

**01.宝山区**

When people need to make important decisions, one of their first steps is usually to collect information about the issue at hand. And the more crucial the decision is, the more information people or businesses and organizations usually want. (21) \_\_\_\_\_ computers are capable of collecting and analyzing far more information than human beings, it makes sense that organizations would use them for this purpose. This use and analysis of large amounts of information is known as big data.

To decide if data sets count as big data, they are evaluated using three standards, (22) \_\_\_\_\_ (know) as "the three Vs." The first is volume: Big data involves large amounts of data, most of (23) \_\_\_\_\_ comes without structure or organization. The second is velocity meaning speed: Big data is received quickly because it often reaches the programs that use it directly from the internet. Many of these programs (24) \_\_\_\_\_ (design) to adapt to changes in the data quickly as well. Finally, big data offers (25) \_\_\_\_\_ (great) variety than traditional data, including more unstructured data. Because of the three Vs, human analysts can only work with big data with the help of computer programs designed to manage it.

Businesses can use big data to help understand their customers, either as a group or individually. For example, some (26) \_\_\_\_\_ (stream) websites rely on big data to suggest music or television offerings tailored to the user's interests. Big data can also help companies decide how much *inventory* (库存) they need so that they don't waste money producing and storing products that customers (27) \_\_\_\_\_ not buy.

In healthcare, programmers (28) \_\_\_\_\_ (develop) tools to help doctors and patients to make medical decisions using big data. This can process information about specific patients from at-home medical devices such as heart-rate monitors.

Governments can use big data (29) \_\_\_\_\_ (plan) efficient public transportation systems and identify roads that need maintenance. When used for this purpose, big data is not controversial. But some oppose other uses of big data by governments (30) \_\_\_\_\_ they might impact on citizens' privacy in an attempt to control behavior.

Big data can be a useful tool for many types of organizations that seek to use it to make better decisions to benefit people.

**答案:** 21. Since 22. known 23. which 24. are designed 25. greater  
 26. streaming 27. will 28. are developing 29. to plan 30. for fear that

## 02. 崇明区

### Life May Actually Flash Before Your Eyes on Death

New data from a scientific “accident” has suggested that life may actually flash before our eyes as we die.

A team of scientists set out to measure the brainwaves of an 87-year-old patient who (21) \_\_\_\_\_ (develop) *epilepsy* (癫痫) for many years. But during the *neurological* (神经学的) recording, he suffered a fatal heart attack, (22) \_\_\_\_\_ (offer) an unexpected recording of a dying brain.

It revealed that in the 30 seconds before and after, the man’s brainwaves followed the same patterns as dreaming or recalling memories. Brain activity of this sort could suggest that a final “recall of life” may occur in a person’s last moments, the team wrote in their study, (23) \_\_\_\_\_ (publish) in *Frontiers in Aging Neuroscience* on Tuesday.

Dr Ajmal Zemmar, a co-author of the study, said that what the team, then based in Vancouver, Canada, accidentally got, (24) \_\_\_\_\_ (consider) the first-ever recording of a dying brain. So will we get a glimpse back at those moments (25) \_\_\_\_\_ we stayed with loved ones and other happy memories? Dr Zemmar said it was impossible (26) \_\_\_\_\_ (tell). “If I were to jump to the philosophical area, I would guess that if the brain did a flashback, it would probably like to remind you of good things, rather than the bad things,” he said. “But (27) \_\_\_\_\_ is memorable would be different for every person.”

Dr Zemmar, now a neurosurgeon at the University of Louisville, said in the 30 seconds (28) \_\_\_\_\_ the patient’s heart stopped supplying blood to the brain, his brainwaves followed the same patterns as when we carry out *high-cognitive demanding* (高认知要求的) tasks, like concentrating, dreaming or recalling memories. It continued 30 seconds after the patient’s heart stopped beating. “I think there’s (29) \_\_\_\_\_ mysterious and spiritual about this whole near-death experience,” Dr Zemmar said. “And findings like this — it’s a moment (30) \_\_\_\_\_ scientists live for.”

