**PART 1 핵심을 꿰뚫어라**

**01 주제∙제목**

**기출 깨뜨리기**

The names of pitches are associated with particular frequency values. Our current system is called A440 because the note we call ‘A’ that is in the middle of the piano keyboard has been fixed to have a frequency of 440 Hz. This is entirely arbitrary. We could fix ‘A’ at any frequency, such as 439 or 424; different standards were used in the time of Mozart than today. Some people claim that the precise frequencies affect the overall sound of a musical piece and the sound of instruments. Led Zeppelin, a band popular in the 70s, often tuned their instruments away from the modern A440 standard to give their music an uncommon sound, and perhaps to link it with the European children’s folk songs that inspired many of their compositions. Many purists insist on hearing baroque music on period instruments, both because the instruments have a different sound and because they are designed to play the music in its original tuning standard, something that purists deem important.

**이렇게도 나왔다**

In some sense, tea played a life-changing role for herdsmen and hunters after it spread to China’s grasslands and pasture lands. It is often said that people make a living according to given circumstances. On high mountains and grasslands in the northwest part of China, a large quantity of cattle, sheep, camels, and horses are raised. The milk and meat provide people with much fat and protein but few vitamins. Tea, therefore, supplements the basic needs of the nomadic tribes, whose diet lacks vegetables. Therefore, the herdsmen from the Qinghai-Tibet Plateau, the Xinjiang and Inner Mongolia autonomous regions follow the tea culture system in which they drink tea with milk. And they make milky tea the most precious thing for the people in the northwest part of China.

**적용독해**

1.

For anyone trying to travel into or out of England this past weekend, it was a nightmare. The Eurostar rail line connecting London to cities on the continent was completely shut down. Roads throughout the country were also unusable. Thousands of drivers were forced to leave their cars on the roadside and find another way home due to the icy conditions. Even air travel was impossible. Hundreds of flights were canceled during the three-day period, which left thousands stranded at the airport. Travelers were very upset. Most did not understand how just five centimeters of snow could close down the entire country. In the wake of the winter storm, officials have announced plans to improve emergency transportation policies in order to prevent this from happening again.

2.

Despite the contrary opinions of most scientists of the time, Jonas Salk believed that injecting patients with polio virus that had been “killed” would immunize them from the disease without infecting them. He tested his vaccine on volunteers, including himself and his family, and found that they all developed anti-polio antibodies without contracting polio or experiencing any negative side effects. In 1954, a national test of the vaccine was conducted on one million children, and the vaccine was declared safe and effective the next year. Before the vaccine was made available to the general public, the annual number of polio cases in the USA averaged more than 45,000. But by 1962, that number had dropped below 1,000. Interestingly, Salk never patented his vaccine, as he was more concerned with making it safe and effective than with earning profits.

3.

For many years, conservationists have worried about the loss of biodiversity in the wild. However, diversity loss is also occurring under the watchful eyes of farmers. One problem is that certain breeds of livestock are growing less popular due to the fact that they offer less milk or meat. The same thing is true with crops. Over the past century, three fourths of the genetic diversity of crops has been lost. Many farmers have switched to plant varieties that grow faster and produce more food. Of the 30,000 edible species of plants on our planet, a mere 30, including rice, wheat and corn, account for 95 percent of what we eat. Unfortunately, there is currently a need to increase world food production to deal with the growing population. The loss of diversity due to this situation could make it harder to grow crops in new places with different environmental conditions.

4.

Scientists have long considered the Moon to be a promising location for colonization. Compared to other potential destinations in space, the Moon is much closer to Earth, and thanks to this close proximity, the time it would take to transport people and equipment there would be relatively short. The Moon’s proximity to Earth would even make it possible to develop a tourist industry that could bring visitors there for a short period of time. In addition, the Moon has many local resources that could be extracted and then used to build settlements, radiation blockers, and much more. Finally, the possibility of ice existing at the Moon’s poles gives hope that colonists could have a reliable source of water.

5.

Contrary to popular belief, video games are not always bad for your health. A video game called *Re-mission* is designed for children with cancer. In the game, they guide a microscopic character through a human body in order to destroy cancer cells. The game reflects the process the kids are going through, and the game’s weapons are based on actual cancer treatments such as chemotherapy and antibiotics. The game helps children learn about cancer, giving them a feeling of control. When they are shooting cancer cells in the game, it is as if they are fighting the cells in their own body. According to a study on the effectiveness of the game, the more cancer cells they destroy, the less likely they are to experience side effects like infections and nausea. In interviews, patients reported that they had more energy and felt their chances for full recovery were more promising due to overcoming the cancer cells in the games.

6.

Humans are sometimes able to help even the largest of nature’s creatures. This was the case recently when a 50-ton humpback whale got tangled up in some fishing lines. When a fisherman saw the whale and called for help, a team of brave divers entered the water to try to save it. It was dangerous work, for the whale could easily have killed the divers with a simple flip of its tail. Finally, though, they succeeded in cutting the lines and freeing the whale. But before swimming off, the whale went up to each of the divers and nuzzled him. The divers had never seen such a display of affection before. Too surprised to move, they watched as the whale slowly faded into the distant sea.

**02 요지∙주장**

**기출 깨뜨리기**

In our efforts to be the good child, the uncomplaining employee, or the cooperative patient, many of us fall into the trap of trying to please people by going along with whatever they want us to do. At times, we lose track of our own boundaries and needs, and the cost of this could be our life, both symbolically and literally. When we are unable to set healthy limits, it causes distress in our relationships. But when we learn to say no to what we don’t feel like doing in order to say yes to our true self, we feel empowered, and our relationships with others improve. So don’t be afraid to say no. Try to catch yourself in the moment and use your true voice to say what you really want to say.

**이렇게도 나왔다**

Have you ever met someone while you were experiencing significant emotional, psychological, or physical stress? Perhaps you stayed up all night studying for a final, or maybe you learned that a grandparent recently died. You likely exhibited behaviors that are not consistent with how you usually act. Meeting someone when you are extremely stressed can create an inaccurate impression of you. For this reason, recognize that our first impressions of others also may be perceptual errors. To help avoid committing these errors, engage in perception checking, which means that we consider a series of questions to confirm or challenge our perceptions of others and their behaviors. For example, see if you can provide two possible interpretations for the verbal and nonverbal behavior observed and seek clarification of it in order to determine the accuracy of your evaluation.

**적용독해**

1.

Fox and Cat were resting in the forest one day, talking about how they escaped their enemies. “I’m so clever,” said Fox. “I know 100 different ways to escape my enemies.” Cat was impressed. “I only have one way,” he said, “but it’s worked well for me so far.” Suddenly, the quiet of the forest was broken by the barking of hounds. Cat quickly climbed the nearest tree and hid in the leafy branches. “This is how I always escape,” he said to Fox. “Which of your tricks are you going to use?” Fox thought hard about it, first deciding on one way, and then changing his mind and choosing another. He was still lost in thought when the hounds arrived, and he was easily killed by the hunter.

2.

It is fairly common for people to do the same things again and again. We all have habits that we find comfortable. We meet the same people, eat the same foods and watch the same TV programs day after day. So we usually end up thinking the same thoughts and having the same opinions. It doesn’t sound very interesting, does it? So why not try something different? You can start with something small. Maybe you can say hello to one of your classmates you seldom talk to. Or you can just try eating something new for lunch. Experiment with breaking your routines and who knows what will happen? By making tiny changes in your life, you might open the door to a new experience or an exciting opportunity.

3.

Defensive pessimists are people who use a kind of negative thinking to achieve positive results. They use this calculated strategy when dealing with emotions such as anxiety and fear. First, they set low expectations for themselves, imagining everything that can go wrong. Then they come up with a solution for each of these problems, which makes them feel as if they are in control. Unlike people with low self-esteem, defensive pessimists use their poor opinion of themselves as a tool to succeed. Before giving a presentation, for example, a defensive pessimist might think, “No one is going to understand this information. I’ll have to make sure I explain it very carefully.” In this way, defensive pessimists are able to deal with problems. And in situations in which they don’t succeed, they feel as though they were prepared and therefore don’t see failure as a catastrophe.

4.

There is an unfortunate gap in our society between scientists and regular people which prevents the two groups from communicating well with each other. Those with scientific minds have trouble explaining their work in common language, while gifted speakers usually do not have much scientific knowledge. But the fact is that the studies and experiments scientists are doing every day have a huge effect on our lives. Wouldn’t it make sense, then, for them to make an effort to inform society about what they are doing and why? Instead of spending all their time hiding away in laboratories, scientists should take a little time each day to make a speech or talk to a reporter about their work.

5.

Song lyrics are sometimes distinguished from poems through the idea that songs are written in everyday language that most people can understand, while poems are written in a difficult, literary style. But rather than separating these two forms of writing based on the language of the song or poem, it is more useful to consider what accompanies the words. Song lyrics go along with other musical content, such as melody, rhythm, and instrumentation. However, in a poem, words are accompanied only by silence. If the surrounding musical content is removed from song lyrics, they can sometimes even be thought of as a poem. This shows how important it is to define poems and song lyrics based not on their internal linguistic qualities but on how their words relate to the sounds, or lack thereof, that surround them.

6.

In modern society, the division of workers into the categories of skilled and unskilled has its roots in early childhood. Unsurprisingly, children born with social disadvantages are more likely to end up as unskilled workers. We may talk about living in a land of equal opportunity, but we can’t deny that the quality of a person’s opportunities is to some extent determined at birth. To improve this situation, change is required. Social policies that enrich the home environments of disadvantaged children would help give them a fair chance of succeeding when they grow up. Studies have shown that such improvements have a positive effect on social behavior, schoolwork, and, ultimately, career success. Addressing opportunity inequality through this kind of early intervention is clearly preferable to interfering with current workplace hiring practices.

