in those days when ships regularly sank in storms, the loss of the *Royal Charter* was considered a national tragedy. FitzRoy stirred up feelings even further when he wrote a letter to *The Times* newspaper explaining that the storm had been entirely predictable.

That same year, a total of 1,645 lives were lost off the British coast, and FitzRoy wrote repeatedly to *The Times* pushing for a storm-warning service for shipping. This was just the right moment for a national forecasting service. Knowledge of the weather was improving, barometer readings gave warning of approaching storms, and the invention of the electric telegraph and Morse code in 1844 gave instant communication for the first time.

So in February 1861, FitzRoy pressed ahead with a storm-warning service. Previously, weather reports had been unreliable, but FitzRoy's innovation was to issue ships with standardised instruments which allowed for accurate weather reports. At exactly the same time each day the information was sent to him by telegraph, and he was able to draw up more detailed weather maps. The approach of an incoming storm could be recognised, and from London, FitzRoy could telegraph warnings to ports on the coast, where an ingenious system of flags was hoisted up high for passing ships to read. This represented the biggest advance in shipping safety after the introduction of the lifeboat, and in subsequent years the number of lives lost around Britain fell by about a third. FitzRoy became a hero to the fishing and maritime fleets.

Encouraged by his storm-warning success, FitzRoy then started a public weather forecasting service. As he had a close connection with **The Times**, this newspaper introduced his daily forecast in August 1861. It attracted huge attention, including from Queen Victoria, who regularly sent messengers to FitzRoy's office to get a forecast for the sea crossing over the Solent to an island which she liked to visit off the south coast of England. He was also popular with ordinary fishermen, who were happy not to be out at sea in bad weather. The owners of fishing vessels, however, were not supportive of FitzRoy's forecasts, which often caused delays for them when bad weather was forecast.

Nevertheless, weather forecasting at that time was very difficult, and one mistake could result in much bad publicity. It wasn't long before some forecasts turned out wrong, and the letters pages of *The Times* were full of heated correspondence. It is indisputable that FitzRoy was way ahead of his time, but it is only in recent years that he has been recognised as a towering figure in meteorology, with the honour of an area of sea being given his name in the shipping forecast (a radio broadcast of weather reports for the seas around Britain). His extraordinary determination to get forecasting established cost him dearly though, and he died prematurely. But his legacy lives on, because late in his life he published a book about weather forecasting which was recognised by other scientists to be well ahead of its time.

Questions 1-5

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

In boxes 1-5 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

1. In Robert FitzRoy's time, weather forecasting was a respected skill.
2. When FitzRoy retired from the navy, he had already had a successful career at sea.
3. FitzRoy faced competition from other applicants for the chief statistician's job.
4. The British Parliament supported the idea of regular weather forecasts in 1854.
5. Progress in technology made it a good time for publicly available weather forecasting to begin.

Questions 6-13

Complete the notes below.

Choose ONE WORD ONLY from the passage for each answer.

Write your answers in boxes 6-13 on your answer sheet.

February 1861: Storm warning service

- FitzRoy received weather reports produced by ships using reliable 6 _____
- simultaneous weather reports were taken daily
- storm warnings were telegraphed to 7 _____ along the shore
- signals for ships were displayed using raised 8 _____
- the storm warning service was the greatest development in sea safety since the 9 _____ was introduced

August 1861: Public weather forecasting service

- very popular in *The Times* newspaper
- frequently used by the English Queen for safe trips to a favourite 10 _____
- FitzRoy's forecasts were popular with fishermen but not with boat 11 _____
- in modern times FitzRoy's 12 _____ is used for a marine area
- FitzRoy produced a 13 _____ which was respected by the scientific community

答案汇总

1. FALSE
2. TRUE
3. NOT GIVEN
4. FALSE
5. TRUE
6. instruments
7. ports
8. flags
9. lifeboat
10. island
11. owners
12. name
13. book

八、SS Yongala 号沉船史 (History of the SS Yongala)

仅有文章，无题目

Final voyage of the luxury steamer, SS Yongala

The SS Yongala is a passenger steam ship belonging to the Adelaide Steamship Company. It cost the company \$102,000 to build in 1903 and was named after the small town of Yongala in South Australia. Yongala means 'good water' in the Nadjuri language. On 23 March 1911, at 1.40 pm, the Yongala carried 49 passengers, 73 crew, and 617 tons of cargo and set sail for Townsville from Mackay under the

command of Captain William Knight.

Shortly after leaving Mackay, the Flat Top signal station received a telegram warning of a tropical cyclone between Townsville and Mackay. However the SS Yongala was not fitted with any wireless equipment and could not be warned about the impending cyclone. On 26 March 1911 the SS Yongala was officially listed as missing, but search and rescue efforts to locate the ship proved to be unsuccessful.

Aftermath of the disappearance

There were many theories surrounding the disappearance of the Yongala but the Marine Board of Queensland did not officially investigate its disappearance until 8 June 1911. The investigation lasted 12 days and ended on 20 June 1911. Due to the lack of witnesses the Marine Board of Queensland based their inquiry on the condition and seaworthiness of the ship as well as the skipper's experience and abilities. It was determined that the SS Yongala was in good condition and the skipper was capable and thus the Marine Board of Queensland concluded that 'the fate of the Yongala passes beyond human ken into the realms of conjecture, to add one more to the mysteries of the sea'.

Discovery and identification of the Yongala wreck

The mystery of the SS Yongala's disappearance remained until 1958 when Bill Kirkpatrick located the wreck. He then took members from the Queensland Underwater Research Group of Townsville on an expedition. The group brought a barnacle-encrusted steel safe to the surface hoping that it might contain important documents that would lead to the identification of the ship. However, when they cracked open the safe all they found was black sludge. The group had a hunch that the wreck was that of the SS Yongala, but had no definitive proof to back up their claims.

That is until a photograph of the safe was circulated in the *Townsville Daily Bulletin*. The Queensland Manager of Chubb & Sons Lock and Safe Company recognised it as a Chubb's model. He sent the partial serial number seen on the safe – 9825W – to the main company in England to see if they could find a match. The safe found in the wreck matched that of a Chubb safe that had been bought for use onboard Yongala – confirming the wreck's identity and Yongala's final resting place.

Australia's Best Dive

Today, the wreck of the SS Yongala lies 89 kilometres southeast of Townsville. The 110-metre-long wreck rests on the open sandy bottom with a slight list to starboard and the bow pointing north. The wreck starts at about 14 metres below the surface of the water and extends all the way to 28 metres at the bottom.

The Yongala wreck is protected under the Historic Shipwrecks Act of 1976, so penetration is forbidden. Its isolation and late discovery have allowed an artificial reef to form on it, making it a magnet for marine life. The wreck itself is covered in colourful soft coral, hard coral and sponges, and divers can expect to see thousands of tropical fish, sea snakes, sea turtles, giant trevally and Queensland gropers. Other sightings include eagle rays, manta rays, bull sharks, whale sharks, and in the cooler months, humpback whales.

九、珍珠 (The Pearl)

A Throughout history, pearls have held a unique presence within the wealthy and powerful. For instance, the pearl was the favored gem of the wealthy during the Roman Empire. This gift from the sea had been brought back from the orient by the Roman conquests. Roman women wore pearls to bed so they could be reminded of their wealth immediately upon waking up. Before jewelers learned to cut gems, the pearl was of greater value than the diamond. In the Orient and Persia Empire, pearls were ground into powders to cure anything from heart disease to epilepsy, with possible aphrodisiac uses as well. Pearls were once considered an exclusive privilege for royalty. A law in 1612 drawn up by the Duke of Saxony prohibited the wearing of pearls by nobility, professors, doctors or their wives in an effort to further distinguish royal appearance. American Indians also used freshwater pearls from the Mississippi River as decorations and jewelry.

B There are essentially three types of pearls: natural, cultured and imitation. A natural pearl (often called an Oriental pearl) forms when an irritant, such as a piece of sand, works its way into a particular species of oyster, mussel, or clam. As a defense mechanism, the mollusk secretes a fluid to coat the irritant. Layer upon layer of this coating is deposited on the irritant until a lustrous pearl is formed.

C The only difference between natural pearls and cultured pearls is that the irritant is a surgically implanted bead or piece of shell called Mother of Pearl. Often, these shells are ground oyster shells that are worth significant amounts of money in their own right as irritant-catalysts for quality pearls. The resulting core is much larger than in a natural pearl. Yet, as long as there are enough layers of nacre (the secreted fluid covering the irritant) to result in a beautiful, gem-quality pearl, the size of the nucleus is of no consequence to beauty or durability.

D Pearls can come from either salt or freshwater sources. Typically, saltwater pearls tend to be higher quality, although there are several types of freshwater pearls that are considered high in quality as well. Freshwater pearls tend to be very irregular in shape, with a puffed rice appearance the most prevalent. Nevertheless, it is each

individual pearl's merits that determines value more than the source of the pearl. Saltwater pearl oysters are usually cultivated in protected lagoons or volcanic atolls. However, most freshwater cultured pearls sold today come from China. Cultured pearls are the response of the shell to a tissue implant. A tiny piece of mantle tissue from a donor shell is transplanted into a recipient shell. This graft will form a pearl sac and the tissue will precipitate calcium carbonate into this pocket. There are a number of options for producing cultured pearls: use freshwater or seawater shells, transplant the graft into the mantle or into the gonad, add a spherical bead or do it nonbeaded. The majority of saltwater cultured pearls are grown with beads.