答案: 21. had developed 22. offering 23. published 24. was considered 25. when  
26. to tell 27. what 28. before 29. something 30. that/which

### Your Cat Might Not Be Ignoring You When You Speak

Every cat owner has a story to tell of being blanked by their cat. We call to our cat, it turns away, and some of us might be left (21) \_\_\_\_\_ (wonder) why we didn't get a dog. But your cat may be listening after all. More than that, it (22) \_\_\_\_\_ (care) more than you may think.

A study by French researchers (23) \_\_\_\_\_ (publish) last month in the journal *Animal Cognition* found that not only do cats react to what scientists call cat-directed speech — a *high-pitched* (高音的) voice similar to (24) \_\_\_\_\_ we talk to babies — they react to who is doing the talking.

“We found that hearing their owners using a high-pitched voice, cats reacted more than when hearing their owner speaking normally to another human adult,” said Charlotte de Mouzon, an author of the study. “But it actually didn't work when it came from a stranger's voice.”

(25) \_\_\_\_\_ studies involving dogs, analyzing cat behavior is difficult, which is part of why humans understand them less. Cats are stressed by being in a lab (26) \_\_\_\_\_ meaningful behavioral observations become impossible. And forget about trying to get a cat (27) \_\_\_\_\_ (sit) still for an *M.R.I. scan* (核磁共振扫描) to study its brain function.

So the researchers for the latest study went to the cats' homes and played recordings of different types of speech and different speakers. At first, there was concern from Dr. de Mouzon and her team for lack of reaction from the cats, but upon analysis of the film recordings, delicate reactions (28) \_\_\_\_\_ (notice). “It could be just moving an ear or turning the head to the speaker or even freezing what (29) \_\_\_\_\_ were doing,” Dr. de Mouzon said.

In the study, there were a few cases (30) \_\_\_\_\_ cats would approach the speaker playing a voice and meow. “In the end, we had really clear gains in the cat's attention when the owner was using cat-directed speech,” Dr. de Mouzon said.

答案: 21. wondering 22. cares 23. published 24. how 25. Unlike  
 26. so that 27. to sit 28. were noticed 29. they 30. where

#### 04. 黄浦区

### Reconsidering the Staycation

I've always been doubtful of the staycation. The newly-invented word is too cute for 21 feels like a comfort: While other people are off exploring the Blue Lagoon by camper van, you get to stay in your very own home and go to your usual supermarket 22 cookies!

So, I am fascinated to discover, thanks to my colleague Catherine Pearson, that I 23 (understand) staycation in a wrong way. Evidently, my tendency 24 (take) a break without a plan is unlikely to produce a restorative effect. Instead, one should make good preparations for that period of time. Jaime Kurtz, a psychology professor at James Madison University and the author of "The Happy Traveler: Unpacking the Secrets of Better Vacations," advises 25 (ask) oneself, "If I were moving away soon, what would I most want to do, and who would I most want to spend time with?"

I like this saying "Live every day as if it were your last." Any reminder that time is flying is a good one 26 it gets you to live better. This weekend, you could, for instance, seek out some vegan ice cream 27 doesn't taste terrible. You could try running in a pool, which is easier on the joints but as effective as running on land. You could go for a walk or a drive while listening to "Slow Radio," a very comforting BBC podcast 28 (feature) sounds of the natural world.

Whether or not you have a proper vacation 29 (plan) for the coming weeks, you could envision any coming weekend as its own two-day mini-break, programming it as you would a trip to somewhere new, with a journey 30 (exciting) than just "sleep as much as possible" and "mow the lawn".

答案: 21. what 22. for 23. have understood 24. to take 25. asking  
26. if 27. that / which 28. featuring 29. planned 30. more exciting

## 05.金山区

### What's Good About Social Network

Do you remember when social media felt good? When friends got reunited years after graduation? But then came all the fake news, targeted advertising, and fear of leaking personal information... You began questioning (21) \_\_\_\_\_ why you had spent all the time on it. This was (22) \_\_\_\_\_ happened to many, including me. Though social media was always something I needed, the life when it was needed for sheer entertainment has gone.