**03 요약문**

**기출 깨뜨리기**

Low-balling is a technique where two individuals arrive at an agreement and then one increases the cost to be incurred by the other. For example, after the consumer has agreed to purchase a car for $8,000, the salesperson begins to add on $100 for tax and $200 for tires. These additional costs might be thought of as a ‘low ball’ the salesperson throws the consumer. One explanation for the effectiveness of low-balling is in terms of self-perception theory. When the consumer agrees to purchase the product under the original terms, he may use that behavior to confirm to himself his sincere interest in the product, which may enable him to endure the increased cost. Another explanation is in terms of impression management theory. If the consumer were to withdraw from the deal after the ‘slight’ change in the agreement, he might foster the undesirable impression of being an irresponsible consumer unaware of these necessary charges.

Low-balling is effective because the consumer, by not withdrawing from the deal, tends to justify his purchase or tries to save face.

**이렇게도 나왔다**

You’d think that whenever more than one person makes a decision, they’d draw on collective wisdom. Surely, a group of minds can do better than an individual. Unfortunately, that’s not always the case. The wisdom of a crowd partly relies on the fact that all judgments are independent. If people guess the weight of a cow and put it on a slip of paper, or estimate the likelihood of a revolution in Pakistan and enter it into a website, the average of their views is highly accurate. But, surprisingly, if those people talk about these questions in a group, the answers that they come to are increasingly incorrect. More specifically, researchers have found an effect of group polarization. Whatever bias people may have as individuals gets multiplied when they discuss things as a group. If individuals lean slightly toward taking a risk, the group leaps toward it.

When people dependently work with others, the wisdom of the crowd often turns into the stupidity of the group.

**적용독해**

1.

Researchers conducted an experiment to find out if excessive mental activity can make us feel worn out. In the experiment, some participants were asked to play a mentally challenging computer game, while others simply enjoyed watching a movie, an activity that didn’t require any cognitive effort. Afterwards, all of the participants took an endurance test by riding an exercise bike. The results showed that those who had played the game gave up more quickly than those who had watched the movie. This might seem to suggest that the mental activity did actually tire them out. However, medical tests showed that their blood pressure, breathing and heart rate — standards for physical state — remained normal. The researchers believe this misperception occurred because the participants anticipated the endurance test to be more difficult than it actually was.

An experiment showed that feelings of physical exhaustion from thinking too hard are nothing more than a trick of the mind.

2

Not all of the actions people take have identifiable causes. For example, a lifeguard who risks her own life to save a swimmer drowning at sea does not first establish a set of principles upon which she then bases her decision to jump into the water. When we admire the lifeguard’s character, we are admiring not her rationality but her noble instincts. Furthermore, when we act consciously, we are not necessarily being more efficient or effective. In fact, once we have learned a skill, whether it be swimming, dancing, or typing, careful attentiveness to our actions tends to just get in the way. Even great ideas are usually not products of the careful and methodical formation of concepts that we gradually piece together. Rather, brilliant insights often come to us like gifts when we least expect it.

We don’t always have good reasons for our actions; oftentimes, intuition can lead to better results than intentional actions.

3

The introduction of European settlers to North America changed the traditional lifestyles of Native Americans forever. However, only a small percentage of Native Americans found the way of life of the white settlers superior to their own. Even the Native American children who received a formal education in white schools nearly always chose to return to live with their own people. The same was true for any Native American given the opportunity to choose between the two lifestyles. From the perspective of the native peoples, the way of life being offered to them by the European outsiders lacked freedom, created extremes of wealth and poverty, and focused too much on the accumulation of money and other material things. They had no problem rejecting this foreign lifestyle, as it seemed impossible that it could bring them true happiness.

Most Native Americans preferred to maintain their way of life rather than adopt the European settlers’ lifestyle, which they saw as restricting their freedom and happiness.

4

In the late 1960s, psychologist Walter Mischel began researching both instant and delayed gratification in children. In his experiments, he offered preschoolers an immediate reward, such as a marshmallow or a pretzel, but told them they could receive a larger reward if they waited for a short period of time. Mischel wanted to figure out to what degree self-control is something people are born with and how much it depends on one’s ability to develop strategies for resisting temptation. All of the children in the experiments found it hard to resist the immediate reward. But those who most successfully resisted employed strategies such as singing to distract their attention away from the reward and even sitting on their hands to physically restrain themselves. In addition, Mischel discovered that all of the children had an easier time resisting the immediate reward when the researcher actively distracted them.

Children’s ability to exert self-control is linked to their ability to develop methods to help themselves overcome temptation.

**04 목적**

**기출 깨뜨리기**

Good news for pet shop owners! We, ABLE Shipping, have developed the perfect system for shipping fish to your customers. We can ship live fish across the nation, and the fish will do just fine. Are you wondering how we ensure each fish has a safe journey? Here’s the secret. We pack each one in an oxygen-inflated plastic bag with enough water to keep the fish relaxed and comfortable. Furthermore, each bag is wrapped in a cushion and then placed inside a shipping box. Your fish will enjoy the journey all the way to your customers’ front doors. Call us at 1-800-456-4959 or e-mail us at fishlove@ ableshipping.com, and you’ll see how it works.

**이렇게도 나왔다**

As a recent college graduate, I am very excited to move forward with my career in marketing and gain additional experience in a food sales environment specifically. I have heard wonderful things about your company and would love to join your team. While my prior experience has been in retail, I have always wanted to move in the direction of food sales. My volunteer experience has allowed me to work with people from all walks of life, and I know how much they appreciate your company’s contributions to the local charity. If hired as a member of your Marketing Department, my goal would be to get new clients and to ensure that current customers continue to feel excited about their purchases.

**적용독해**

1

Although we are sorry about the problems you’ve had with your Goldblade electric razor, we regret to inform you that we cannot repair it free of charge. As you noted, the razor is still under warranty. However, as the terms of the warranty were broken, it no longer applies. The razor was designed to be used with a 110-volt outlet. For 220-volt outlets, a converter must be used. This is explained clearly in the user’s manual. There is also a warning sticker on the razor itself. Since you plugged your razor directly into a 220-volt outlet, there will be a charge of $80 to repair it. Again, I apologize for the situation, but we must follow the terms of the warranty.

2

This morning, while my children were watching the *Saturday Morning Kids’ Hour* on your station, I noticed that there was an advertisement showing a group of children playing together on a school playground during one of the commercial breaks. When a new child approaches the group and asks if she can join them, the other children reject her because she is not wearing the clothing brand being advertised. This advertisement could have severely negative effects on children’s behavior towards others and on their own self-esteem, especially if they themselves are introverted or unpopular. Therefore, I request that you no longer broadcast this advertisement during your *Saturday Morning Kids’ Hour* commercial breaks. In its place, positive messages about things like the benefits of eating nutritious foods or treating one another with respect could be broadcast.

3

Recently, CALBIT, Inc. has become aware that emails appearing to have been written by CALBIT executives are being delivered to email addresses throughout the company. While the exact content of these emails varies, it usually has to do with an opportunity of employment in the financial or international payments divisions. Sample email titles include “In-House Work Available” and “ATTN: Job Opening in Finance.” These messages, although they bear the company logo and a link to our website, were not generated by CALBIT executives and do not contain accurate information. If you think you may have received one of these emails, please report it to the Tech Department immediately by calling extension 515. Most importantly, do not open any attachments or click on any of its links, as they may expose your computer to a virus.

**REVIEW TEST 1**

1

As you know, I was involved in a serious accident last January. While I was taking a walk through my neighborhood one evening, a car hit me from behind and shattered several bones in my legs. The doctors told me I might never be able to walk again. For six months, I spent three hours at your gym every day working with your physical therapy experts. Little by little, I felt my legs healing and returning to their former strength. I am proud to report that as of today, I can walk again with only the assistance of a cane. The enthusiasm and commitment of the gym staff made my recovery experience both fun and effective, and I don’t think I would have achieved such progress without them.

2

When living in a society, people often exchange things with one another in order to gain what they need and achieve their goals. A long time ago, money became the standard form for representing such exchanges. This standard is beneficial because it assigns an exact value to labor, services and goods, allowing each party in an exchange to be sure that the transaction is a fair one. Such exchanges make it possible for the members of a society to work collectively to improve the quality of the society as a whole. As the representative measurement used to carry out each exchange, money enables this to occur. In other words, money by itself has no value. Its value is only created by the fact that it is a social product.

3

There was once a king who, seeking to impress his royal guests, commanded his servants to capture monkeys from the forest and train them to dance. The servants were successful, and before long they had taught the monkeys to wear fancy clothes and masks and dance onstage. All the king’s guests were very impressed, and they congratulated him on having the finest dancers in the land. One day, a member of the court decided to have some fun. During the monkeys’ performance, he threw a handful of nuts onto the stage. The monkeys went wild, ripping off their clothes and masks and fighting with each other over the nuts. The dance was ruined. The audience laughed at the monkeys, but they laughed even harder at the king, ridiculing him for trying to turn monkeys into courtly dancers.

4

Although you might think taking a shorter shower can help conserve water, actions like this in fact have a minimal impact. On the other hand, producing beef requires huge amounts of water, because all of the grains cows eat need water to grow. Large amounts of water are also needed to make processed foods such as frozen pizza. Perhaps the worst news of all is that one of the most delicious items we can buy, chocolate, is also one of the most water-demanding. Most individuals have a good deal of control over their purchases, but they tend to be unaware of how environmentally friendly various products are, including how much water is used in their production. So one of the best ways for us to save water is actually to pay closer attention to what we buy.