E Regardless of the method used to acquire a pearl, the process usually takes several years. Mussels must reach a mature age, which can take up to 3 years, and then be implanted or naturally receive an irritant. Once the irritant is in place, it can take up to another 3 years for the pearl to reach its full size. Often, the irritant may be rejected, the pearl will be terrifically misshapen, or the oyster may simply die from disease or countless other complications. By the end of a 5 to 10 year cycle, only 50% of the oysters will have survived. And of the pearls produced, only approximately 5% are of substantial quality for top jewelry makers. From the outset, a pearl farmer can figure on spending over \$100 for every oyster that is farmed, of which many will produce nothing or die.

F Imitation pearls are a different story altogether. In most cases, a glass bead is dipped into a solution made from fish scales. This coating is thin and may eventually wear off. One can usually tell an imitation by biting on it. Fake pearls glide across your teeth, while the layers of nacre on real pearls feel gritty. The Island of Mallorca (in Spain) is known for its imitation pearl industry. Quality natural pearls are very rare jewels. The actual value of a natural pearl is determined in the same way as it would be for other "precious" gems. The valuation factors include size, shape, color, quality of surface, orient and luster. In general, cultured pearls are less valuable than natural pearls, whereas imitation pearls almost have no value. One way that jewelers can determine whether a pearl is cultured or natural is to have a gem lab perform an x-ray of the pearl. If the x-ray reveals a nucleus, the pearl is likely a bead nucleated saltwater pearl. If no nucleus is present, but irregular and small dark inner spots indicating a cavity are visible, combined with concentric rings of organic substance, the pearl is likely a cultured freshwater. Cultured freshwater pearls can often be confused for natural pearls which present as homogeneous pictures which continuously darken toward the surface of the pearl. Natural pearls will often show larger cavities where organic matter has dried out and decomposed. Although imitation pearls look the part, they do not have the same weight or smoothness as real pearls, and their luster will also dim greatly. Among cultured pearls, Akoya pearls from Japan are some of the most lustrous. A good quality necklace of 40 Akoya pearls measuring 7mm in diameter sells for about \$1,500, while a super-high quality strand sells for about \$4,500. Size on the other hand, has to do with the age of the oyster that created the pearl (the more mature oysters produce larger pearls) and the location in which the pearl was cultured. The South Sea waters of Australia tend to produce the larger pearls; probably because the water along the coast line is supplied with rich nutrients from the ocean floor. Also, the type of mussel common to

the area seems to possess a predilection for producing comparatively large pearls.

G Historically, the world's best pearls came from the Persian Gulf, especially around what is now Bahrain. The pearls of the Persian Gulf were natural created and collected by breath-hold divers. The secret to the special luster of Gulf pearls probably derived from the unique mixture of sweet and salt water around the island. Unfortunately, the natural pearl industry of the Persian Gulf ended abruptly in the early 1930's with the discovery of large deposits of oil. Those who once dove for pearls sought prosperity in the economic boom ushered in by the oil industry. The water pollution resulting from spilled oil and indiscriminate over-fishing of oysters essentially ruined the once pristine pearl producing waters of the Gulf. Today, pearl diving is practiced only as a hobby. Still, Bahrain remains one of the foremost trading centers for high quality pearls. In fact, cultured pearls are banned from the Bahrain pearl market, in an effort to preserve the location's heritage. Nowadays, the largest stock of natural pearls probably resides in India. Ironically, much of India's stock of natural pearls came originally from Bahrain. Unlike Bahrain, which has essentially lost its pearl resource, traditional pearl fishing is still practiced on a small scale in India.

Questions 1-4

Reading Passage has seven paragraphs, A-G. Which paragraph contains the following information?

Write the correct letter A-G in boxes 1-4 on your answer sheet.

1 ancient stories around the pearl and customers

2 difficulties in cultivating process.

3 factors can decide the value of natural pearls.

4 different growth mechanisms that distinguish the cultural pearls from natural ones.

Questions 5-10

Complete the summary below.

Choose letter from **A-K** for each answer.

Write them in boxes **5-10** on your answer sheet.

In ancient history, pearls have great importance within the rich and rulers, which was treated as gem for women in **5**. and pearls were even used as medicine and sex drug for people in **6**. There are essentially three types of pearls: natural, cultured and imitation. Most freshwater cultured pearls sold today come from China while the **7**. is famous for its imitation pearl industry. The country **8**. usually manufactures some of the most glittery cultured ones while the nations such as **9**. produces the larger sized pearl due to the favorable environment along the coast line. In the past, one country of **10**. in Gulf produced the world's best pearls. Nowadays, the major remaining suppliers of the natural pearls belongs to India.

A America B Ancient Rome C Australia D Bahrain
E China F Japan G India H Korea
I Mexico J Persia K Spain

Questions 11-14

Do the following statements agree with the information given in the Reading Passage?
In boxes 11-14 on your answer sheet, write:

TRUE if the statement is true

FALSE if the statement is false

NOT GIVEN if the information is not given in the passage

11 Often cultured pearl's centre is significantly larger than in a natural pearl.

12 Cultured pearls are generally valued the same much as natural ones.

13 The size of pearls produced in Japan is usually of smaller size than those came from Australia.

14 Akoya pearls from Japan glows more deeply than the South Sea pearls of Australia.

答案

Question 1: A

Question 2: E

Question 3: F

Question 4: C

Question 5: B (Ancient Rome)

Question 6: J (Persia)

Question 7: K (Spain)

Question 8: F (Japan)

Question 9: C (Australia)

Question 10: D (Bahrain)

Question 11: TRUE

Question 12: FALSE

Question 13: TRUE

Question 14: NOT GIVEN

十、电影起源 (History of Film)

You should spend about 20 minutes on Questions 113, which are based on Reading Passage 1 below.

History of Film

Early Optical Toys and the Persistence of Vision

The illusion of moving pictures is rooted in two optical phenomena: persistence of vision and the phi phenomenon. Persistence of vision causes the human brain to briefly retain an image after it disappears, while the phi phenomenon creates an impression of continuous movement when images are shown in rapid succession.

Long before actual films, inventors built playful devices to exploit these effects. In the 1830s, devices like the phenakistoscope (1832), a spinning disc with sequential drawings viewed via slits and a mirror, and the zoetrope (1834), a rotating drum with slits cut into its sides, produced convincing illusions of motion from static images. The zoetrope's design—a cylinder with vertical slits and a strip of pictures on its inner wall—allowed multiple people to peer through the slits and see a "moving" scene as the drum spun. These Victorian-era optical toys demonstrated the principles that make cinema possible.

In 1877, French inventor Charles-Émile Reynaud introduced the praxinoscope, an improved successor to the zoetrope. Like the zoetrope, it used a strip of pictures inside a spinning cylinder, but the praxinoscope replaced the zoetrope's narrow viewing slits with an inner circle of mirrors. This clever modification meant a brighter, undistorted view of the images: as the wheel turned, a viewer looking into the mirrors saw a smooth animation without the dimming caused by slits. In essence, Reynaud's 1877 praxinoscope was "similar to a zoetrope, with mirrors in place of viewing slits," yielding a clearer picture of the moving drawings.

Such optical inventions—along with the earlier magic lantern (a 17th-century projector for painted slides) and thaumatropes (hand-twisted picture disks from the 1820s)—were the precursors of cinema, demonstrating that sequential images could create the illusion of motion.

Pioneers of Motion Photography (1870s–1880s)

Animation toys were limited to drawn images. The next step toward cinema was capturing real motion. This became possible with advances in photography. By the

1870s, photographic exposure times had dropped from an hour to a fraction of a second, and innovators began experimenting with series photography—taking rapid sequences of pictures to dissect motion.

One famous early experiment was conducted by Englishborn photographer Edward Muybridge. Beginning in 1872, Muybridge worked for Leland Stanford, a racehorse owner, to settle a debate: whether a galloping horse ever lifts all four hooves off the ground. Muybridge set up a row of cameras along a track, each triggered by the horse's hooves as it passed. In 1877 he succeeded—the resulting photographs showed the horse fully airborne midgallop. To demonstrate the result, Muybridge mounted the images on a rotating disk and projected them with a magic lantern, producing a "moving picture" of the horse at full gallop as it had actually occurred in life. This was a crucial proof of concept: real life motion could be recorded and then played back as an animation.

Meanwhile, in France, physiologist Étienne Jules Marey devised a way to capture movement with a single camera. In 1882 Marey built the chronophotographic gun, a camera shaped like a rifle that could take 12 pictures per second of a moving subject (originally, birds in flight). Marey's "gun" exposed images in rapid succession onto a rotating glass plate (later onto roll film). Although Marey's goal was scientific (analyzing motion too fast for the eye) and he only briefly attempted to project his images, his work further advanced the techniques needed for motion pictures.

By the late 1880s, another key ingredient fell into place: celluloid roll film. Inventor Hannibal Goodwin conceived the idea of flexible film, and industrialist George Eastman began massproducing photographic celluloid film in 1889. Unlike glass plates or paper strips, the new celluloid film could hold thousands of images in a long, durable ribbon. This was crucial—it enabled the recording of extended sequences of photographs and thus the possibility of lengthy moving pictures, not just split-second motion studies.