But occasionally, I (23) \_\_\_\_\_ (remind) how powerful a tool it always is. It remains unparalleled in its original, uncommercialized mission (24) \_\_\_\_\_ (serve) as a connector of people and a facilitator of friendship. I'm thinking about this after having just returned from breakfast with my friend, Rob. I (25) \_\_\_\_\_ (not see) him since I was 16. We fell out of touch because he lived in Scotland while I lived in London, two opposite ends of this country. But last month I ran across something when I was browsing through Facebook. It was a photo of a little girl (26) \_\_\_\_\_ I didn't know, winning first prize in a school talent show. A photo unusually (27) \_\_\_\_\_ (post) by Rob, which was his first post on Facebook, was tagged with the name of the school his daughter attended, which was not in Scotland, but just five miles from my house.

Were it not for social media, I would never have known that Rob had moved to my neck of the woods. Both of us were amazed at how incredible it was that we'd spent years living so near, shopping in the same grocery stores, taking the same commuter buses and going to the same cinema, without ever (28) \_\_\_\_\_ (bump) into each other. Truth is, (29) \_\_\_\_\_ we had, I'm not sure I would have recognized him without his profile picture. So (30) \_\_\_\_\_ all the considerations and criticisms about how social media disturbs our lives, it is nice to know that it's still worth pressing *Like*. Anyway, social media is irreplaceable to us.

答案：21.yourself/yourselves 22.what 23.am reminded 24.to serve 25.haven't seen  
26.who/whom/that 27.posted 28.bumping 29.even if/though 30.despite

## 06.静安区

### Japan's robot revolution in senior care

Japan's artificial intelligence expertise is transforming the elder care industry, with 21 (specialize) robotic care accomplishing more than just taking pressure off the critical shortage of caregivers. Senior care facilities across Japan are testing out such new robots 22 deliver a collection of social and physical health care and the government-backed initiative has been met with positive reviews by elderly residents.

The rapidly graying population 23 (eye) by the government as a potential market for medical technology now. Disappointing government predictions show that by 2025, Japan's first baby boomers will have turned 75 and about 7 million people are likely to suffer from some form of *dementia* (痴呆). The nation won't be able to avoid a dementia crisis 24 an additional 380,000 senior care workers.

The long-standing shortage of professional care workers has encouraged the Japanese government 25 (simplify) procedures for foreign caregivers to be trained and certified. The current Technical Intern Training Program between Vietnam, the Philippines, and Indonesia, under 26 Economic Partnership Agreement, was extended to include nursing care as well as agriculture, fishery, and construction sectors.

27 the government made efforts to increase the numbers of senior care workers, the target number of foreign graduates has still fallen flat, with the national caregiver examination proving a major obstacle to pass. The success rate for foreign students was a merely 106 students last year, 28 has slightly improved to 216 students this year. Another depressing reality is that 19 to 38 percent of foreign nurses who pass the exam opt to leave the industry and return home, 29 (cite) tough work conditions and long hours. Given the challenges, this is 30 the government believes care robots will be able to step in.

答案：21. specialized      22. as      23. is being eyed      24. without      25. to simplify  
26. an      27. While/Although/Though      28. which      29. citing      30. where/why/how

## 07. 阅行区

The rainforests are alive with the sound of animals. Besides the pleasure of the noise, it is useful to ecologists. Listening out for animal calls is considered a method of measuring the biodiversity of a piece of land. (21)\_\_\_\_\_ it is much easier than digging under the bushes looking for tracks, such analysis is time-consuming. It also requires (22)\_\_\_\_\_ expert pair of ears.

In a paper published in *Nature Communications*, a group of researchers led by Jörg Müller, an ecologist at the University of Würzburg, describe a better way: have a computer do the job. Smartphone apps already exist through (23)\_\_\_\_\_ the sounds of birds or *mammals* (哺乳动物) can be identified.