5

It isn’t news that our genes determine many things about us, such as our gender and eye color. The fact that depression can run in families isn’t news either. However, whether this depression is in our DNA or a result of our family environment was a mystery until recently. According to new studies on the genetics of depressive illness, some people have a greater chance of developing depression than others. If someone in our immediate family has had the condition, our risk of becoming depressed can be doubled or even tripled. Also, about half of individuals with bipolar disorder have parents with a record of depressive illness. These results do not indicate that depression is unavoidable, but they show that it is more likely for people with certain genes.

6

Deer living in a region where there are no wolves sometimes experience a condition called chronic wasting disease (CWD). Yet, in other regions of the United States where wolves have recently returned, deer populations show no signs of CWD. Similarly, the large grazing animals in Yellowstone National Park, such as bison and elk, used to do as they pleased. With no predators to chase them, they often remained in the same area until they had eaten every last bit of vegetation there. However, since wolves have been reintroduced to the park, the grazers have to move around more to evade them. As a result, the vegetation has grown back and is flourishing. This, in turn, has allowed other animals that rely on the vegetation for food to return as well.

Predators like the wolf play a vital role in maintaining the balance of life in an ecosystem.

7

One day in 1903, chemist Edouard Benedictus dropped a glass container and it broke on the floor. Amazingly, though, the glass did not shatter. Benedictus investigated the container and found a thin film on the inside left over from when he had filled it with a solution of collodion. Not long after the incident, he was reading the newspaper and came across an article about a car crash. The passengers in the vehicle were badly injured when the windshield glass shattered and cut them. Remembering what had happened to his broken container, Benedictus got the idea that a special coating could be used on windshields to prevent them from shattering. And before long, he succeeded in inventing the world’s first safety glass.

8

Quarantine inspections are performed in airports to help stop diseases from spreading from country to country. This practice began in 14th-century Europe, during the time of a horrific plague that killed one-third of the continent’s population. In 1377, the first quarantine law was passed in the city of Ragusa, now known as Dubrovnik, Croatia. All ships arriving from plague areas had to remain isolated until it was certain that none of the crew members were infected. Later, 40 days was decided upon as the length of time the ships had to wait. Although there was no scientific reason for choosing such a specific period of time, this practice led to the modern concept of quarantines. In fact, this is actually where the word quarantine comes from — Ragusa was an Italian-speaking city, and the Italian word for 40 is *quaranta*.

9

For many years, it has been suggested that people who experience severe jet lag have problems with their short-term memory. For example, pilots and flight attendants who travel on many long-distance flights in a short period often report things like losing their keys and being unable to remember their hotel room numbers. A researcher recently experienced this phenomenon after flying on several trans-Atlantic flights in one month. Intrigued, he decided to study how jet lag affects brain functions, especially memory. He scanned the brains of people suffering from serious jet lag and compared the images to those of people who had not traveled at all. His findings indicated that jet lag caused harm to the people’s brain cells and that part of their brains had even shrunk.

According to a recent experiment, jet lag may cause a form of brain damage and result in a decrease in short-term memory capacity.

**PART 2 추론하면서 읽어라**

**05 빈칸 추론**

**기출 깨뜨리기**

In all cultures in which eye-gaze behavior has been studied, science confirms that those who are dominant have more freedom in using it. In essence, these individuals are entitled to look wherever they want. However, subordinates are more restricted in where they can look and when. Humility dictates that in the presence of royalty, as in church, heads are bowed. As a general rule, dominants tend to ignore subordinates visually while subordinates tend to gaze at dominant individuals at a distance. In other words, higher-status individuals can be indifferent while lower-status persons are required to be attentive with their gaze. The king is free to look at anyone he wants, but all subjects face the king, even as they back out of a room.

**이렇게도 나왔다**

In science, we can never really prove that a theory is true. All we can do in science is use evidence to reject a hypothesis. Experiments never directly prove that a theory is right; all they can do is provide indirect support by rejecting all the other theories until only one likely theory remains. For example, sometimes you hear people say things like ‘evolution is only a theory: science has never proved it.’ Well, that’s true, but only in the sense that science never proves that any theory is positively true. But the theory of evolution has assembled an enormous amount of convincing data proving that other competing theories are false. So though it hasn’t been proved, overwhelmingly, evolution is the best theory that we have to explain the data we have.

**적용독해**

1

People mentally preparing for a challenge often focus on a positive outcome so that their subconscious minds will propel them to success. A young bull rider proved the power of the subconscious by using this technique. In bull riding, the goal is to stay on the bull for eight seconds. In the beginning of the man’s career, he constantly worried about getting thrown off too fast. And each time he rode the bull, he’d get thrown off after only a couple of seconds. One day, instead of focusing on what could go wrong, he decided to think only about what could go right, all the money he’d earn and all the fans he’d attract. Sure enough, he stayed on the bull for eight seconds that day, and now he’s the U.S. bull riding champion.

2

Sleeping in an unfamiliar bed can be difficult. In fact, sleep problems caused by new surroundings are referred to as the “first night” effect. Researchers believe that this phenomenon is caused by a division in our brains — the right hemisphere sleeps deeply, but the left hemisphere does not. The reason for this imbalance is that one of the roles of the left hemisphere is to stay alert when we find ourselves in a strange environment. In other words, the first-night effect is a sort of built-in security guard working the night shift. If it hears the slightest sound, it wakes us up. While this mechanism was probably quite useful when our ancestors were sleeping in a jungle full of predators, it can be a real inconvenience when we spend the night in a hotel room or a friend’s house.

3

“Systems thinking” refers to the ability to see how things work as a whole rather than just looking at their separate parts. Many people have learned that the best way to solve a problem is to break a system up into smaller parts and then make each part work well. However, improving each section does not necessarily mean you’ve improved the whole. In fact, changing a single part for the better can actually make the whole system less effective. Imagine a small city with a traffic problem. Rather than looking at the whole situation, the city government simply decides to build more roads. Because of these new roads, more and more people begin moving to the suburbs. In the end, the solution has not helped. Instead it has enabled suburban sprawl and increased traffic congestion, all because they didn’t use systems thinking.

4

Can you perform two different activities at once? Most people can, as long as the two tasks require different kinds of attention. For example, musicians can read music and play their instruments at the same time. They focus on visual information to read the music, and they produce a physical response to play it. Since these tasks involve different kinds of concentration, they can carry them out simultaneously. The same is true for talking while driving a car. Our concentration on language does not interfere with our concentration on driving. On the other hand, most people find it impossible to do two similar things at once, such as reading a book and having a conversation. Both rely on the use of language, so we can only do one at a time.

5

These days, the media seems to be overly dependent on opinion polls. These polls are good for ratings because people pay attention to their results, believing them to be scientific shortcuts to understanding the truth about an issue. The straightforward ratios and percentages that polls produce seem to be reliable, precise, and objective. However, there are many potential pitfalls that can cause polls to be inaccurate. If the person writing the questions used in the poll is biased, it is likely that the results will be slanted in that direction as well. Also, if the questions aren’t asked of a diverse group of people, the results cannot be considered to represent the entire population. Although polls have some worth, you shouldn’t have too much faith in them

6

The exact origins of drama in ancient Greece are unknown, but many theories have been put forth. One of the most accepted of these theories asserts that superstitious rituals gradually evolved into drama. Thousands of years ago, people desired to control the unpredictable elements of nature through various methods. When one of these methods seemed to have the desired results, it was repeated over and over until it became a ritual. These rituals often featured music and dance, with masked and costumed people performing on stage. Over the years, the superstitions and myths that originally created the rituals disappeared as they were disproved by knowledge. What remained of these performances provided the basis for much of modern art and drama.

**06 연결사 추론**

**기출 깨뜨리기**

Oil and gas resources are not likely to be impacted by climate change because they result from a process that takes millions of years and are geologically trapped. On the other hand, climate change may not only force the shutting down of oil- and gas-producing areas, but increase the possibility of exploration in areas of the Arctic through the reduction in ice cover. Thus, while climate change may not impact these resources, oil and gas reserves and known or potential resources could be affected by new climate conditions, since climate change may affect access to these resources. In Siberia, for instance, the actual exploration challenge is the time required to access, produce, and deliver oil under extreme environmental conditions, where temperatures in January range from –20℃ to –35℃. Warming may ease extreme environmental conditions, expanding the production frontier.

**이렇게도 나왔다**

Fishing is the most obvious oceanbased economic activity. People in many coastal areas make their living by fishing, and fish and shellfish make up a major part of their diet. In fact, about one billion people worldwide rely on fish as their main source of animal protein. In terms of fishing as an economic activity, the largest segment of world fisheries is commercial fishing. Fish caught by commercial fishermen include salmon, tuna, shellfish and other edible species such as squid. Consumers are used to buying these seafoods in grocery stores, restaurants, and village markets around the world. However, the supply is not infinite. As the world’s population swells, the demand for fishing products puts intense pressure on fish populations. The worldwide catch of ocean fish swelled from 81 million tons in 2003 to 148 million tons in 2010.

**적용독해**

1

We are now in the midst of the Fourth Industrial Revolution, which is building upon the adoption of electronics and automated production that characterized the Third and includes technologies like cloud computing and the Internet of Things. The rate at which this revolution is occurring is unprecedented. Unlike previous industrial revolutions, which moved at a linear pace, the Fourth is progressing exponentially. In addition, it is replacing human labor with machines and computer programs across the entire economy. While this has the potential to raise overall global income levels, it will certainly displace workers, which in turn could produce greater income inequality between these workers and corporate owners. On the other hand, this displacement could potentially lead to an increase in jobs that are safer and more rewarding. It’s impossible to know exactly what the future holds, but history suggests that the most likely result is some combination of these two possibilities.

2

As trees grow year after year, they shed layers of bark that once protected them but can no longer contain their expanding bulk. In the same way, people eventually outgrow the defenses that they develop to shield themselves from certain unpleasant things in their lives. If they are not able to do this, they will fail to grow and realize their full potential. Trees rely on their tough bark to guard their delicate processes of growth and transformation from outside threats. Likewise, our defenses allow us to heal ourselves during troubled times and prepare to face the world again. But once we have fully healed and are whole again, we must discard these barriers. Otherwise, we will never be able to experience the true pleasures of life.