The First Motion Picture Cameras

With fast photography and roll film available, inventors around the world rushed to build devices to record and display moving pictures. An early breakthrough came from Louis Le Prince, a Frenchborn inventor. Le Prince created a single-lens motion picture camera in the late 1880s and managed to shoot several short films in Leeds, England. Notably, in October 1888 he filmed *Roundhay Garden Scene*, a few seconds of moving imagery often cited as one of the first true motion pictures. By 1889 Le Prince was using Eastman's new roll film in his camera. He planned a public exhibition of his films in New York City in 1890—a demonstration that could have inaugurated the age of cinema—but fate intervened: Le Prince mysteriously

disappeared in 1890 while traveling in France, and his film exhibition never took place. As a result, Le Prince's contribution to cinema remained little known for decades.

In the end, credit for the first practical movie camera went to someone else. William Kennedy Laurie Dickson, a young Scottish engineer, was working in West Orange, New Jersey, at Thomas Edison's laboratories, and he built what came to be widely regarded as the world's first functional motionpicture camera. Edison, already famous for his phonograph (invented in 1877), had envisioned adding visual marvels to his audio device. In 1888 he tasked Dickson with developing a motionpicture camera.

Building upon the prior work of Muybridge and Marey, Dickson combined crucial technologies: a faststop camera shutter mechanism (adapted from a clock's escapement) to regulate the intermittent motion of the film, and perforated celluloid film to advance images in precise synchronization. By 1891, Dickson had succeeded in creating the Kinetograph camera, which could expose a rapid series of images onto the film strip. The Kinetograph's photographic system initially recorded about 50 feet of film running at roughly 40 frames per second—enough for a short sequence of action.

Edison's Kinetoscope: A OneViewer Motion Picture

Thomas Edison's approach to the new medium differed from Le Prince's public exhibition idea. Edison had originally conceived of motion pictures as a visual adjunct to his phonograph, something individuals could privately watch as they would listen to a record. Accordingly, after Dickson developed the camera, Edison did not immediately pursue a projector for large audiences. Instead, Dickson also designed a personal viewing device called the Kinetoscope, essentially a wooden cabinet peepshow machine. Inside each Kinetoscope, a continuous loop of film ran over a light source and shutter, and by peering through an eyepiece on top, a single viewer could watch the movie play.

Edison's first Kinetoscope parlor opened in New York in April 1894, featuring banks of coinoperated machines—each showing a short film to one person at a time. The Kinetoscope quickly became a commercial success; by 1894–95, Kinetoscope parlors and arcade installations were spreading across the U.S. and even overseas. To supply content, Edison's team produced dozens of brief films (often simple scenes, vaudeville acts, or novelty performances) using a rudimentary studio called the Black Maria—a cramped, tarpaper shack on rails that could rotate to follow the sun for lighting.

However, the Kinetoscope's design had two significant drawbacks: the films were short, and, crucially, only one person could view the show at a time. Despite Edison's doubts about projection, other inventors saw that the real future of cinema lay in showing films to large audiences on a screen, rather than as solitary peepshows.

Notably, Edison also made a strategic error—he neglected to secure foreign patents for the Kinetoscope system. This allowed others in Europe to legally copy and modify his devices. By 1894, even as Edison's machines proliferated, innovators abroad were already experimenting with improved motionpicture apparatus. In London, for example, engineer William Friese-Greene and others had filed patents for projection devices and cameraprojector hybrids around the same time. In Paris, a public demonstration of Edison's Kinetoscope in 1894 inspired two brothers—Auguste and Louis Lumière—to take the final leap into projected cinema.

The Lumière Brothers and the Birth of Cinema (1895)

It was the Lumière brothers of France who ultimately gave the world the first true cinema experience. Drawing on their background in photography (the Lumières were manufacturers of photographic plates), the brothers set out to develop a device that could record moving images and project them onto a screen for an audience. By early 1895, Louis and Auguste Lumière had invented their apparatus, which they named the Cinématographe.

At roughly 5 kilograms (11 lbs), this innovative machine was much smaller and lighter than Edison's cameras—Edison's electrically driven Kinetograph had weighed in at over 200–300 kg (reportedly more than 1,000 lbs) with its heavy motor and batteries. In contrast, the Lumière Cinématographe was handcranked and portable, making location filming feasible. Remarkably, the Cinématographe was a 3in1 device: it served as a camera for filming, could be used to print copies of the film, and, with a quick configuration change, became a projector to beam the motion pictures onto a screen. (In fact, the word *cinema* derives from this invention's name.)

On December 28, 1895, the Lumière brothers hosted a landmark event in Paris—the world's first commercial public film screening. Held at the Salon Indien du Grand Café in Paris, this demonstration is widely regarded as the birth of cinema as a commercial entertainment. For the astonished paying audience, the Lumières projected a series of short films shot with their Cinématographe, including the famous *Workers Leaving the Lumière Factory* and **Arrival of a Train at La Ciotat Station**. The Cinématographe's projected images of everyday life elicited gasps and applause; viewers marvelled at the realism of moving photographs coming to life on a screen. Unlike Edison's oneperson peepholes, here an entire room could share the same moving picture experience—an immersive spectacle that would quickly spread

around the globe.

The Lumières' invention proved not only technically sound but also practical: "Unlike the Kinetograph, which was batterydriven and weighed over 1,000 pounds, the Cinématographe was handcranked, lightweight (less than 20 pounds), and relatively portable." This portability had profound effects on the kinds of films made. Edison's heavy Kinetograph was mostly confined to a studio (hence his early films featured staged vaudeville acts or subjects that could perform in front of a stationary camera). The Lumière camera, by contrast, could be carried into the field. Early Lumière films were largely documentary views (*actualités*) of real life: workers leaving a factory, trains arriving, people walking about in city streets. These short snippets had little narrative but captured the motion of ordinary life in real environments—a novelty for audiences of the time.

Within months of their first show, the Lumière brothers began dispatching teams of cameramenprojectionists around the world. These operators traveled to faroff places—from Moscow to New York, from India to Japan—filming local scenes and screening movies to enthralled audiences everywhere. As one historian notes, "because the Lumières sent their cameramen all over the world in search of exotic subjects, the Cinématographe became the founding instrument of distant cinemas in Russia, Australia, and Japan." In 1896, just a year after their first show, the Lumières opened theaters in London, New York, Brussels, and other cities to exhibit their growing catalog of films.

Global Spread and Lasting Impact

The immediate success of the Lumière shows signaled that motion pictures were more than a passing curiosity. What began as scientific experimentation and parlour entertainment had evolved into a new artistic and commercial medium. By 1896-1897, projected films (whether on Lumière machines or rival projectors) became a sensation across Europe and North America, often featured in music halls and vaudeville programs. This period was sometimes called the "novelty period," when the mere fact of moving images was the draw—theaters even advertised the machines ("Edison's Vitascope" or "Lumière's Cinématographe") as the headline attraction.

But filmmakers quickly started to extend content beyond short glimpses. Within a few years, pioneers like Georges Méliès in France and Edwin S. Porter in America were introducing storytelling, special effects, and editing to films, turning them from minutelong scenes into longer narratives by the early 1900s.

In its infancy, cinema drew from existing traditions of photography, theater, and vaudeville, yet it rapidly developed a language of its own. By the early 20th century, the "animated photographs" of the 1890s had transformed into a thriving film industry. As more people paid to see movies, investors built studios and dedicated movie theaters, and techniques improved for lighting, camera movement, and film editing. What had started as a novelty of science became, in the new century, the world's dominant form of mass entertainment. Originally a product of 19th-century scientific endeavor, cinema became a medium of mass entertainment and communication—one that would continue to evolve through sound, color, and beyond, but always rooted in those 19th-century "magic" inventions that first brought pictures to life.

十一、自行车的历史 (The History of Bicycles)

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

The History of Bicycles

A The bicycle was not invented by one individual or in one country. It took nearly 100 years and many individuals for the modern bicycle to be born. By the end of those 100 years, bicycles had revolutionized the way people travel from place to place.

B Bicycles first appeared in Scotland in the early 1800s, and were called velocipedes. These early bicycles had two wheels, but they had no pedals. The rider sat on a pillow and walked his feet along the ground to move his velocipede forward.

C Soon a French inventor added pedals to the front wheel. Instead of walking their vehicles, riders used their feet to run the pedals. However, pedaling was hard because velocipedes were very heavy. The framework was made of solid steel tubes and the wooden wheels were covered with steel. Even so, velocipedes were popular among rich young men, who raced them in Paris parks.

D Because the velocipedes were so hard to ride, no one thought about using them for transportation. People didn't ride velocipedes to the market or to their jobs. Instead, people thought velocipedes were just toys.

E Around 1870, American manufacturers saw that velocipedes were very popular overseas. They began building velocipedes, too, but with one difference. They made the frameworks from hollow steel tubes. This alteration made velocipedes much

lighter, but riders still had to work hard to pedal just a short distance. In addition, roads were bumpy so steering was difficult. In fact, most riders preferred indoor tracks where they could rent a velocipede for a small fee and take riding lessons.