The researchers took recordings from across 43 sites in the *Ecuadorean Rainforest* (厄瓜多尔雨林). Some sites were relatively primitive, old-growth forests. Others were areas that (24)\_\_\_\_\_ (clear) for *pasture* (牧场) already. Sound recordings were taken four times every hour, over two weeks. The various calls were identified manually by an expert, and then used to construct a list of the species present. As expected, the longer the land had been free from agricultural activity, the more significant the biodiversity it hosted.

Then it was the computer's turn. The researchers fed their recordings to (25)\_\_\_\_\_ (train) AI models, using sound samples from elsewhere in Ecuador, to identify 75 bird species from their calls. They found the AI tools could identify the sounds as well as the experts.

Not everything in a rainforest makes a noise. Having used light-traps to capture night-flying insects and DNA analysis (26)\_\_\_\_\_ (identify) them, Dr Müller and his colleagues found the diversity of noisy animals was a reliable indicator for the diversity of the quieter (27)\_\_\_\_\_, too.

The results may have relevance outside ecology departments, too. Under pressure (28)\_\_\_\_\_ their customers, some make-up companies and oil firms have been spending money on forest restoration projects. Dr Müller hopes an automated approach to (29)\_\_\_\_\_ (check) on the results could help monitor such efforts. This method would also provide a standardized way to measure (30)\_\_\_\_\_ they are working as well as their sponsors say.

答案:

21. Even though / Even if	22. an	23. which	24. had been cleared	25. trained
26. to identify	27. ones	28. from	29. checking	30. whether / if

## 08.青浦区

## The Sisterhood of the Traveling Diary

Kyra Peralte thought keeping a diary might help her sort out her troubled feelings. In April 2020, the mother of two in New Jersey, started writing about the challenges of handling work, marriage and motherhood during a global crisis.

Writing released emotions, but Peralte, now 46, wanted to know how other women were doing. So she made an unusual offer. She invited women from near and far to fill the 21 (remain) lined pages of her notebook with their own stories. She named the project The Traveling Diary.

So many wanted to participate 22 Peralte decided to create a website (thetravelingdiarytour.com) for people to add their names to the queue. She came up with a system: each person 23 (get) to keep the diary for three days and fills as many pages as she wishes. Then she is responsible for mailing it to the next person.

So far, more than 2,000 women from 30 countries 24 (participate). Of course, not all those entries could fit in just one journal. More than 50 of these notebooks are currently 25 use. About 20 completed ones are back in Peralte's possession.

Each participant fills the pages with her own handwriting, narrating her experiences, recounting obstacles she faced, and sharing 26 (learn) lessons.

Kirsty Nicol, 31 from London, received the journal in March 2021. She said reading the entries allowed her to transport her into the lives of 27 and find bits of wisdom they left.

One such pearl came from a woman in Australia. She had written: "Working with the setbacks. Not against them. Patience and gratitude. It's a dance. Life is moving and we 28 stamp our feet in rejection, or we can gracefully embrace the mess, tidying as we go."

"It has really evolved into a community," Peralte says. She sends participants a weekly newsletter and often hosts online meetings so the women get the chance to get to know one another more, share stories and feel 29 (distant). Some of the women, she says, have even become close friends. Her spontaneous idea, she says, has had a profound effect on the women 30 were part of it. "The Traveling Diary is making sisters out of strangers." She says.

答案: 21. remaining 22. that 23. gets 24. have participated 25. in  
 26. learned/learnt 27. others 28. can 29. less distant 30. who/that

09.松江区

### Buy Now, Pay Later Spending

Buy now, pay later (BNPL) spending is expected to rise to record levels this holiday season. With so many young “buy now, pay later” shoppers already in debt from this short-term financing tool not requiring interest, questions emerge: Why do these shoppers use such a tool? And what risks does it pose to their budgets in the months (21) \_\_\_\_\_ (come)?