3

Every time we go online and use websites like Facebook and Google, we leave a trail of data that can be used by governments, corporations, and even cyber-criminals to track our movements and online activities. However, most people are unaware that this is happening, and even if they are, they probably don’t know what that data is being used for. In 2014, Facebook, Microsoft, Yahoo and Google began releasing information about requested data, shedding light on who wants it and why. According to Facebook, government requests around the globe increased from 35,051 in the latter half of 2014 to 41,214 in the first half of 2015. US law enforcement agencies made the majority of these requests, wanting information about users’ account details and IP addresses. Corporations, on the other hand, want information on the content that users create and share, because it allows them to develop more effective marketing strategies.

**07 지칭 추론**

**기출 깨뜨리기**

Dr. Paul Odland and his friend Bob travel frequently to South America, where they provide free medical treatment for disabled children of poor families. One day, they went to a local marketplace. Paul wanted to buy some souvenirs, and he spotted a carving that he liked. The non-English speaking seller was asking 500 pesos for the carving. With Bob acting as interpreter, Paul offered 300 and his opponent proposed 450. The bargaining in the noisy market became spirited, even intense, with Paul stepping up his price slightly and the seller going down slowly. The pace increased so fast that Bob could not keep up with the back-and-forth interpretation. Meanwhile, observing the seller carefully, Paul sensed something wrong in Bob’s interpretation. In fact, the seller had gone below Paul’s last offer. When Paul raised his doubt, Bob instantly recognized the error and corrected his interpretation. At length, they settled the deal, and he was delighted to purchase the carving at a reasonable price and thanked Bob.

**이렇게도 나왔다**

In the summer of 1972, the actor Anthony Hopkins was signed to play a leading role in a film based on George Feifer’s novel *The Girl from Petrovka*. That is why he traveled to London to buy a copy of the book. Unfortunately, none of the main London bookstores had a copy. Then, on his way home, waiting for an underground train at Leicester Square tube station, he saw a discarded book lying on the seat next to him. It was a copy of *The Girl from Petrovka*. As if that was not coincidence enough, more was to follow. Later, when he had a chance to meet the author, Hopkins told him about this strange occurrence. Feifer was interested. He said to him that in November 1971 he had lent a friend a copy of the book — a unique copy in which he had made notes on turning the British English into American English for the publication of an American version — but his friend had lost the copy in London. A quick check of the copy Hopkins had found showed that it was the very same copy that his friend had mislaid.

**적용독해**

1

Sandstorms are common throughout the dry desert regions of the world, but not every storm is the same. When sandstorms are particularly intense, they are referred to by the Arabic word *haboob*. They often occur in Africa’s Sahara desert and the large deserts of the Arabian Peninsula. The United States experiences them as well, mostly in the state of Arizona. They are generally quite large in size, measuring as wide as 100 kilometers and reaching several kilometers in height. The winds that they bring can blow at speeds as high as 50 kph and can be very damaging. Sometimes the storms will contain rain as well, but the raindrops are not seen by observers at ground level, for they evaporate before reaching the earth.

2

There are 1.5 billion people around the world without access to electricity, and another 750 million without clean water. The SunSaluter, however, may be able to help them. It is a device with an adjustable solar panel and a container on its east end. The container is filled with water in the morning, causing the panel to face the rising sun. As the day goes on, the water slowly drains from a hole in the bottom of its container, so the panel continuously moves with the sun. This water flows into another container, which has a filter that purifies the water so it can be consumed. In other words, a single device provides both energy and drinking water. And because it rotates its solar panel throughout the day, it can produce 30% more electricity than a fixed solar panel. It also produces four liters of drinking water daily.

3

Our amazing ability to recognize images was illustrated in an experiment in which subjects were shown more than 600 pictures, one at a time. After they viewed the pictures, they were shown 68 pairs of pictures as a test. Each pair contained one of the pictures from the hundreds they had previously seen. They were then asked to indicate which picture they had already seen and were able to do so with a 96.7 percent success rate. Two hours later, researchers showed them some more picture pairs. When asked which of them came from the original 600 pictures, they answered correctly an astounding 99.7 percent of the time. In similar recognition tests given several days later, they were still able to pick out the correct pictures.

**08 분위기∙심경 추론**

**기출 깨뜨리기**

I had volunteered for the charity picnic, and I needed to be there on time. Ms. Green, the charity president, was preparing this monthly event by herself. Lily complained, “Mom, I don’t feel like going today. We’ve volunteered more than five times this year.” She was eating slower than usual. I urged her, “Lily, don’t you remember we promised to help Ms. Green last month? Go and get dressed.” I stood by the door and pointed at my watch. She slowly pulled on her sweater and said, “I still don’t feel like going.” I started losing my patience. I responded, “Don’t you know Ms. Green has a lot of work to do for the picnic today? It’s time you started thinking about other people.” My voice was growing louder with each sentence.

**이렇게도 나왔다**

Workers had been looking for clean water for three days, and all that time the sound of drilling had filled the air around Nya’s home. On the third afternoon, the workers at the drill site seemed excited. They moved quickly, while their leader called out orders. Nya and the other children gathered around, and even the adults stopped working and came to see what was going on. Suddenly, with a great WHOOSH, water began gushing from a hole in the ground. At last, there was new water! The people cheered as the water shot high into the air. One woman even started to sing a celebration song. All the children, including Nya, clapped their hands. But after looking again at the water gushing from the ground, Nya frowned. The water was dirty and brown. It was full of mud.

**적용독해**

1

As we drove toward the field, I spotted the sign for Blue Sky Tours. There were several hot-air balloon companies set up around the field, but the Blue Sky balloons were the biggest. When we arrived, our balloon was inflated and ready to go, so we didn’t have to wait at all. Having never been in a hot-air balloon before, my heart was pounding as I climbed into the basket. It was more spacious than I had expected and was divided into five sections. There was a massive torch in the center, and as the pilot turned up the flame, we began to slowly rise into the air. The view was magnificent. We could see the road we had driven on and the village in which we had spent the night. And all around us were tall mountains and endless fields of green.

2

It’s 6:30 in the morning, and the Jones family is beginning their day. Charlene, who is five-months pregnant, is feeding bananas and cereal to Brian, her ten-month-old child. Suddenly, Roger, the two-year-old, begins screaming. The family dog, Jules, has just knocked him over. Charlene hurriedly chases the barking dog out into the backyard and then begins to change Roger’s diaper, all the while continuing to sing “Open, Shut Them” to Brian to encourage him to chew his food. Jim, her husband, enters the room, frantically trying to button his shirt and tie his tie. In his new diaper, Roger stumbles over to him and grabs onto his leg. “I’m sorry, I can’t play with you now,” Jim tells him. “I’m late for work again.”

3

The chair Sam was sitting in was very uncomfortable, but maybe that was because he’d been sitting in it for the last two hours. The table in front of him shook whenever he touched it, causing his half-full cup of cold coffee to wiggle back and forth. There was nothing to do but sit and stare at the wall. He’d polished his glasses, brushed off his suit, and whistled songs until he couldn’t think of any more to whistle. He wished he had a book or something to read. Pushing the chair back a little, he wondered if the table would support his legs if he rested them on top of it so he could take a nap.

**REVIEW TEST 2**

1

Human beings are born with a certain amount of sympathy and consideration for others, and this moral core can even lead us to act in a way that benefits others instead of ourselves. Education can strengthen an individual’s sense of justice so that selfishness all but disappears from one’s decision-making process. However, when it comes to larger social groups, this level of morality becomes extremely difficult to achieve. One of the main factors responsible for the inferiority of the morality of groups, when compared to that of individuals, is collective egoism. Egoistic impulses become much stronger when they are united in a group than when they are held by a single person. They are also more vividly expressed, and it is difficult to establish a rational social force to regulate this reservoir of self-interest.

2

The Waitomo Glowworm Caves are one of New Zealand’s most popular tourist attractions. When visitors enter the caves, they feel like they’ve walked into the night sky. But what seem to be stars are actually the larvae of tiny gnats. Although they glow in all stages of their lifespan — except when they are eggs — the gnats shine brightest during their larval stage. This glow helps them attract food — as they become hungrier, it becomes brighter. They also have a surprising way of capturing their prey. The larvae dangle long strands of silk covered in sticky mucus from the ceiling of the cave. When other insects, such as moths, are attracted to the larvae’s glow, they get entangled in their sticky strands. They then simply pull the strand up and eat their helpless prey.

3

Compulsive hoarding is a type of obsessive behavior in which people collect large amounts of worthless items and are unwilling to throw them away. Despite the mess and disorder this creates in their homes, people with this condition seldom realize they have a problem. However, it’s important that they get professional help. Hoarders consider their possessions to be an indispensable part of their life, even if they’re just piles of old newspapers or some broken toys. Simply the thought of getting rid of these useless objects can cause serious emotional distress. In addition, compulsive hoarding makes it difficult for these people to have a healthy social life. They are too embarrassed to have visitors to their homes due to the crowded and disorganized mess of trash and other objects, so they often live in isolation. Without the proper help, they are likely to live lonely, unsatisfying lives.

4

Over the centuries, people have come up with many different methods of telling the dishonest from the truthful. In ancient Asia, for example, suspected criminals were given a handful of raw rice. The suspect would chew on the rice and then be instructed to spit it out. Innocent people would have no trouble spitting out the rice grains, but the rice would stick inside the mouths of guilty people. The science behind this is that people who are nervous or fearful, as criminals may be when they’re being questioned about their crimes, experience certain reactions in their nervous systems. One such reaction is that the mouth stops producing saliva, making it very dry and causing the rice to stick to it. The modern polygraph test works on the same principle.