F Subsequent changes by British engineers altered the wheels to make pedaling more efficient. They saw that when a rider turned the pedals once, the front wheel turned once. If the front wheel was small, the bicycle traveled just a small distance with each turn. They reasoned that if the front wheel were larger, the bicycle would travel a greater distance. So they designed a bicycle with a giant front wheel. They made the rear wheel small. Its primary purpose was to help the rider balance. Balancing was hard because the rider had to sit high above the giant front wheel in order to reach the pedals.

G This meant he was in danger of falling off the bicycle and injuring himself if he lost his balance. Despite this inherent danger, 'high wheelers' became very popular in England. American manufacturers once again tried to design a better bicycle. Their goal was to make a safer bicycle. They substituted a small wheel for the giant front wheel and put the driving mechanism in a larger rear wheel. It would be impossible for a rider to pedal the rear wheel, so engineers designed a system of foot levers. By pressing first the right one and then the left, the rider moved a long metal bar up and down. This bar turned the rear axle. This axle turned the rear wheel and the bicycle minimized the dangers inherent in bicycle riding. More and more people began using bicycles in their daily activities.

H The British altered the design one last time. They made the two wheels equal in size and created a mechanism that uses a chain to turn the rear wheel. With this final change, the modern bicycle was born.

I Subsequent improvements, such as brakes, rubber tires, and lights were added to make bicycles more comfortable to ride. By 1900, bicycle riding had become very popular with men and women of all ages. Bicycles revolutionized the way people worldwide ride bicycles for transportation, enjoyment, sport, and exercise.

Questions 1-6

Complete the sentences.

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

In the invention of the bicycle took part not only one individual or one country, but the world in general during the 1. _____ years.

This invention was firstly found in Scotland in the first decades of 1800, and was known as velocipedes. They did not resemble today's bicycles and had two wheels, but they had no 2. _____. The rider sat on a pillow and walked his feet along the ground in order to move his velocipede forward.

Soon, a French inventor added pedals to the front wheel. However, because of their difficulty in riding, nobody used them in daily life, and they were accepted as 3. _____.

Around 1870, manufacturers in America found that this invention is popular 4. _____, but with the difference: frameworks were made from 5. _____, what makes them much lighter.

Soon, the British inventors found the method which can make pedaling more efficient- to turn pedals one by one. They designed a bicycle with a giant front wheel. However, as the rider had to sit high above the giant front wheel it was too difficult to keep the balance. The safer bicycle was invented by Americans. They designed the rear 6. _____, which minimized the danger of falling and injuring. At last, the British changed the design one last time and added two wheels equal in size and the mechanism that induce a chain to turn the rear wheel. By this there was invented the example of the modern bicycle.

Questions 7-10

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

In boxes 7-10 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

7. The bicycle was invented by Americans only.
8. It was too hard to lead the velocipedes due to their heaviness.
9. The alteration of velocipedes made the life of people much more easy.
10. The changes by British inventors altered the wheels to make pedaling more efficient.

Questions 11-13

Complete the sentences.

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

11. The British inventors concluded that if the front wheel were large in _____, the bicycle would travel a comparatively long distance.
12. American engineers designed a system of _____ which was driven by pressing first the right and then the left pedals.
13. The last, but not least, alteration in creating the modern bicycle was making the two wheels equal in size and using the _____ to spin the rear wheel.

答案

1. 100
2. pedals
3. toys
4. overseas
5. hollow steel tubes
6. driving mechanism
7. FALSE
8. TRUE
9. NOT GIVEN
10. TRUE
11. size
12. foot levers
13. chain

十二、丝绸工业的发展 (The development of the silk industry)

A When silk was first discovered in China over 4,500 years ago, it was reserved

exclusively for the use of the emperor, his close relations and the very highest of his dignitaries. Within the palace, the emperor is believed to have worn a robe of white silk; outside, he, his principal wife, and the heir to the throne wore yellow, the colour of the earth.

B Gradually silk came into more general use, and the various classes of Chinese society began wearing tunics of silk. As well as being used for clothing and decoration, silk was quite quickly put to industrial use, and rapidly became one of the principal elements of the Chinese economy. It was used in the production of musical instruments, as string for fishing, and even as the world's first luxury paper. Eventually even the common people were able to wear garments of silk.

C During the Han dynasty (206 BC-220 AD), silk ceased to be a mere fabric and became a form of currency. Farmers paid their taxes in grain and silk, and silk was used to pay civil servants and to reward subjects for outstanding services. Values were calculated in lengths of silk as they had previously been calculated in weight of gold. Before long, silk became a currency used in trade with foreign countries, which continued into the Tang dynasty (616-907 AD). It is possible that this added importance was the result of a major increase in production. Silk also found its way so thoroughly into the Chinese language that 230 of the 5,000 most common characters of Mandarin have 'silk' as their key component.

D Silk became a precious commodity, highly sought after by other countries from an early date, and it is believed that the silk trade actually existed before the Silk Road was officially opened in the second century BC. An Egyptian mummy with a silk thread in her hair, dating from 1070 BC, has been discovered in the village of Deir el Medina near the Valley of the Kings, and is probably the earliest evidence of the silk trade. During the second century BC, the Chinese emperor Han Wu Di's ambassadors travelled as far west as Persia and Mesopotamia, bearing gifts including silks. A range of important finds of Chinese silks have also been made along the Silk Road. One of the most dramatic of these finds was some Tang silk discovered in 1900. It is believed that around 1015 AD Buddhist monks, possibly alarmed by the threat of invasion by Tibetan people, had sealed more than ten thousand manuscripts and silk paintings, silk banners and textiles in caves near Dunhuang, a trading station on the Silk Road in northwest China.

E Some historians believe the first Europeans to set eyes upon the fabulous fabric were the Roman legions of Marcus Licinius Crassus, Governor of Syria. According to certain accounts of the period, at an important battle near the Euphrates River in 53 BC, the Roman soldiers were so startled by the bright silken banners of the enemy that they fled in panic. Yet, within decades Chinese silks were widely worn by the rich and noble families of Rome. The Roman Emperor Heliogabalus (218-222 AD) wore

nothing but silk. By 380 AD, the Roman historian Marcellinus Ammianus reported that "The use of silk, which was once confined to the nobility, has now spread to all classes without distinction - even to the lowest." The desire for silk continued to increase over the centuries. Despite this demand, the price of silk remained very high.

F In spite of their secrecy about production methods, the Chinese eventually lost their monopoly on silk production. Knowledge of silk production methods reached Korea around 200 BC, when waves of Chinese immigrants arrived there. Shortly after 300 AD, it travelled westward, and the cultivation of the silkworm was established in India.

G Around 550 AD silk production reached the Middle East. Records indicate that two monks from Constantinople (modern-day Istanbul), capital of the Byzantine Empire, appeared at their emperor's court with silkworm eggs which they had obtained secretly, and hidden in their hollow bamboo walking sticks. Under their supervision the eggs hatched into worms, and the worms spun silk threads. Byzantium was in the silk business at last. The Byzantine church and state created imperial workshops, monopolising production and keeping the secret to themselves. This allowed a silk industry to be established, undercutting the market for ordinary-grade Chinese silk. However, high quality silk textiles, woven in China especially for the Middle Eastern market, continued to achieve high prices in the West, and trade along the Silk Road continued as before. By the sixth century the Persians, too, had mastered the art of silk weaving, developing their own rich patterns and techniques. But it wasn't until the 13th century that Italy began silk production, with the introduction of 2,000 skilled silk weavers from Constantinople. Eventually, silk production became widespread throughout Europe.

H World silk production has approximately doubled during the last 30 years in spite of manmade fibres replacing certain uses of silk. Before this period, China and Japan were the two main producers, together manufacturing more than 50 per cent of world production each year. After the late 1970s, however, China dramatically increased its silk production, and once again became the world's leading producer.

Questions 1-7

Complete the notes below.

Choose ONE WORD ONLY from the passage for each answer.

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

Chinese silk

Early Uses

Clothing

at first, silk only available to Chinese of high rank

emperor wore 1..... silk indoors

In industry

silk items included parts of musical instruments, fishing strings and 2.....

Currency

silk was used as payment of 3..... as well as for wages and rewards

silk replaced 4..... as a unit of value

silk soon used as payment in 5..... trade

Evidence of silk trade

1070 BC, Egypt:

hair of a 6..... contained silk

2nd century BC, Persia and Mesopotamia:

gifts of silk were presented by Chinese ambassadors

1015 AD, north-west China:

silk objects were hidden inside 7.....

Questions 8-13

Do the following statements agree with the information given in Reading Passage 1? In boxes 8-13 on your answer sheet, write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

8. Their first sight of silk created fear among Roman soldiers.

9. The quality of Chinese silk imported by the early Romans varied widely.

10. The Byzantine emperor first acquired silkworm eggs from the Chinese emperor.

11. The price of high-grade Chinese silk fell due to competition from Middle-Eastern producers.

12. Silk was produced in the Middle East several centuries before it was produced in Europe.

13. Global silk production has declined in recent years.

答案

Question 1: white

Question 2: paper

Question 3: taxes

Question 4: gold

Question 5: foreign

Question 6: mummy

Question 7: caves

Question 8: TRUE

Question 9: NOT GIVEN

Question 10: FALSE

Question 11: FALSE

Question 12: TRUE

Question 13: FALSE

十三、条形码的历史 (The history of the bar code)

A The first step toward today's bar codes came in 1948, when Bernard Silver, a graduate student in the USA, overheard a conversation in the halls of Philadelphia's Drexel Institute of Technology. The president of a food chain was pleading with a professor to undertake research on a method of capturing product information automatically at store checkouts. The professor turned down the request, but Bernard Silver mentioned the conversation to his friend Norman Woodland, a twenty-seven-year-old teacher at Drexel.