The many Generation Z and millennials (typically around 40 years and younger) tend to use this short-term financing, (22) \_\_\_\_\_ allows them to buy items and pay for them over time. Offered mostly by financial technologies, BNPL allows these customers to pay back their purchases (23) \_\_\_\_\_ interest and with the first payment usually made at checkout. The most common “buy now, pay later” plan is (24) \_\_\_\_\_ customers make four equal payments and pay off the debt in six weeks. It’s been a lifeline for some people, such as a university student (25) \_\_\_\_\_ weekly income is not big enough. “BNPL provides consumers with flexible payment options so they (26) \_\_\_\_\_ manage spending,” said Vivek Pandya, lead analyst at Adobe Digital Insights. That is of great importance for many consumers, especially (27) \_\_\_\_\_ with a tendency to purchase higher-cost items.

However, since BNPL (28) \_\_\_\_\_ (appear), warnings from experts have come into our view. They have been indicating that it’s financially unhealthy to form such a spending habit. According to New York Federal Reserve economists, BNPL may encourage debt to increase over time, (29) \_\_\_\_\_ (influence) a consumer’s ability to meet non-BNPL commitments, or users to overextend themselves. Users should also note that (30) \_\_\_\_\_ interest is not charged on the loan, they’ll be hit with late fees for missed payments, which can add up quickly, says the Consumer Financial Protection Bureau.

答案：

21. to come	22. which	23. without	24. that	25. whose
26. can/may/will	27. those	28. appeared	29. influencing	30. though/although/while

## 10.徐汇区

Perhaps even more incredible is that it's smack bang in the middle of Kentucky.

Mammoth Cave National Park preserves this unique and historical natural wonder. As large as the limestone cave system is, park officials, estimate there (21) \_\_\_\_\_ be another 600 miles of cave passageways that have yet to be explored.

(22) \_\_\_\_\_ those unexplored, more than 200 caves exist in the park that are disconnected from the larger system.

The incredible rock formations have resulted in the park (23) \_\_\_\_\_ (recognize) as a World Heritage Site, thanks to its extraordinary size and scientific importance – making it one of only 13 natural US sites with that title.

The caves were created naturally by the process of limestone erosion, which is known as “karst topography”. Rain and rivers slowly dissolve and shape soft limestone, which creates the vast underground network. The system is still being shaped and carved today. Not only are they a stunning destination to visit, but the system also provides drinking water for roughly 40% of the US population – and they're (24) \_\_\_\_\_ historical significance too.

The caves act as a time capsule that preserve over 5,000 years of human history – and the caves' first explorers were Native Americans, who (25) \_\_\_\_\_ (mine) the upper levels of Mammoth Cave. Thanks to the cave system's atmosphere and natural protection from any kind of human disturbance, the archaeological sites have been left in great shape. Several sets of Native American remains have been recovered, (26) \_\_\_\_\_ (provide) fascinating evidence of pre-Columbian funerary practices.

Mammoth Cave was established as a national park thanks to strong local support. Back in the 1920s, Secretary of the Interior Hubert Work created the Southern Appalachian National Park Commission in 1925 to survey (27) \_\_\_\_\_ (propose) park sites, including the caves. After years of work acquiring the land for the park, as well as building roads, trails, and public facilities, Mammoth Cave National Park was established on July 1, 1941.

Pioneering African Americans were some of the first cave guides, and are responsible for some of the more recently discovered passageways. Stephen Bishop, who was a slave, worked in the cave from 1838 to 1856 and ventured beyond the tour routes that (28) \_\_\_\_\_ (establish). He crossed a terrifying drop called the “bottomless pit” to discover unmapped areas of the cave system. Although they were unrecognized at the time, pioneers like Bishop helped spark the golden age of cave exploration.

The park now receives around 2 million visitors a year, with roughly a quarter taking a tour of the caves – everything from a cultural tour to the more adventurous scrambling tours on offer. The cave supports more than 130 wildlife species, such as the eyeless cavefish, (29) \_\_\_\_\_ has adapted to the lightless environment by no longer growing eyes, and the cave crayfish.

Mammoth Cave National Park is also much more than just a cave; its surrounding forest contains one of (30) \_\_\_\_\_ (diverse) habitats in the country. There are miles of trails open for horseback riding, with kayak and canoe trails and great fishing spots. There are also more than 1,300 flowering species in the forest, and animals like wood warblers, thrushes, and bald eagles can regularly be spotted.