5

These days, there are some economists who believe that wide gaps between different income levels are necessary in order for capitalism to function properly. Higher incomes, they argue, are essential to serve as a reward to those who work the hardest and contribute the most to the economy. On the other hand, there are other economists who argue that this disparity in wealth is an undesirable condition that is ultimately bad for society. It goes against the principles of opportunity and equality, and contributes to high levels of violence and rising crime rates. In their opinion, this large difference in income levels is something that must be reduced. Therefore, they want to see an increase in the minimum wage and the creation of more educational opportunities for lower-income citizens.

6

The time we spent at the camp in the mountains was almost magical. One evening, after a delicious dinner of fresh fish and beans, my mother and father took me down to the river to watch the sunset. We strolled through the woods holding hands, listening as the birds sang sweet songs. It was warm, but a cool breeze blew gently through the trees. When we reached the river, the water sparkled with all the colors of the setting sun. We stood there without saying a word, watching the blue of the sky darken into black. I hugged both of my parents, and then we walked back to the camp, all three of us chatting about our plans to roast marshmallows over an open fire.

7

It has been proven through scientific experiments that there are some animals that have an extraordinary sense of direction. The Laysan albatross, a large seabird found in the northern part of the Pacific Ocean, is a great example of this. In 1957, 18 Laysans were taken from their home on Midway Island, a tiny piece of land in the middle of the Pacific Ocean. The birds were transported by plane to faraway places, including Japan, the Philippines, and Hawaii, where they were set free. It was known that the albatross could fly great distances with its huge wings, but no one imagined that these birds would be able to make it home again. Before long, however, 14 of the 18 Laysan albatrosses had found their way back home to Midway Island.

8

It was the middle of winter, and a man was hiking in the wilderness. His trail led over a frozen pond, but when he was almost across, the thin ice suddenly cracked. He was plunged into frigid water. Using all his strength, he managed to pull himself back onto land. His mind raced. He had to make a fire to dry off and warm himself up. There was no time for error. He found some dead branches and then reached into his bag for the matches, but his fingers had gone numb and he couldn’t find them. He dumped the bag’s contents onto the ground. Tearing off his gloves, he picked up the matchbox and tried desperately to light one. Again and again he tried, but the matches refused to spark.

9

The appearance of motion can be defined as the continuous displacement of an object in space in reference to a second object. If there is no second object to serve as a reference point, motion won’t be apparent. For example, if you are in a moving car, the objects in the landscape that move past serve as reference points, giving you the sensation of motion. Likewise, in an airplane, the earth’s surface can serve as a reference point. Of course, the closer the reference point, the stronger the sense of motion. For this reason, astronauts orbiting the earth at thousands of miles per hour can barely perceive a feeling of motion, as their reference point, the earth, is extremely far away.

**PART 3 정확하게 읽어라**

**09 내용 일치∙불일치**

**기출 깨뜨리기**

Jean Baptiste Joseph Fourier was a French mathematician and physicist. When he was eight years old, his father died, and less than a year after this tragedy, his mother passed away, leaving him an orphan. A charitable lady helped him attend a local military school. He wanted to become an officer but was not allowed to because he was the son of a tailor. In 1795, he became a teacher at the École Normale in Paris. During the post-Revolution frenzy, he spoke out against the use of the guillotine, for which he almost lost his life. When Napoleon invaded Egypt in 1798, Fourier and other scholars accompanied the expedition. Having returned to France, Fourier began his research on heat conduction. His mathematical theory of heat conduction earned him lasting fame. During his stay in Egypt he contracted a strange illness that confined him to well-heated rooms for the rest of his life. On May 16, 1830, Fourier died in Paris.

**이렇게도 나왔다**

Phyllium giganteum is the scientific name for the “walking leaf,” an insect that disguises itself so well that it often cannot be distinguished from a real leaf. It can grow to be up to five inches long and three inches wide. The rear wings of male walking leafs extend to the end of their abdomen. Females, on the other hand, have no rear wings, and their front wings are narrower and shorter than their abdomen. Found primarily in tropical regions of Asia, the walking leaf lays from 100 to 300 thick-shelled eggs and survives on a diet of plants such as oak, eucalyptus, raspberry, and rose. As its mobility is extremely limited, it moves only when it’s necessary to eat, spending most of its life nearly motionless in the same small area.

**적용독해**

1

The word “Gothic” is often used to refer to something dark and mysterious. From 1765 to 1840, Gothic novels were the reading material of choice in most of Europe. These early horror stories, which were written by people like Horace Walpole, Ann Radcliffe, and Monk Lewis, were sold by the thousands and were translated into multiple languages. Readers enjoyed their depictions of mystical worlds where ghosts and spirits roamed and mysterious happenings were a matter of course. The upper classes were among the most enthusiastic consumers of these stories, but publishers made sure to price them so everyone, even society’s poorest members, could read them. For the cost of a penny, anyone could enter the Gothic realm of terror, and an astonishing number of pennies were paid in order to do so.

2

Located in Central America, the country of Honduras is covered in mountains. Although five times larger than neighboring El Salvador, Honduras has a smaller population. Unlike many other Central American countries, Honduras has not suffered from political violence. However, rebels from Nicaragua often crossed the border while fighting against their country’s government. They used the northeast corner of Honduras as a base for their army in the 1980s. As for the Honduran government, it was largely controlled by foreign companies, such as the United Fruit Company, in the first half of the 20th century. In 1954, workers went on strike, which reduced the political power of the United Fruit Company. Although foreign companies still have some influence, the situation has improved these days, and Honduras is run by Hondurans.

3

Related to the bear, the raccoon looks very similar to its larger cousin. It walks in the same way, with its heels on the ground, although its front paws have a different shape, looking more like those of a monkey. Perhaps the most noticeable feature of the raccoon is the patches of black fur that circle its eyes. In another similarity to bears, raccoons have a diverse diet, including wild berries, nuts, birds, insects, frogs, snails, and crayfish. Raccoons like to rinse their food in water before eating it. Since many of their favorite snacks can be found near streams, rivers, and lakes, raccoons like to live in those places, making dens in nearby hollow trees.

4

European freshwater eels are real travelers. These snake-shaped fish are born and die in the Sargasso Sea, southeast of Bermuda. Yet they spend most of their lives in European waterways. Their journey begins at birth, when as larvae they drift east through the Atlantic. It takes them three years to cross the ocean, during which time they grow and change color. The next nine to nineteen years of their lives are spent in the rivers and lakes of Europe. Then, in old age, they retrace their path back to the Sargasso, where they reproduce and die. Though these eels possess a powerful sense of smell, used for navigation in small bodies of water, the only way scientists can explain their trans-Atlantic migration is a species-wide inherited memory.

5

The American author Kurt Vonnegut published fourteen novels, three short story collections, five plays, and five works of nonfiction during a career spanning more than 50 years. An outspoken critic of society, he rejected the mainstream political ideologies of his day, such as the “survival of the fittest” mentality which seemed ever-present in America, and this attitude influenced his writing. Vonnegut stated that his favorite writer was George Orwell and remarked, “I like his concern for the poor, I like his socialism, I like his simplicity.” On April 11, 2007, Vonnegut passed away as a result of brain injuries sustained in a fall at his home in New York City. Following his death, his son Mark compiled several of his previously unpublished short stories and essays into a book entitled *Armageddon in Retrospect*, which was released in 2008.

6

Jaguars are a kind of big cat native to North and South America. They can be found from the southern part of the United States all the way down to northern Argentina, with most living in Brazil and Central America. They were once worshipped by some indigenous American peoples for their beauty and power. Jaguars generally have bodies that are between three and six feet long, with tails that can exceed two feet in length. They have large heads, and legs that are shorter and thicker than a leopard’s. Like leopards, however, their fur is yellowish with dark spots. Jaguars can climb trees and are good swimmers. They are considered to be a near-threatened species due to their declining populations. Unfortunately, they are often killed by humans, despite an international ban on selling jaguars or their body parts.

**10 도표**

**기출 깨뜨리기**

The above graph compares the percentage of parents of minor children (hereafter, parents) and that of other adults in terms of their involvement in six library activities in 2012. Most notably, the percentage of parents is higher than that of other adults in all activity types. The percentage of parents who browsed shelves is the same as that of parents who borrowed print books. The percentage gap between parents and other adults is largest in the activity of attending classes or events for children and is smallest in the activity of using computers or the Internet. The percentage of other adults who browsed shelves is twice as high as that of other adults who borrowed DVDs, CDs, or videotapes. Finally, the percentage of parents who borrowed e-books is less than 10% but is higher than that of other adults who did the same activity.

**이렇게도 나왔다**

The above graph shows the percentage of retail car sales by vehicle size from 1995 to 2015 in the U.S. Among the given three years, midsize cars recorded the highest percentage of retail car sales each year despite a decrease from 1995 to 2005. Large cars were the least preferred among the three categories during the given period. Regarding small cars, the percentage of sales increased over the past two decades, and peaked in 2015. The percentage gap between large car sales from 1995 to 2005 was bigger than that of small car sales in the same period. In 2005 and 2015, midsize cars accounted for the same percentage of retail sales.

**적용독해**

1

The graph above compares changes in the mouth’s acidity level caused by the consumption of fruit sugar, cane sugar, and honey, as well as their effects on tooth decay, which typically occurs when the pH level in the mouth drops below 5.5. Cane sugar decreases the pH level the most quickly and causes it to remain under 5.5 for the longest period. Consuming cane sugar drops the pH level to 3.5 in 5 minutes, and it remains under 5.5 for over 25 minutes. In the case of fruit sugar, the pH level drops to 4.5 in 5 minutes, and it remains at a level that can cause tooth decay for half an hour. Honey, which causes the pH level to drop to about 4.7 in 5 minutes, appears least likely to cause tooth decay. Within 15 minutes of consuming it, the mouth’s pH level rises back above 5.5.