B The problem fascinated the two friends, and they set about thinking of a solution. Their first idea was to use patterns printed with an ink that would glow under ultraviolet light, and they built a device to test the concept. It worked, but the printing costs were high and the patterns faded over time. Nonetheless, they were convinced they had a workable idea. After several months of work they came up with the linear bar code, using elements from two established technologies: Morse code, in which letters and numbers are coded into a system of dots and dashes, and the method used to record soundtracks in movies. Silver and Woodland patented the idea in

1952, describing their invention as 'article classification... through the medium of identifying patterns'. But the cost, together with the fact that their scanning equipment was rather unreliable, made the idea a non-starter at that time.

C Scanning systems made little progress until the 1970s, when lasers became affordable. Following this, various systems came into use around the world in stores, libraries, factories, and the like, each with its own proprietary code, but there was no standardization. A consortium of grocery manufacturers and retailers therefore set up a committee to look into bar codes, and to standardize what became known formally as the Universal Product Code (UPC). At the heart of the committee's guidelines were a few basic principles. To make life easier for the cashier, bar codes would have to be readable from almost any angle and at a range of distances. Because they would be reproduced by the million, the labels would have to be cheap and easy to print. And to be affordable, automated checkout systems would have to pay for themselves in two and a half years.

D The committee considered more than a dozen versions of bar codes, including one based on multi-colored dots and another using a circular bull's-eye design with lines radiating from a central point. On April 1, 1973, they unanimously agreed on a standardized UPC, a combination of black and white lines and numbers, based on Woodland and Silver's idea but developed by George Laurer at IBM. Alan Haberman, who headed the subcommittee as president of First National Stores, described the bar code as a kind of world language that worked for everyone. He recalls proudly, 'We showed that it could be done on a massive scale, that cooperation... was possible for the common good, and that business didn't need the government to shove them in the right direction.'

E The investment involved in the bar-code revolution was huge. Each of the tens of thousands of grocery outlets in the US had to spend at least \$200,000 on new scanning equipment. Chains had to install new data processing centers and retrain their employees. Printers had to develop the new types of ink, plates, and other technology to reproduce the code with the exact tolerances it requires, and manufacturers had to spend millions of dollars a year on the labels.

F On June 26, 1974, all the tests were done, all the proposals were complete, all the standards were set, and at a supermarket in Ohio, a single pack of Juicy Fruit chewing gum became the first retail product sold with the help of a bar code scanner. Decades of schemes and billions of dollars in investment now became a practical reality. The bar code on any product could be read and understood in every suitably equipped store.

G The advantages of the system were not clear immediately, as wholesalers, retailers and customers remained suspicious. Some customers believed bar codes were a form of surveillance. During the early weeks, Business Week magazine ran the headline 'The Supermarket Scanner That Failed'. However, the benefits eventually became apparent. 'It turns out there were massive savings in labor and other areas,' Haberman says. These included checking out items at twice the speed compared to using traditional equipment, which meant shorter lines. And it did not take supermarkets too long to see that, as well as vastly improving customer service,

the bar code could hugely reduce the amount of time spent checking inventory.

H Now, every day more than 5 billion bar codes are scanned in retail outlets throughout the world. Passengers' luggage is tagged with bar codes by airlines. Staff attach them to babies to ensure the right babies go home from hospitals with the right mothers. Runners in major marathons set off with bar codes on their vests, and librarians rely on them. Tiny bar codes have even been mounted on bees by researchers to track their movements.

I As for that original pack of Juicy Fruit, it is now, unchewed and unopened, in the Smithsonian Institution National Museum of American History in Washington.

Questions 1-8

Complete the notes below.

Write ONE WORD ONLY from the passage for each answer.

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

History of the bar code

1948-1952

Methods of recording information automatically were developed by Silver and Woodland.

1st system:

- used ultraviolet light and a special type of 1 _____
- problems: expensive and not permanent

2nd system:

- based on technology used in Morse code and also for the 2 _____ of films
- problems: 3 _____ and expensive

1970s

- Availability of cheaper 4 _____ meant scanning technology spread more widely
- Problem: lack of 5 _____ in code systems
- April 1973: committee agreed on one universal product code (UPC)
- June 1974: pack of Juicy Fruit chewing gum sold with bar code scanner

Advantages of bar code system:

- supermarkets needed to spend less on labour
- the 6 _____ of checkouts increased
- doing inventories was much cheaper

Present day

Users of bar codes include:

- retail companies
- airlines
- staff in hospitals
- participants in 7 _____
- scientists studying 8 _____

Questions 9-13

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

In boxes 9-13 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

9. Bernard Silver was invited to develop a system for capturing product information by the president of a food chain. _____

10. A committee set up in the 1970s said bar codes should be easy to use and not too expensive. _____

11. Alan Haberman disagreed with government policies on business matters.

12. Many grocery outlets were unable to afford the necessary scanning equipment.

13. The advantages of the new bar code scanner took some time to be accepted by users. _____

答案

Question 1: ink

Question 2: soundtracks

Question 3: unreliable

Question 4: lasers

Question 5: standardization

Question 6: speed

Question 7: marathons

Question 8: bees

Question 9: FALSE

Question 10: TRUE

Question 11: NOT GIVEN

Question 12: NOT GIVEN

Question 13: TRUE

十四、食虫植物 (Carnivorous plants)

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

Carnivorous plants

They attract insects and then eat their flesh. Is that any way for a plant to behave?

The naturalist and author of *On the Origin of Species*, Charles Darwin, was fascinated by carnivorous plants. In 1860, soon after he came across his first carnivorous plant — the sundew, *Drosera* — he wrote, 'I care more about *Drosera* than the origin of all the species in the world.' He spent months running experiments on the plants. He dropped flies and bits of meat on their leaves and watched them slowly fold their sticky tentacles over their prey. He thought it incredible that brushing a leaf with a single strand of human hair was enough to bring about a response. Yet sundews, he observed, ignored raindrops. To react to such a false alarm, he reasoned, would obviously be a great evil to the plant. This was no accident. This was adaptation.

Darwin expanded his studies from sundews to other species in his book *Insectivorous Plants*. He was amazed at the quickness and power of the Venus flytrap. He showed that when one of its leaves snapped shut, it formed itself into a temporary 'stomach', secreting enzymes that could dissolve the prey. He noted that a leaf took more than a week to reopen after closing, and reasoned that the interlocking spines along the margin of the leaf allowed tiny insects to escape, saving the plant the expense of digesting an insufficient meal.

Today, biologists using 21st-century tools to study cells and DNA are beginning to understand how these plants hunt, eat, and digest — and how these strange adaptations came about in the first place. Alexander Volkov, a plant physiologist at Oakwood University in Alabama, believes he has figured out the Venus flytrap's secret. 'This,' Volkov declares, 'is an electrical plant.'

When an insect brushes against a hair on the leaf of a Venus flytrap, the movement

sets off an electric charge. The charge builds up inside the tissue of the leaf but is not enough to stimulate the snap, which keeps the Venus flytrap from reacting to false alarms, such as raindrops. An insect, however, is likely to brush a second hair, adding enough electric charge for the leaf to close.

Volkov's experiments reveal that the electric charge travels down fluid-filled tunnels in a leaf, which opens up pores in cell membranes. Water rushes from the cells on the inside of the leaf to those on the outside, causing the leaf to rapidly flip in shape from convex to concave, like a soft contact lens. As the leaves flip, they snap together, trapping an insect inside.

The bladderwort plant has an equally sophisticated way of setting its underwater trap. It pumps water out of tiny air sacs or bladders, lowering the pressure inside. When a water flea or some other small creature swims past, it bends hairs on the bladder, causing a flap to spring apart. The low pressure sucks water in, carrying the creature along with it. In one five-hundredth of a second, the flap swings shut again. The cells in the bladder then begin to pump water out again, creating a new vacuum. Many other species of carnivorous plants act like living flypaper, catching animals on sticky tentacles. Pitcher plants use yet another strategy, growing long tube-shaped leaves into which insects fall. Some of the largest have pitchers up to 30cm deep and can consume whole frogs unlucky enough to fall into them. Sophisticated chemistry helps make the pitcher a death trap.

Nicholas Gotelli, of the University of Vermont, is trying to figure out what evolutionary forces pushed these plants towards meat. Carnivorous plants clearly benefit from eating animals; when scientists feed pitcher plants extra bugs, the plants get bigger. But the benefits of eating flesh are not the ones you might expect. Carnivorous animals, like ourselves, use the carbon in protein and the fat in meat to build muscles and store energy. Carnivorous plants, however, take nitrogen and phosphorus from the flesh in order to build light-harvesting enzymes. Eating animals, in other words, lets carnivorous plants do what all plants do: grow by taking energy directly from the sun.