答案:

21. may                    22. In addition to            23. being recognized            24. of                    25. mined  
26. providing            27. proposed                    28. had been established            29. which                    30. the most diverse

## 11.杨浦区

**Going Hungry in the Land of the Rich**

The United States is one of the world's wealthiest countries. Despite this, many Americans struggle just to put healthy food, or any food at all, on the table every day. One might think that a food shortage (21) \_\_\_\_\_ (happen) in America, but this is not the case. There is more than sufficient food for everyone, 40% of (22) \_\_\_\_\_ is unfortunately, wasted every day. There are many different ways food (23) \_\_\_\_\_ (waste): farmers only pick the best-looking crops, deliveries aren't made on time, supermarkets throw out extra products, customers buy more than they need, and so on. The highest level of wastage tends to happen in the richest communities.

Meanwhile, people who live in poor or rural areas often have little or no access to food. These areas are called "food deserts." They have fewer supermarkets, and the only food options that they (24) \_\_\_\_\_ afford are often unhealthy ones. Healthy foods (25) \_\_\_\_\_ such as fresh fruits and vegetables may be impossible to find. Sadly, 12.8% of the American population live in food deserts.

What can we do to help (26) \_\_\_\_\_ who don't have enough food? Shirley and Annie Zhu came up with a solution. In 2017, when Hurricane Harvey destroyed over 100,000 homes in their city, Houston, the sisters got involved. (27) \_\_\_\_\_ helping to clear water from a flooded supermarket, they saw a huge amount of food being wasted. At the same time, thousands of people in the city didn't have enough (28) \_\_\_\_\_ (eat).

The girls set up Fresh Hub with 10 of their classmates, (29) \_\_\_\_\_ (hope) to do something to help. They created an app which could be used by residents to find out (30) \_\_\_\_\_ fresh food was available. Then they contacted local farmers and supermarkets to ask for their extra food. To date, Fresh Hub has delivered more than 15,000 pounds of food to people in need.

**答案:** 21. is happening 22. which 23. is wasted 24. can 25. such as  
26. those 27. While/When 28. to eat 29. hoping 30. whether/if/what/where

## 12.长宁区

**Even Very Young Children Can Be Depressed**

If you doubted it, I would introduce you to Susan, who came to my office and talked constantly about her “bad feeling.” Susan 21 (lose) interest in her favorite activities, stopped playing with her friends, and told her parents that she wanted to be dead. She’d spent more time in the school nurse’s office than in her classroom.

Susan was six years old, 22 (suffer) from depression. Proper treatment helped Susan recover. Without it, she might still be an unhappy child, alone and in pain.

The risk for depression does tend to increase as we grow older. Depression in young children is rare but real. Rene Spitz, a 23 (note) psychological researcher, found that infants who were in an institutional orphanage after World War II refused to eat and eventually died 24 they weren’t held by their caretakers. Children have an innate need 25 (hold) and comforted. If those needs aren’t met, then even very young children can fail to thrive and may become sick and die.

Approximately 1% of preschoolers experience depression; they often have great difficulty expressing their feelings, because not all of their language skills 26 (develop) sufficiently. Instead of expressing their feelings 27 language, the depressed preschool children are likely to show emotions by exhibiting significantly aggressive, fearful, or crying behavior. 28 most preschool children may get angry if they’re hungry, sleepy, afraid when their parents go away, 29 fail to get Daddy to buy them the latest toys, these behaviors are often carried to extremes of intensity and frequency in depressed children.

Although a diagnosis of clinical depression is rare in preschool children, there are times when it is appropriate. In most cases, the child has experienced significant frustrations resulting from the death or absence of a parent, has witnessed or been victims of violence, or has had a significant health problem 30 has interrupted normal emotional or physical development. I find preschool children to be more resilient (适应力强的) than older children in dealing with these events, as long as they have a supportive parent and receive timely treatment.