2

The chart above shows changing gold prices from 1970 to 2007. These changes can be categorized into three main phases. In the period between 1970 and 1980, gold prices rose sharply, with only a slight decline from 1974 to 1976. During the early portion of the next period, which occurred between 1980 and 2000, gold prices fell by more than $200 per ounce, the largest drop represented on the chart. Despite this decline, gold prices remained between $300 and $450 per ounce for this entire phase. In the third phase, which began in 2001, the price of gold rose steadily, reaching an all-time high in 2007. However, at no time during any of these three phases did the price of gold exceed $1,000 per ounce.

3

The graph above displays the employment status of city residents between the ages of 18 and 30, during a financial crisis, with separate percentages for men and women. According to the graph, there are fewer women in both the full-time and self-employed categories than there are men. However, this difference is much greater for self-employed residents than for those who work full time. But the opposite is true in the part-time category, where female workers outnumber the males by a small margin. The largest percentages of both genders are unemployed, with about half of the men and a third of the women in this category. Finally, there is an almost even split in the genders of people classified as “other.”

4

The above graph, which shows youth unemployment by race and ethnicity, reveals that while unemployment has dropped among all groups since 2010, racial and ethnic youth employment gaps remain. Since 2005, unemployment rates among white and Asian youth have been consistently lower than in other groups. In most of these years, Asian youth faced the lowest unemployment rate among all youth groups. The Latino youth unemployment rate has closely followed the youth averages since 2005. In 2015, the difference between black and overall youth unemployment decreased to 9.7 percent. This was due to falling black youth unemployment: 2015’s 19.2 percent was the lowest average unemployment rate for black youth in the years following 2007.

**11 어휘 파악**

**기출 깨뜨리기**

When people started to plant stored seed stock deliberately, they also began protecting their plants. This changed the evolutionary pressure that these food plants experienced, as they no longer had to survive in a natural environment. Instead, people created a new environment for them, and selected for other characteristics than nature previously had. Seeds recovered at archaeological sites clearly show that farmers selected for larger seeds and thinner seed coats. Thick seed coats are often essential for seeds to survive in a natural environment because the seeds of many wild plants remain dormant for months until winter is over and rain sets in. But under human management thick seed coats are unnecessary, as farmers take over responsibility for storing seeds away from moisture and predators. In fact, seeds with thinner coats were preferred as they are easier to eat or process into flour, and they allow seedlings to sprout more quickly when sown.

**이렇게도 나왔다**

The discovery that attitudes don’t always reflect actions came as a great surprise. Richard LaPiere, a professor at Standford University, gave a powerful demonstration of the disconnect between attitude and behavior in the 1930s. He traveled around the US with some colleagues from China. At the time, many people in the US had a negative opinion of Chinese people. LaPiere wrote to hotels and restaurants along the route, asking whether they would accommodate him and his Chinese guests. Of the 128 who wrote back, 92 percent told him that they would refuse to serve Chinese customers. But when he traveled around the country, visiting the same hotels and restaurants, the Chinese travelers were treated with courtesy in 249 out of 250 establishments. Remarkably, the powerful unfavorable attitudes didn’t predict actual behavior.

**적용독해**

1

You may not realize it, but the speed at which the Earth rotates is not completely constant. Because of this, there are very slight variations every so often. We are all familiar with leap years, when the calendar receives an extra day to keep it in line with the seasons. In a similar way, “leap seconds” must sometimes be added to correct tiny changes in the day’s length. For example, the last minute of 1998 was 61 seconds long instead of the usual 60, delaying the start of 1999 by a single second. You might also notice leap seconds in the time signals radio shows give to mark the hour. The normal signal consists of six beeps in succession, but this changes to seven whenever a leap second is added.

2

When we admire celebrities and fictional characters, we often try to combine parts of their personalities with our own. Some creative people honor their favorite books, paintings or songs in a similar way. This kind of work of art is known as a pastiche. Sometimes, a pastiche mimics one well-known masterpiece; other times it pieces together elements from a number of different famous sources. The intent isn’t to fool the viewer, reader or listener. Instead, it is to make people laugh or to depict the masterpieces from a new point of view. Some artists have had great success with their pastiches, taking several sources and weaving them together into new, interesting, complex works of art. Others, however, try to put together parts that don’t match. As a result, their pastiches feel inconsistent and are generally considered failures.

3

For most people in our society, economic security is uncertain at best. This is because failure in their professional lives can easily mean financial ruin. However, the same situation does not appear to hold true for some of the nation’s top corporate executives. In many recent cases, business leaders were rewarded with million-dollar bonuses and generous retirement benefits despite the fact that the corporations they were in charge of lost billions of dollars or, in some cases, even collapsed entirely. Unfortunately, no such rewards were given to the employees of these companies, many of whom were laid off or had their pension packages liquidated. The situation has become so serious that the U.S. Congress has had former CEOs testify about why they deserved such large bonuses and retirement benefits when their performances were so unsuccessful.

4

In many of the world’s cultures, tradition states that special actions must be taken when one of a child’s baby teeth falls out. Many such customs involve a belief that a particular creature is responsible for taking the tooth. Koreans throw the lost baby tooth onto the roof of their home so that a magpie will take it and bring a new one. The same tradition is observed in other Asian countries, such as Japan and Vietnam. In Mongolia, it is a dog that must take the child’s tooth. Mongolians believe that the new tooth will grow straight and strong if the lost one is eaten by a dog. For this reason, parents will insert their child’s lost tooth in a fatty piece of meat and feed it to a dog.

5

These days a large majority of companies in the U.S. possess some sort of code of ethics. Such codes are created in order to guide both executives and employees in the event that they encounter an ethical dilemma. Situations addressed by these ethics codes include accepting gifts from clients, filling job vacancies with friends or relatives, and associating with a competitor. The codes that produce the most beneficial outcomes are those that are created with the cooperation and participation of employees. Too often, though, they are designed to protect only the interests of the company and not its workers. For example, many codes only address conflict-of-interest issues such as those listed above and do not give any positive reinforcement to employees who demonstrate a high level of ethical responsibility.

6

Health hazards and environmental damage caused by water pollution are among the most serious issues our civilization faces today. In recent years, however, many agreements have been reached that are resulting in a decrease in levels of marine contamination. For example, one of the most serious causes of such pollution is the leakage of oil from tankers that are transporting it across the ocean; however, the development of an emergency response system designed to handle spills has contributed to a significant decrease in serious incidents of oil pollution. Progress has also been made regarding the dumping of radioactive waste with the passage of agreements such as the London Dumping Convention. And finally, there have been many regulations placed on the amounts of traditional waste that can be discharged by ships at sea.

**REVIEW TEST 3**

1

Hummingbirds are notable for their unique style of flight, which allows them to hover and actually fly backwards. Moreover, their fearlessness, small size, and brightly colored feathers have drawn the admiration of humans for centuries. Unfortunately, this attention sometimes has unwelcome consequences. In the 19th century, they were often killed, stuffed, and sold to collectors, who preserved them in glass and hung them on walls. These days, the biggest threats to hummingbirds are climate change and a loss of habitat. Driven into cities, they may fly into open buildings and structures, such as garages. Once indoors, the hummingbirds panic and attempt to escape by flying upwards, soon succumbing to exhaustion and dying.

2

To be a truly critical thinker, spotting fallacies is essential. Any false argument may seem reasonable at first, but the careful examiner soon discovers its faulty basis. Ad hominem arguments, red herrings, and straw men are all well-known types of fallacies. In the first, the ad hominem fallacy, one speaker attacks the other’s personality or background. Using such aggressive tactics is normally a sign that the speaker has no real argument. Another fallacy, the red herring, draws listeners’ attention away from the real point. This happens when speakers see their arguments are failing and try to distract listeners with something seemingly important, yet logically unrelated. Finally, in a straw man argument, the debater presents their opponent’s case incorrectly, and disproves that one rather than the real one. The fake opposing argument, or “straw man,” is usually an unrelated point, and proving it wrong achieves nothing.

3

The graph above shows changes in a country’s birthrate from 1930 to 2010. The number of live births is shown on the vertical axis, with a timeline presented along the horizontal axis. In the first year shown, the birthrate stood at 80 live births per 1,000 women. It rose from 1930 to 1950, before declining until 1960. After 1960, however, it skyrocketed to new highs; in fact, the increase in the birthrate between 1960 and 1970 was the highest of any ten-year period shown on the graph. The birthrate’s highest point was reached in 1990, when it was twice as high as it had been in 1930. After that, the birthrate decreased throughout the 1990s. This decline continued until 2010, when the birthrate dropped to approximately the same level as 1980.

4

The key to generating creative, new ideas is often to adopt a fresh outlook on what is already around us. When Johannes Gutenberg invented the printing press, he was actually combining two previously unrelated devices. He asked himself what would happen if he took a bunch of coin punches and put them under the force of a wine press. The resulting combination was one of the most revolutionary creations in European history. Or consider Pablo Picasso. One day, after looking at an old bicycle for a while, he took off the seat and the handle bars. Then he welded them together to create a sculpture resembling the head and horns of a bull. These two examples show the innovative mind’s power to transform one thing into another. By changing our point of view, we can turn the ordinary into the extraordinary.

5

“Nordic combined” is a Winter Olympic event that requires athletes to participate in both ski jumping and cross-country skiing competitions. It gets its name from the Norwegian military, who were the first to combine the two sports into a single event. On day one of the Nordic combined, each competitor jumps from a hill that’s as tall as 394 feet. On day two, competitors race on cross-country skis for up to 15 kilometers. Points are awarded each day according to the results, and whoever has the highest point total at the end of day two wins the gold medal. Many past champions have been Norwegians, but athletes from Finland, Germany, Austria, and Japan also do well. Men’s Nordic combined has been a Winter Olympic sport since 1924, but the women’s version has yet to be included.