Unfortunately, they do a really bad job of it. That's because they have to use a lot of energy to make the equipment they need to catch animals — the enzymes, the pumps, the sticky tentacles, and so on. A pitcher or a flytrap is not very good at photosynthesis because, unlike plants with ordinary leaves, it does not have flat solar panels that can absorb lots of sunlight. Gotelli suspects that only under special conditions are the benefits of being carnivorous greater than the costs. The poor soil of bogs and swamps, where many carnivorous plants grow, offers little nitrogen and phosphorus, so carnivorous plants enjoy an advantage there over 'conventional' plants. Also, bogs are often flooded with sunshine, so even an inefficient carnivorous

plant can carry out enough photosynthesis to survive. 'They're stuck, and they're making the best of it,' says Aaron Ellison of Harvard University.

Unfortunately, the adaptations that enable carnivorous plants to survive in harsh habitats also make them extremely sensitive to environmental changes. Chemical fertilizers used in agriculture and pollution from power plants are adding extra nitrogen to many bogs in North America. Carnivorous plants are so finely adapted to low levels of nitrogen that this extra fertilizer is overloading their systems. Humans also threaten carnivorous plants in other ways. The black market trade in exotic carnivorous plants is strong, but even if this can be prevented, carnivorous plants will continue to suffer from other dangers. Their habitat is disappearing, to be replaced by shopping centres and houses. The suppression of wildfires by government agencies allows other plants to grow quickly and outcompete the Venus flytraps. Good news, perhaps, for flies. But a loss for all who delight in the inventiveness of evolution.

Questions 1-5

Complete the notes below.

Choose ONE WORD ONLY from the passage for each answer.

Write your answers in boxes 1-5 on your answer sheet.

#Carnivorous Plants

Darwin's experiments:

Drosera

- He put insects and small amounts of meat onto leaves and observed what happened.
- He was amazed that one human hair triggered a response.
- He understood why the plant did not respond to 1 _____.

Venus flytrap

- He demonstrated how leaves close and then, for a short period, act like a 2 _____.
- He noted the structure of the leaves ensures small insects are released.

Biology today:

Venus flytrap

- If insects come into contact with leaf hairs, their movement produces an electric charge.
- The charge enters fluid-filled tunnels, causing 3 _____ in cell membranes to open.
- Water moves between cells and then the leaf changes from convex to concave, trapping the insect inside.

Bladderwort

- Hairs bend when insects swim past, resulting in the opening of a flap.
- Water is sucked in.
- When water is pumped out of bladder cells, a 4 _____ builds up inside.

Pitcher plants

- The plants have tube-shaped leaves that insects fall into.
- Some plants are big enough to capture and eat 5 _____.

Questions 6-13

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

In boxes 6-13 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

6. Pitcher plants increase in size after they have digested a lot of insects.
7. Carnivorous plants produce light-harvesting enzymes with the nutrients they extract from animals.
8. Pitcher plants and Venus flytraps are more efficient at photosynthesis than plants with ordinary leaves.
9. Venus flytraps are better adapted to the soil of swamps and bogs than other carnivorous plants.
10. Carnivorous plants frequently find it difficult to photosynthesis in bogs due to a lack of sunlight.
11. Scientists have campaigned to reduce the amount of nitrogen that is released into the soil by agricultural practices.

12. A lot of exotic carnivorous plants are sold illegally.
13. Preventing wildfires is beneficial to the Venus flytrap.

答案汇总

1. raindrops
2. stomach
3. pores
4. vacuum
5. frogs
6. TRUE
7. TRUE
8. FALSE
9. NOT GIVEN
10. FALSE
11. NOT GIVEN
12. TRUE
13. FALSE

速记版

一、美国西部尘埃 (Dust and the American West)

【核心逻辑链】

美国西部在移民前很少尘埃。**Jason Neff** 分析科罗拉多湖泊沉积物发现，**1860-1900** 年尘埃急剧增加，与欧洲移民引入牛群有关。西南部原本缺乏大型食草动物，土壤有硬壳可抗风。牛群破坏硬壳，导致风蚀。大平原野牛群适应了放牧，但西南部土地脆弱。投机性投资（如 **Aztec Land and Cattle Company**）导致过度放牧，土地荒废。尘埃携带养分北上，影响山区雪融，加速冰川消融。

【Q1-7 判断题】

Q1 TRUE (1860-1900 尘埃剧增，B 段：from about 1860 to 1900, dust deposition rates shot up)

Q2 FALSE (Anasazi 因干旱消失，非尘埃，C 段：There was a near-permanent drought between 900 and 1300 which was so intense that it destroyed a series of Native American civilizations)

Q3 FALSE (西南部无野牛, D 段: No bison and few antelope or deer)

Q4 NOT GIVEN (野牛减少是否因易猎未提)

Q5 NOT GIVEN (铁路成本是否高于预期未提)

Q6 FALSE (Aztec 公司不保护土地, F 段: only interested in quick profits and had little incentive to protect the soils)

Q7 TRUE (土地仍贫瘠, F 段: even now few of the pastures have recovered)

【Q8-13 笔记填空】

Q8 cattle herds (限制牧群, F 段: federal authorities finally sought to limit cattle herds)

Q9 winds (土壤抗强风, G 段: These crusts can survive winds of up to a hundred miles an hour)

Q10 lake sediments (湖泊沉积物含尘埃, G 段: dust in Colorado lake sediments)

Q11 size (研究化学成分和大小, H 段: investigating the size and chemical composition of the dust)

Q12 nutrients (带来养分, H 段: carry nutrients with them into areas which previously evolved and survived without them)

Q13 glaciers (冰川消失, I 段: shrinking of glaciers across the American West)

二、恐龙脚印 (Footprints in the Mud)

【核心逻辑链】

恐龙崛起可能与小行星撞击有关。三叠纪恐龙小, 与多种爬行动物共存。侏罗纪 (2.02 亿年前) 恐龙成主宰。Olsen 研究脚印而非骨骼, 发现三叠纪末脚印突然变化: 一些消失, 一些出现并迅速变大, 可能因“生态释放”(竞争消除后迅速进化)。撞击证据: 铱异常和蕨类孢子高峰。未找到 2.02 亿年前陨石坑, 可能被忽视、消失或年代误定 (如 Manicouagan 可能被误定)。

【Q1-6 判断题】

Q1 FALSE (小行星灭绝恐龙理论仍有争议? 题干说“仍有怀疑”, 但文中说“人人知道”, 矛盾, 但答案 FALSE)

Q2 FALSE (书中电影未夸大, B 段: realistically depicted)

Q3 NOT GIVEN (其他科学家是否反对未提)

Q4 TRUE (脚印比骨骼常见, C 段: Dinosaur skeletons are rare. Dinosaur footprints are... surprisingly abundant)

Q5 FALSE (ichnotaxa 不能精确对应物种, D 段: cannot be matched precisely within the species)

Q6 TRUE (有些从三叠纪到侏罗纪, E 段: four march confidently across the boundary into the Jurassic)

【Q7-13 摘要填空】

Q7 ecological release (生态释放, G 段: a phenomenon called ecological release)

Q8 dragons (科莫多龙, G 段: often referred to as dragons)

Q9 competitors (无竞争者, G 段: where they face no competitors)

Q10 overlooked (被忽视, H 段: have been overlooked)

Q11 vanished (消失, H 段: it may have vanished)

Q12 tectonic processes (板块构造, H 段: the ocean floor is constantly recycled by the tectonic processes)

Q13 misdated (年代误定, I 段: has been misdated)

三、好创意为何失败 (Why good ideas fail)

【核心逻辑链】

TF 公司曾于 1970 年代成功, 2004 年衰落。创始人 Tibal Fisher 推出 TF's Nextstage 品牌, 专攻 60+ 老年市场, 销售助老产品 (大字手机、舒适握柄厨具等)。市场调研显示产品受欢迎, 2007 年斥资 4000 万美元改造店铺, 但 2009 年失败告终。专家分析: Donna Sturgess 指出 TF 只做表面态度调研, 忽略消费者潜意识情感; 她以减肥药 Alli 为例, 通过取友好名字、设计可重复使用包装来注入积极情感。Alex Lee 指出消费者被“理想自我”吸引而非“现实自我”, 以 OxO 为例, 通过焦点小组发现问题, 产品定位面向 20-30 岁人群, 不做“助老工具”宣传; 市场调研不必复杂, 可做简单问卷, 高管应相信直觉。

【Questions 1-5 判断题】

1. TRUE (目标: target consumers 60+ with devices specifically designed to assist with problems associated with ageing)
2. TRUE (market research proved positive, showing strong consumer support)
3. NOT GIVEN (只说了花费\$40 million, 未与预期比较)
4. NOT GIVEN (只提到 coffee shop, 未提自有品牌)
5. FALSE (customers complained that stores felt like a senior centre)

【Questions 6-13 笔记填空】

6. surface (looked only at surface attitudes)
7. weight loss (a drug to aid weight loss)
8. name (came up with a name that sounds like a helpful partner)
9. container (make the container beautiful and functional, could later be used to store)
10. behaviour (going into people's houses to examine their behaviour)
11. focus groups (conducted what are known as focus groups)
12. simple surveys (conducted simple surveys in the lobby)
13. instincts (most important signals come from an executive's own instincts)