**答案:** 21. had lost/lost 22. suffering 23. noted 24. if /when 25. to be held  
 26. are developed/have been developed 27. in 28. While/Although/Though 29. or 30. that/which

### 13. 嘉定区

#### Seeing Math on the Page

Math and literature are probably two of the subjects that bring students headaches. However, scientists wonder (21) \_\_\_\_\_ the beauty of math can be found in literary works. *Once Upon a Prime: The Wondrous Connections between Mathematics and Literature*, a book published recently by UK mathematician Sarah Hart, (22) \_\_\_\_\_ (present) some interesting thoughts about “three”. She argues that the beauty of this number is indeed evident in many works of western literature and languages in general.

‘Three’ is the minimum number (23) \_\_\_\_\_ a two-dimensional shape can be defined. For example, three sticks can create a triangle, a stable structure. Many common phrases are in three words, such as “ready, set, go”. Being the first things kids may learn, some nursery rhymes have a word (24) \_\_\_\_\_ (repeat) three times, such as “row, row, row your boat”. In stories, there are usually three main characters, such as Harry, Ron and Hermione in the *Harry Potter* series. For a series of novels, there are usually three books (25) \_\_\_\_\_ four, according to Hart.

Why is it always the third son who behaves differently from his two older brothers, thus (26) \_\_\_\_\_ (win) the princess? “The reason for this,” Hart explains, “is obvious. We require two repetitions to get to know the pattern, (27) \_\_\_\_\_ the breaking of the pattern in the third character can surprise or amuse us.”

Similarly, another study by researchers at the University of Vermont also connected math and storytelling. They analyzed more than 1,300 fiction books and arranged for 10,000 words from the books (28) \_\_\_\_\_ (rate) by 50 participants on a happiness scale of 1 to 9. Then the ratings (29) \_\_\_\_\_ (categorize) into different graphs, which showed how the readers’ emotions changed while reading. It turned out that each story fit perfectly into one of six basic graphs, a mathematical pattern.

“The idea that one would (30) \_\_\_\_\_ choose between mathematics and literature is something of a tragedy,” Hart says, “The two fields are fundamentally linked”.

**答案:** 21. whether 22. presents/has presented 23. with which 24. repeated 25. rather than / instead of  
26. winning 27. so that 28. to be rated 29. were categorized 30. have to

#### 14. 浦东新区

##### Wildlife Report Calls for Action

The World Wide Fund for Nature released its Living Planet Report, which found that the Earth's wildlife populations have fallen by 69% in the past 50 years.

The report is produced every two years to show how the natural world is changing, so governments, businesses, and conservationists understand (21)\_\_\_\_\_ needs to be done to protect the Earth. The team looks at several factors. One is the Living Planet Index (LPI), (22)\_\_\_\_\_ examines how wildlife populations have changed over time. A total of 5,268 species across the world have been tracked, including birds, fish, insects, and mammals.

The change in wildlife varies around the world. South America and the Caribbean are the most affected. In these areas, the average wildlife populations have dropped by 94% over 50 years. Central Asia and Europe have (23)\_\_\_\_\_ (small) decline, with an 18% drop. The WWF says the changes are caused by human activity. One of the biggest threats (24)\_\_\_\_\_ (face) wildlife is the number of acres of forest that are being chopped down (25)\_\_\_\_\_ the land can be used for farming instead. To find the best way to protect animals worldwide, the International Union for Conservation of Nature(IUCN) is studying how easy or hard (26)\_\_\_\_\_ will be to help different species. It has so far found that the populations of several animals, including the pink pigeon and the Sumatran rhino, (27)\_\_\_\_\_ be boosted.

While some news from the Living Planet Report is worrisome, there is good news, too. Up to now the numbers of many species (28)\_\_\_\_\_ (rise) around the world because of people's efforts to protect them. In India, the number of tigers has nearly doubled since 2009. And in 2020, there were more than 50 sightings of the critically (29)\_\_\_\_\_ (endanger) Antarctic blue whale.

In the US, conservation efforts in recent decades have helped to save several species, including the bald eagle, which (30)\_\_\_\_\_ (remove) from the threatened species list in 2007.