6

In the graph shown above, energy consumption is broken down by sector for the Organization for Economic Co-operation and Development (OECD) European countries, the United States, and the entire world. Overall, the commercial sector was responsible for the lowest amount of energy consumption. The United States used more energy than the OECD European countries for the purpose of transportation, but its energy use was lower than that of these countries in the residential sector. In terms of the industrial sector, both the United States and the OECD European countries consumed more energy than the world average. The smallest difference in energy consumption between these three groups was found in the category of electricity-related losses. Finally, more than half of the energy consumed in the United States came from the combination of transportation and electricity-related losses.

7

Social cognitive theory states that our self-efficacy beliefs can have a significant effect on both our accomplishments and well-being. These beliefs influence the choices we make and the paths of action we take. We generally choose to undertake actions that we feel confident about and avoid those about which we’re uncertain. However, people with a strong belief in their own competence embrace difficult tasks, viewing them as exciting challenges. They are also more interested and involved in whatever they do, which strengthens their commitment, even in the face of failure. When they do fail, they bounce back easily, quickly regaining their sense of efficacy. Self-efficacy beliefs also influence how we think and react emotionally. If we have high self-efficacy, we approach difficult tasks logically and calmly. On the other hand, low self-efficacy can cause our problems to appear unsolvable, making us feel nervous and depressed.

8

Okra is a tropical plant with a distinctive appearance — it has long, curving pods with a point on one end and a cone-shaped cap at the other. The plant’s color ranges from various shades of green to a reddish hue, while the edible seeds contained inside its pods are generally a pinkish-beige. Okra is native to the region in which the countries of Ethiopia and Sudan are now located. It is reported to have been growing along the banks of the Nile as early as the 13th century. The slave trade of the 17th century brought okra to America, where the natives dried and ground it into a powder that could be used to thicken their seafood and vegetable stews.

9

There are many people who don’t like to hear recordings of their own voice. The primary reason for this is that it tends to sound higher and thinner than they expect. This may be partly due to shortcomings in the quality of recording technology, but there’s another reason as well. In our everyday life, we rarely get to hear ourselves the same way others do. When we speak, others hear our words only after they have traveled some distance through the air. But we mostly hear and feel our own words internally, as vibrations in our bones. This makes our voices sound fuller and deeper when compared to what others hear. Also, we’re influenced by the way we want ourselves to sound, which makes the way we hear ourselves quite subjective.

**PART 4 글의 구조를 생각하라**

**12 이어질 글의 순서**

**기출 깨뜨리기**

We tend to perceive the door of a classroom as rectangular no matter from which angle it is viewed. Actually, the rectangular door of a classroom projects a rectangular image on our retina only when it is viewed directly from the front.

At other angles, the image will be seen as a trapezoid. The edge of the door towards us looks wider than the edge hinged with the frame.

Slowly the trapezoid becomes thinner and thinner, and all that is projected on the retina is a vertical line, which is the thickness of the door. These changes we can observe and distinguish, but we do not accept them.

Similarly, a round coin is seen as round even when viewed from an angle at which, objectively, it should appear elliptical. In the same way, we see car wheels as round, even though the retinal image is oval when viewed from an angle other than directly from the front.

**이렇게도 나왔다**

The subjective approach to probability is based mostly on opinions, feelings, or hopes. Therefore, we don’t typically use this approach in real scientific attempts.

Although the actual probability that the Ohio State football team will win the national championship is out there somewhere, no one knows what it is. Some fans will have ideas about what that chance is based on how much they love or hate Ohio State.

Other people will take a slightly more scientific approach — evaluating players’ stats, analyzing all the statistics of the Ohio State team over the last 100 years, looking at the strength of the competition, and so on.

But the probability of an event in either case is mostly subjective, and although this approach isn’t scientific, it sure makes for some great sports talk amongst the fans.

**적용독해**

1

Translation is a task that requires highly skilled professionals. If done incorrectly, it can cause serious problems and sometimes leads to tragic consequences.

For example, an unconscious 18-year-old man was brought to a hospital in Florida by his family. They tried to explain to the doctors what had happened to him, but they only spoke Spanish. Translation was provided by a hospital worker, who translated *intoxicado* as “intoxicated” instead of “poisoned.”

This poor translation caused the doctors to give him the wrong treatment. The man’s family believed that he had food poisoning. However, the doctors treated the man as if he were suffering from a drug overdose. In actuality, he was suffering from an intracerebral hemorrhage.

Due to the miscommunication, the proper treatment for his condition was delayed, which caused him to lose the ability to move all four limbs. If someone at the hospital had known the exact meaning of a single word, the young man could have been treated properly.

2

In 1696, England established a window tax in order to make up for financial losses during the time of William III.

People had to pay tax to the government for each window in their homes. It was easy to assess and collect money because most windows were visible from the street. For a long time, the tax helped generate income for the government.

Over time, however, the amount of money brought in by the tax declined. This was because people were blocking their windows and new buildings were being built with fewer windows. In order to avoid paying the tax, people were doing away with windows.

This lack of windows caused financial problems, but the bigger problem was the health of the people. Doctors complained that having fewer windows reduced the amount of sunlight in buildings and made the spaces damp and dark, which caused the residents to get sick. Protesters were soon calling the window tax a “tax on health,” and it was eventually repealed.

3

During World War II, the British set up a chain of radar stations along their coast in order to detect incoming German bombers. If detected, they could be shot down before reaching England.

To keep this technology secret, British intelligence propagated the idea that the successful detection resulted from the incredible vision of their soldiers. One RAF pilot named John Cunningham even became widely known as “Cat’s Eyes” for his ability to spot bombers in the dark.

The British government announced that Cat’s Eyes’ amazing eyesight was due to his carrot-heavy diet. The Ministry of Food was soon making informative cooking booklets that included a character called Dr. Carrot and publicized the slogan “Carrots keep you healthy and help you see in the blackout.”

The Germans, British civilians, and parents all over the world bought the story and repeated it endlessly for decades. This contributed to the successful concealment of the truth of what the RAF really did, and it unintentionally got kids to eat a lot of vegetables.

4

Many of Shakespeare’s works, such as *Hamlet* and *Romeo and Juliet*, reveal his anxiety about the mistreatment of the dead rather than the fear of death itself. What made Shakespeare fear this so much?

It was common during his time to dig up corpses either for research or religious reasons. On occasion, bodies were removed and dumped into landfills in order to make space for new graves.

Shakespeare was worried about this happening to himself when he died. Thus, he asked for a warning directed at those who might dig him up to be engraved on his tomb. In short, it said that any person who moved his bones would be cursed.

An expert who wrote a book that explores this idea believes the inscription to be one of the reasons why his tomb has never been disturbed. He also added that the curse is the great writer’s uncompromising statement on a theme that preoccupied him throughout his entire career.

**13 주어진 문장의 위치**

**기출 깨뜨리기**

It’s important that the media provide us with diverse and opposing views, so we can choose the best available options. Let’s take the example of going to war. War should be a last resort, obviously, undertaken when all other options have failed. So, when someone is threatening to go to war, or trying to convince us and mounting a huge public relations campaign to justify it, the news media have a responsibility to question everything. They should be providing the most intense scrutiny on our behalf, so the public can see the other side of things. Otherwise, we may be drawn into unnecessary wars, or wars fought for reasons other than those presented by governments and generals. Most of the time, the media fail to perform this crucial role. Even the large, so-called ‘liberal’ American media have admitted that they have not always been watchdogs for the public interest, and that their own coverage on some major issues “looks strikingly one-sided at times.”

**이렇게도 나왔다**

The Irish overreliance on potatoes was worsened by certain economic trends in the early 19th century. The development of the British textile industry, for example, made the traditional handicraft sector useless, destroying a key mechanism for achieving food security for the Irish rural poor. A second negative trend was falling real wages and rising rents, which gradually reduced the relative standard of living of wage-dependent Irish. In desperation, many Irish farmers resorted to cultivating wetlands or rocky hillsides. But this unproductive land left such farmers at a chronic risk of starvation. Another sign of Irish poverty was the increased reliance of the poor on the “lumper” variety of potato, a watery, tasteless potato that nonetheless could produce impressive yields even on substandard soil. Unfortunately this potato proved particularly vulnerable to the potato blight of 1845-52.

**적용독해**

1

Confirmation bias is the tendency to focus on facts that confirm our own beliefs when gathering information. It often occurs when we are dealing with highly emotional issues or deeply held opinions. For example, people may choose to read only newspapers and magazines that hold the same political views as they do. And when they come across ambiguous opinions, they’ll usually interpret them in a way that supports their own ideas. Researchers in particular need to be aware of this phenomenon to avoid producing biased results. They will sometimes display confirmation bias by designing experiments that are likely to confirm their hypotheses. If any evidence is found that contradicts their expectations, they will purposefully overlook it. One way for researchers to avoid this is to collaborate with other scientists who hold different views.

2

According to the U.S. government, 48% of annual greenhouse gas emissions comes from buildings and 76% of all electricity is used by the building sector. Clearly, the building sector is one of the primary industries responsible for the problem of climate change. To address this issue, the “passive house” has been introduced. This building is well insulated and nearly airtight, kept warm passively by solar gain and the heat of the people and appliances inside it, which minimizes energy losses. Any extra heat it requires can be provided by using a minimum from an external source. And to avoid cooling costs, its windows are strategically positioned and covered with shades. All of this, along with special ventilators that reuse energy to provide a constant supply of fresh air, allows homeowners to save up to 90% on their energy bills.