四、名片的重要性 (The Importance of Business Cards)

【核心逻辑链】

名片交换是商界普遍仪式, 但各国习俗不同: 美国人随意, 日本人讲究礼节。名片形式多样, 从低调到奢华, 甚至有儿童名片, 纽约部分机构已禁用。名片起源: 15 世纪中国发明拜访卡 (社交用), 17 世纪欧洲人发明商业名片 (广告用)。现代名片设计常引发公司内部激烈讨论。一些公司用创意名片宣传 (如玩具公司塑料小人、快餐公司薯片形状、离婚律师可撕名片), 但评论家认为纸质名片将消亡。然而, 数字时代名片仍盛行, 因商业本质不变。Kate Jones 研究指出信任是商业核心, 电脑无法建立情感连接。全球化下, 管理者需更多努力建立关系, 名片有助于记忆和沟通。Janet McIntyre 认为名片显示身份、开启对话, 传统与创新同等重要。

【Q1-5 判断题】

1. TRUE (原文 A 段: 纽约部分幼儿园禁止儿童名片)
2. FALSE (原文 B 段: 中国人发明社交拜访卡, 欧洲人发明商业名片)
3. TRUE (原文 B 段: 名片设计引发董事会激烈讨论)

4. NOT GIVEN (原文 C 段: 玩具公司发塑料小人名片, 未提销量)
5. TRUE (原文 C 段: 评论家认为纸质名片将消亡)

【Q6-13 笔记填空】

6. trust (E 段: 信任是成功商业的关键)
7. computers (E 段: 电脑处理行政, 人处理情感)
8. language (F 段: 无共同语言时管理者更努力)
9. travel (F 段: CEO 四分之三时间用于国际旅行)
10. memory (F 段: 看名片增强记忆)
11. status (G 段: 名片显示身份)
12. conversation (G 段: 交换名片开启对话)
13. tradition (H 段: 传统与创新同等重要)

五、卡拉尔古城 (Caral: an ancient South American city)

【核心逻辑链】

秘鲁 Caral 古城建于约 4600 年前, 是美洲最古老城市中心 (第 1-2 段)。Shady 于 1996 年开始发掘, 因未发现陶器推断为前陶瓷时代; 芦苇碳定年证实其年龄 (第 3 段)。城市建筑规模宏大, 分工明确, 有精英、工匠、工人层级 (第 4 段)。Caral 是贸易中心, 进口可可种子和贝壳 (第 5 段)。无玉米, 贸易基础非粮食储备; 农民开凿运河灌溉 (第 6 段)。Caral 人种植棉花换取渔民的海产, 干南瓜作渔网浮具 (第 7 段)。

【Questions 1-6 判断题】

1. FALSE (第 2 段: 埃及金字塔建造时 Caral 已繁荣, 并非同时建造)
2. TRUE (第 3 段: 未发现陶器→前陶瓷时代→更古老)
3. FALSE (第 3 段: 石头来自附近采石场, 非远处)
4. TRUE (第 4 段: 需数千劳力+建筑师、工匠、管理者→组织团队)
5. NOT GIVEN (第 4 段: 有乐器、音乐重要, 但未说“技艺高超”)
6. FALSE (第 4 段: 居住安排有等级——精英、工匠、工人)

【Questions 7-13 笔记填空】

7. seeds (第5段: seeds of the cocoa bush 非本地)
8. shells (第5段: necklaces of shells 非本地)
9. fish (第6段: bones of small edible fish 来自海岸)
10. canals (第6段: diversion into canals, still cross valley today)
11. maize (第6段: no traces of maize)
12. cotton (第7段: farmers grew cotton for fishermen's nets)
13. flotation (第7段: dried squash as flotation devices for nets)

六、广告的魅力(Advertising Needs Attention)

【核心逻辑链】

广告效果差源于“注意瞬脱”——大脑在处理信息时存在短暂盲区(第4段)。Jamie Rayner 研究发现传统广告已失效,仅1%能自然回忆(第3段)。Jane Raymond 建议广告应简洁直接,避免信息过载(第5段)。此外,在认知任务中被告分心会使人厌恶该品牌,挑战“曝光越多越好”的行业规则;节日期间广告竞争最激烈,消费者易产生反感(第6-7段)。

【Questions 1-7 判断题】

1. FALSE (第1段: Chillz bottle looks like carved from ice, shoppers are drawn to it → 有吸引力)
2. NOT GIVEN (第2段提到多种媒介,但未比较电视与网络)
3. TRUE (第3段: conventional advertising has ceased to work)
4. TRUE (第3段: 产品早夭原因是广告失效 → 无法吸引消费者)
5. TRUE (第5段: advice: straightforward, slowly, gently, concisely → 内容更简单)
6. NOT GIVEN (第6段未区分熟悉与陌生品牌对注意力的影响)
7. FALSE (第7段: Raymond 反对 more-exposure-the-better rule → 并非建议尽可能多投放)

【Questions 8-13 句子填空】

8. regular commuters (第3段: particularly regular commuters)

9. visual processing (第4段: Her move from research in visual processing into consumer psychology)
10. secondary images (第5段: fail to pick up on the secondary images)
11. emotional value (第6段: companies are hugely interested in the emotional value of their brands)
12. intrusive product placement (第6段: watching a film with intrusive product placement... dislike the brand)
13. holiday season (第7段: the most dangerous time is the holiday season)

七、天气预报的起源 (The Origins of Weather Forecasting)

【核心逻辑链】

1861年8月1日,《泰晤士报》刊登了世界上第一份公共天气预报,由海军上将 Robert FitzRoy 发起。当时天气预报被视为类似占星术,常被嘲笑(第1-2段)。FitzRoy 曾担任达尔文“小猎犬号”船长,退役后任气象局首席统计员(第3段)。1859年“皇家宪章号”沉船(430人遇难)促使他推动风暴预警服务。1861年2月,他利用标准化仪器收集船舶报告,通过电报向港口发送预警,并用旗语信号通知船只,成为救生艇引入后航运安全最大进步(第4-6段)。1861年8月启动公共天气预报,维多利亚女王和渔民欢迎,但船主不支持(第7段)。FitzRoy 超前于时代,晚年出版《天气预报》一书,其名字被用于航运预报中的海域(第8段)。

【Questions 1-5 判断题】

1. FALSE (第2段: predicting weather had gained a reputation similar to astrology → 不被尊重)
2. TRUE (第3段: captaining HMS Beagle on Darwin's voyage → 成功海上生涯)
3. NOT GIVEN (未提及其他申请人竞争)
4. FALSE (第3段: British Government was not impressed with the idea of weather forecast)
5. TRUE (第5段: electric telegraph and Morse code gave instant communication → 技术进步使时机成熟)

【Questions 6-13 笔记填空】

6. instruments (第6段: issue ships with standardised instruments)

7. ports (第6段: telegraph warnings to ports on the coast)
8. flags (第6段: system of flags was hoisted up high)
9. lifeboat (第6段: biggest advance after the introduction of the lifeboat)
10. island (第7段: Queen Victoria... to an island she liked to visit)
11. owners (第7段: owners of fishing vessels not supportive)
12. name (第8段: area of sea being given his name)
13. book (第8段: published a book about weather forecasting)

八、SS Yongala 号沉船史 (History of the SS Yongala)

【核心逻辑链】

SS Yongala 是 Adelaide Steamship Company 于 1903 年建造的豪华客轮，以澳洲小镇 Yongala 命名（意为“好水”）。1911 年 3 月 23 日从 Mackay 启航前往 Townsville，载有 49 名乘客、73 名船员和 617 吨货物。出发后不久收到台风警报，但船上未配备无线设备。3 月 26 日被报失踪，搜救无果。昆士兰海事局 6 月调查 12 天，认定船只适航、船长合格，结论是“命运无从知晓，成为海上谜团之一”。1958 年 Bill Kirkpatrick 发现沉船，潜水队打捞保险柜但只找到污泥。后通过 Chubb 保险柜上的序列号确认其为 Yongala 号。如今沉船位于 Townsville 东南 89 公里处，水深 14-28 米，受 1976 年《历史沉船法》保护，禁止进入，已成为著名潜水胜地，珊瑚和海洋生物丰富。

九、珍珠 (The Pearl)

【核心逻辑链】

珍珠自古以来受权贵珍视，罗马帝国时期女性佩戴珍珠入睡，波斯帝国将其磨粉入药。珍珠分天然、养殖和人造三类：天然珍珠由异物进入贝类形成，养殖珍珠人为植入珠核，人造珍珠用玻璃浸鱼鳞液制成。养殖过程漫长且风险高，仅 5% 达到珠宝级。珍珠价值由大小、形状、颜色、光泽等决定，养殖珍珠价值低于天然，人造几乎无价值。历史上波斯湾产最佳天然珍珠，但因石油开采和污染衰落；印度现保有最大天然珍珠库存。

【Q1-4 段落信息匹配】

1. A (珍珠的古代故事和消费者。A 段讲述罗马妇女、波斯帝国等历史)
2. E (养殖过程的困难。E 段描述贝类成熟需 3 年，珍珠形成又需 3 年，存活率仅 50%，优质率 5%)
3. F (决定天然珍珠价值的因素。F 段: size, shape, color, quality of surface, orient

and luster)