21. 答案: what /something 22. which 23. the smallest 24. facing 25. so that  
26. it 27. can/could/may/might 28. have risen /have been rising  
29. endangered 30. was removed

## 15. 普陀区

### Love from the Apple Tree

Once upon a time, there used to be a tall and big apple tree. A little boy, every day to the tree down, climbed up (21) \_\_\_\_\_ (pick) apples to eat, and slept in the shade of the tree. He loved the apple tree, and it loved to play with him. The little boy gradually grew up and stopped (22) \_\_\_\_\_ (come) to play every day. One day he came to the tree, picked all the apples and left happily. Another day, the boy came again, and cut off all the branches, happily away to build a house himself. One summer, the boy came back, cut down her tree trunk, built a boat, (23) \_\_\_\_\_ (sail) away, and did not come back for a long time. After years, the boy returned at last. He was old and wanted (24) \_\_\_\_\_ more than a place to rest. “Old root is (25) \_\_\_\_\_ (suitable) to sit down and rest, come on, sit down and rest with me!” The boy sat down, and the apple tree was so happy that it shed tears.

This is a story of everyone. The tree is like our parent. (26) \_\_\_\_\_ we are young, we love to play with Mom and Dad. Having grown up, we leave them, and only come to them when we need something or when we are in trouble. No matter what, parents will always be there and give everything they (27) \_\_\_\_\_ to make you happy.

(28) \_\_\_\_\_ your parents can give you is not necessarily the best in the world, but they will try their best to give you all, and they are afraid that it is not enough; maybe they never said “I love you”, but love you in their own way for a lifetime, (29) \_\_\_\_\_ is how most parents around the world show their love. For example, a tired father was watching his two daughters eat fried chicken, but he didn’t order anything, telling his daughters that he was not hungry, (30) \_\_\_\_\_ more money in his pocket. We grow up to know that the world’s most affectionate lie is what the father and mother said: I do not love to eat it and I am not hungry.

答案: 21. to pick      22. coming      23. sailed      24. nothing      25. the most suitable  
26. When/While      27. can/could      28. What      29. which      30. without

## 16. 奉贤区

### The First Space Cat

In a few weeks, space scientists will celebrate a remarkable event – the 60th anniversary of the launch of the first cat into space, an astronautical success that has never been repeated.

In the early 60s, dogs and monkeys were the animals usually used by scientists to find out exactly (21) \_\_\_\_\_ dangerous the conditions were in outer space. And they were also used to assess if humans (22) \_\_\_\_\_ survive trips beyond the edge of Earth's atmosphere.

A total of 14 street cats (23) \_\_\_\_\_ (gather) at France's space agency for selection as cat astronauts, but the cats were not given names on purpose in order to prevent scientists from becoming too fond of them. The cat selected to travel to space was simply known (24) \_\_\_\_\_ C341. C341 flew on a French rocket in October 1963, taking it to a place (25) \_\_\_\_\_ no cat had gone before.

Then, (26) \_\_\_\_\_ the news of its flight was announced on 18 October 1963, the French press decided this cat had to have its name. They picked "Felix" after a cartoon cat character, only (27) \_\_\_\_\_ (discover) that C341 was female, so her name was then adjusted to "Félicette" as a result. In putting Félicette in one of its rockets, France added a new species to the list of animals that scientists (28) \_\_\_\_\_ (send) into space before. Previously, two garden spiders, Anita and Arebella, had been taken to the Skylab (29) \_\_\_\_\_ (orbit) around the moon.

"In the 60s, (30) \_\_\_\_\_ (concern) about the possible danger for a human to be in outer space, scientists and engineers primarily undertook animal space flights to see if they suffered or their lives were threatened by the weightlessness or increased radiation or other effects they might experience up there," said astronomer Jake Foster at the Royal Observatory Greenwich. "The fact that they did not fail paved the way for humans to begin journeys into space."

答案: 21. how      22. could      23. were gathered      24. as      25. where  
26. after      27. to discover      28. had sent      29. orbiting      30. concerned