4. C (区分养殖珍珠与天然珍珠的生长机制。C 段解释养殖珍珠是手术植入珠核或贝壳片)

【Q5-10 摘要填空】

5. B (Ancient Rome。A 段: Roman women wore pearls to bed)

6. J (Persia。A 段: In the Orient and Persia Empire, pearls were ground into powders to cure...)

7. K (Spain。F 段: The Island of Mallorca (in Spain) is known for its imitation pearl industry)

8. F (Japan。F 段: Akoya pearls from Japan are some of the most lustrous)

9. C (Australia。F 段: The South Sea waters of Australia tend to produce the larger pearls)

10. D (Bahrain。G 段: Historically, the world's best pearls came from the Persian Gulf, especially around what is now Bahrain)

【Q11-14 判断题】

11. TRUE (养殖珍珠的核心通常比天然珍珠大得多。C 段: The resulting core is much larger than in a natural pearl)

12. FALSE (养殖珍珠通常与天然珍珠价值相同? F 段: cultured pearls are less valuable than natural pearls)

13. TRUE (日本产珍珠尺寸通常小于澳洲? F 段: The South Sea waters of Australia tend to produce the larger pearls, 暗示日本较小)

14. NOT GIVEN (日本的 Akoya 珍珠光泽比澳洲南海珍珠更深? 文中未直接比较)

十、电影起源 (History of Film)

【核心逻辑链】

电影起源基于视觉暂留和 phi 现象。1830 年代光学玩具 (phenakistoscope、**zeotrope**、**praxinoscope**) 展示静态图像产生动感。1870 年代摄影技术进步, **Muybridge** 用多相机拍下奔跑的马, 证明真实运动可录制回放; **Marey** 发明连续摄影枪。1889 年 **Eastman** 量产赛璐珞胶卷, 为长片铺路。**Le Prince** 拍摄早期短片但失踪; **Edison** 团队 **Dickson** 发明 **Kinetograph** 相机和单观众 **Kinetoscope** (1894), 但只限个人观看且未申请外国专利。**Lumière** 兄弟 1895 年发明手摇便携的 **Cinématographe** (三合一: 拍、印、放), 同年 12 月 28 日巴黎首次公开放映, 标志电影诞生。随后 **Lumière** 派遣摄影师全球拍摄放映, 电影迅速成为大众娱乐。

十一、自行车的历史 (The History of Bicycles)

【核心逻辑链】

自行车发明历经近百年，多国参与 (A)。最早为苏格兰“velocipedes”，无脚踏，靠脚踏地 (B)。法国人加前轮脚踏，但车很重 (C)。因难骑，被视为玩具 (D)。美国人用空心钢管减重，但仍难骑 (E)。英国人改大前轮以提高效率，但危险 (F)。美国人改后轮驱动、脚杆系统，更安全 (G)。最后英国人改等大轮+链条，现代自行车诞生 (H)。后续改进 (刹车、橡胶轮胎、灯) 使自行车普及 (I)。

【Questions 1-6 句子填空】

1. 100 (A 段: nearly 100 years)
2. pedals (B 段: they had no pedals)
3. toys (D 段: velocipedes were just toys)
4. overseas (E 段: very popular overseas)
5. hollow steel tubes (E 段: frameworks from hollow steel tubes)
6. driving mechanism (G 段: put the driving mechanism in a larger rear wheel)

【Questions 7-10 判断题】

7. FALSE (A 段: not invented by one individual or one country)
8. TRUE (C 段: pedaling was hard because velocipedes were very heavy)
9. NOT GIVEN (未提及是否让生活更轻松)
10. TRUE (F 段: subsequent changes by British engineers altered the wheels to make pedaling more efficient)

【Questions 11-13 句子填空】

11. size (F 段: if the front wheel were larger, the bicycle would travel a greater distance)
12. foot levers (G 段: designed a system of foot levers)
13. chain (H 段: uses a chain to turn the rear wheel)

十二、丝绸工业的发展 (The development of the silk industry)

【核心逻辑链】

丝绸 4500 年前在中国发现，初为皇室专用。后普及，用于乐器、渔线、纸。汉朝成为货币，付税、薪俸，取代黄金。丝绸之路贸易，埃及木乃伊发中见丝。罗马人初见惊逃，后贵族争穿。中国保密技术，但传至朝鲜、印度，拜占庭僧侣偷蚕卵，中东生产，波斯织锦，13 世纪传至意大利。现代中国又成主产国。

【Q1-7 笔记填空】

Q1 white (皇帝穿白, A 段: Within the palace, the emperor is believed to have worn a robe of white silk)

Q2 paper (奢侈品纸, B 段: as string for fishing, and even as the world's first luxury paper)

Q3 taxes (付税, C 段: Farmers paid their taxes in grain and silk)

Q4 gold (取代黄金, C 段: Values were calculated in lengths of silk as they had previously been calculated in weight of gold)

Q5 foreign (对外贸易, C 段: silk became a currency used in trade with foreign countries)

Q6 mummy (木乃伊发中, D 段: An Egyptian mummy with a silk thread in her hair)

Q7 caves (藏于敦煌洞穴, D 段: had sealed more than ten thousand manuscripts and silk paintings... in caves)

【Q8-13 判断题】

Q8 TRUE (罗马兵惊逃, E 段: the Roman soldiers were so startled by the bright silken banners of the enemy that they fled in panic)

Q9 NOT GIVEN (质量是否多变未提)

Q10 FALSE (僧侣偷, 非皇帝给, G 段: two monks... appeared at their emperor's court with silkworm eggs which they had obtained secretly)

Q11 FALSE (高价仍保持, G 段: high quality silk textiles... continued to achieve high prices)

Q12 TRUE (中东早于欧洲, G 段: By the sixth century the Persians... had mastered the art... But it wasn't until the 13th century that Italy began silk production)

Q13 FALSE (产量增, H 段: World silk production has approximately doubled during the last 30 years)

十三、条形码的历史 (The history of the bar code)

【核心逻辑链】

1948 年 Silver 无意听到食品连锁店总裁请求教授研发自动获取产品信息的方法，教授拒绝，Silver 告知朋友 Woodland。两人开始研究：第一方案用紫外线发光墨水，成本高且易褪色；第二方案结合莫尔斯电码和电影音轨技术，发明线性条码，1952 年获专利，但设备不可靠且昂贵，未推广。1970 年代激光成本降低，扫描系统普及，但缺乏标准化。1973 年委员会统一 UPC 码，基于 Woodland 和 Silver 理念由 IBM 的 Laurer 完善。1974 年 6 月，美国俄亥俄州超市首例条码扫描销售绿箭口香糖。初期受质疑，后显优势：结账速度翻倍、库存管理高效。如今条码广泛应用：零售、航空、医院、马拉松、蜜蜂研究等。首包口香糖入藏 Smithsonian 博物馆。

【Q1-8 笔记填空】

1. ink (B 段：紫外线发光墨水)
2. soundtracks (B 段：电影音轨技术)
3. unreliable (B 段：扫描设备不可靠)
4. lasers (C 段：激光变得 affordable)
5. standardization (C 段：缺乏标准化)
6. speed (G 段：结账速度翻倍)
7. marathons (H 段：马拉松选手用条码)
8. bees (H 段：研究者追踪蜜蜂)

【Q9-13 判断题】

9. FALSE (A 段：总裁邀请的是教授，非 Silver)
10. TRUE (C 段：委员会指南要求易用、便宜)
11. NOT GIVEN (D 段：Haberman 说企业不需政府推动，未提是否反对政府政策)
12. NOT GIVEN (E 段：花费巨大，未提是否负担不起)
13. TRUE (G 段：优点未立即显现，后逐渐被接受)

十四、食虫植物 (Carnivorous plants)

【核心逻辑链】

达尔文用茅膏菜和捕蝇草做实验，发现它们能感知猎物并消化，但会忽略雨滴这样的假信号。现代研究揭示捕蝇草靠电荷累积触发闭合，避免对雨滴反应；狸藻用真空吸

水捕食；瓶子草用管状叶捕获昆虫甚至青蛙。食虫植物从猎物获取氮和磷来制造捕光酶，但光合作用效率低，只在贫瘠阳光充足的沼泽中才有利。它们对氮敏感，面临化肥、栖息地丧失、火灾抑制和非法贸易的威胁。

【Questions 1-5 笔记填空】

1. raindrops (第2段: sundews ignored raindrops)
2. stomach (第3段: formed itself into a temporary 'stomach')
3. pores (第6段: opens up pores in cell membranes)
4. vacuum (第7段: creating a new vacuum)
5. frogs (第7段: can consume whole frogs)

【Questions 6-13 判断题】

6. TRUE (第8段: feed pitcher plants extra bugs, the plants get bigger)
7. TRUE (第8段: take nitrogen and phosphorus to build light-harvesting enzymes)
8. FALSE (第9段: pitcher or flytrap is not very good at photosynthesis)
9. NOT GIVEN (未比较捕蝇草与其他食虫植物对沼泽土壤的适应)
10. FALSE (第9段: bogs are often flooded with sunshine)
11. NOT GIVEN (未提及科学家发起减少氮的运动)
12. TRUE (第10段: black market trade in exotic carnivorous plants is strong)
13. FALSE (第10段: suppression of wildfires allows other plants to outcompete Venus flytraps)