3

All those insects we try to ignore might just be the newest weapon in the fight against world hunger, global warming, and pollution. The UN is encouraging governments to use edible insects to feed pets, farm animals and even humans. Researchers have found that some ants, grasshoppers and beetles contain about as much protein as beef and contain less fat. They’re also high in essential minerals such as iron and magnesium. In addition, according to the UN, these creatures possess attractive side benefits. Using insects as food can reduce greenhouse gas and livestock pollution and feed millions of hungry people. Raising these insects would likely produce fewer greenhouse gases than raising cows or pigs. What’s more, insects can turn two kilograms of feed into one kilogram of meat, while cows require eight kilograms of feed to produce the same amount.

4

When it comes time to build a nest, a female eagle often starts with some odd materials, including thorny branches and sharp rocks. But her next step is to line it with softer materials, such as wool, feathers, and fur, in order to create a cushion for her eggs. After the eggs hatch, the young birds are often reluctant to leave their comfortable nest and the free meals that come with it. That’s when the mother eagle begins stirring up the nest. She uses her claws to pull up the soft layer of material, exposing the sharp rocks and thorny branches. The more she does this, the less comfortable the nest becomes for her young. Using this method and others, the mother eagle eventually convinces them to leave the nest and start their own lives.

5

Have you ever wondered if a full moon is larger when it’s on the horizon than when it’s high in the sky? Here’s a simple experiment you can try. On a night when there’s a full moon, take a ruler and hold it at arm’s length to measure the moon. Do this twice: once when the moon is in the open sky, and once when it’s on the horizon. You’ll find that even though the moon seems to change size, your two measurements will be the same. In fact, the difference in size that your eyes see is an optical illusion. With the moon high overhead, there’s nothing nearby to compare it to. But when it’s lower, seeing it in comparison to the small trees, buildings, or hills on the horizon makes it look bigger.

6

These days, statistics are everywhere. In fact, it has been estimated that the average person is faced with five different statistics each day. The problem with this is that people tend to use these statistics to make decisions. For example, when selecting a telephone company, you might choose the one with the greatest number of customers. However, that statistic doesn’t tell you anything about the quality of the company’s service or their customers’ level of satisfaction. Unfortunately, many people just see the large number of customers and assume that it’s due to the company providing good products or services. This might be true, but it could also be due to something negative, such as a bad contract that is difficult to cancel. Therefore, although they are sometimes useful, statistics can also be misleading.

**14 흐름과 무관한 문장**

**기출 깨뜨리기**

Life can be like riding a roller coaster. There are ups and downs, fast and slow parts, bumps and shaky parts, and even times when you’re upside down. You can’t control which way the track (or in this case, life events) will take you. When you’re at the bottom, you can see only what’s right in front of you, but when you get to the top, you can see the whole picture a lot better. When you’re starting out, accept how you feel and try to enjoy the ride. When it’s over, you’ll see that it was really cool — even if you couldn’t see that when you first started.

**이렇게도 나왔다**

The small black circle in the center of the colored part of your eye is called the pupil. It acts as a sort of window, allowing light to enter the eye. The colored part itself is known as the iris. It is a sheet of muscle used to increase or reduce the size of the pupil. Nerves that are connected to the iris cause it to move through reflex action, which means you don’t need to think about the action to make it happen. These movements allow the iris to control the size of the pupil and, therefore, the amount of light that enters the eye.

**적용독해**

1

With recent reports that Australia’s Great Barrier Reef is dying, large numbers of tourists have been heading there in the hopes of seeing it before it’s gone. This is a classic example of “last chance tourism,” also known as LCT. LCT is a specialized type of tourism that focuses on allowing people to experience things that are likely to disappear soon. Unfortunately, a rush of tourists hoping to see an endangered site only serves to put the site in greater danger. This is because the overcrowding and increased carbon emissions related to tourism can cause the site to deteriorate further, which in turn increases its appeal to other last chance tourists. However, these tourists generally fail to recognize the negative consequences of their own actions.

2

In commercial egg production, a grading system is used to determine the quality of all eggs before they are packaged and offered for sale. Each egg is carefully reviewed both inside and out before it is assigned a specific grade. Inspectors look at the outside of the eggs to see whether their shells are clean and undamaged, and to make sure that they have a normal shape and texture. Then, using X-ray technology, the inspectors peer inside the eggs, checking to see if there is thick, clear liquid and a healthy yolk. Lastly, the size of the air cell found inside each egg is examined — the smaller it is, the higher the egg’s grade is likely to be.

3

In the past, as more end-of-life patients began receiving medical treatment in hospitals, it became common for them to want to return home so that they could spend their last moments in a familiar place. Recently, though, a movement toward hospices and end-of-life care has been growing. A hospice is a facility that is focused on end-of-life care, allowing patients to confront death in comfort. The distinction between hospitals and hospices has to do with the difference between curative care and end-of-life care. While curative care is treatment that is intended to improve symptoms, the goal of end-of-life care is to lessen pain and discomfort in order to reduce a patient’s suffering.

**REVIEW TEST 4**

1

People sharing a small working area often report feelings of having their personal space violated. This is due to the fact that it can be difficult to concentrate when other people are all around us. Students often experience this problem in libraries and other shared study areas As a result, many have developed techniques by which they can make the space feel less crowded than it actually is. For example, they might construct small barriers with their books or bags between themselves and those next to them. Another common strategy employed by students is placing their hands on either side of their face, thereby blocking their view of their neighbors. This can create the feeling that they are alone or at a more comfortable distance from those around them.

2

Imagine the following scenario: A remote-controlled device placed inside a wound turns on and uses heat to kill even the most drug-resistant microbes. After it finishes disinfecting the wound, the device dissolves. Although such devices are not quite ready to be used, scientists are getting closer to perfecting them. U.S. engineers have already designed not only dissolvable electronics, but a biodegradable, remote-controlled circuit as well. This circuit will be essential to building dissolvable electronics that could be used medically. After completing their restorative tasks according to a set timeframe, they could simply dissolve, eliminating the need to surgically remove them later.

3

People sometimes claim that sugar provides the body with a burst of instant energy. What actually happens when we eat sugar is that our blood sugar increases, which causes the pancreas to produce insulin, a hormone that is used to stabilize our blood sugar levels.

As a result, we then experience a sudden drop in our blood sugar, which makes us feel tired. In other words, fatigue is the body’s natural response to sugar consumption.

This feeling generally goes away naturally as your blood sugar levels return to normal. The best way to avoid it completely is by minimizing the amount of sugar in your diet.

It is also a good idea to avoid refined carbohydrates, which are found in bread, pasta and rice. In general, if you eat a balanced diet of regular meals, your blood sugar levels will remain stable.

4

Everton College is currently faced with numerous problems. First of all, most of the classrooms are overcrowded; for example, classes held in room 201 in the Science Hall have as many as 45 students, but there are only 31 desks. In addition, many classrooms are poorly maintained, with stains all over their walls and floors. Unfortunately, these problems continue outside the school buildings as well. Most troubling is the terrible shortage of parking spaces available for students’ cars. The one parking lot that’s actually located on campus is almost always full, which means that students are forced to park their cars in the surrounding residential areas. It can sometimes take so long to find a spot that students have to sprint just to make it to class on time.

5

There are many reasons that people create art, one of which is to express their moral and religious beliefs. Much African art has been created for this reason. Sculpture, storytelling, dance, and music in Africa all have their origins in religion. This religious influence is one reason that African art generally has variety in form yet similarity in style. The religious beliefs and rituals in each region were different, so each had distinct forms of art, such as drums and masks. Yet, the basic style of this art was similar due to common religious themes.

6

Charlie Steinmetz was one of the most gifted engineering minds of all time. It was Steinmetz that created the electrical generators used in Henry Ford’s massive automobile factory.

Once, during a busy workday, the factory generators broke down and none of the company mechanics could fix them. Finally, Ford called Steinmetz. The genius fooled around with the machines for a few hours, and the factory was back in business.

After everything was running smoothly again, Steinmetz gave Ford a bill for $10,000. Even though Ford was rich, he was shocked. “Charlie,” he said, “don’t you think that’s a lot for a couple hours of fooling around with the generators?”

Steinmetz replied, “I’m charging you $100 for fooling around with the generators. But I’m charging you $9,900 for knowing where to fool around.” Ford couldn’t argue with that, and he paid the bill.

7

Many years ago, there was a young man who worked in a factory full of heavy machinery. The equipment was so massive that it shook the whole building, making the man very uncomfortable. As a solution, he decided to bring a rubber mat to stand on. Sure enough, the mat softened the vibrations in the floor and eased the man’s discomfort. However, a few days later, he was dismayed to find that someone had stolen his mat. Revising his idea, the man got two pieces of rubber and nailed one to the heel of each of his shoes. Now he had two little rubber mats to stand on that no one could steal, and they worked as well as the original. The young man was Humphrey O’Sullivan, the inventor of the first rubber-heeled shoes.

8

When a rabbit wiggles its nose, moving it quickly from side to side or up and down, it is picking up scents from many directions. By doing so, it has a better chance of detecting hidden predators. However, the skill of nose wiggling is not as simple as you might think. In fact, few animals other than the rabbit are able to control the muscles and nerves in their noses well enough to wiggle them in this way. Like wild rabbits, pet rabbits also wiggle their noses; they don’t have to worry about detecting predators, but their sense of smell can still help them find food in the house.

9

During Socrates’ final days, his friends formulated the perfect plan to help him escape from the prison where he was to be killed.

They tried to use logic to convince Socrates that their plan was a good one. If he accepted their plan, they explained, he would be able to escape from prison and continue living his life. But if he turned them down, they continued, people would think his friends didn’t care about him.

Therefore, if he wanted to protect his friends’ reputations, following their plan and escaping from prison would be the logical choice. But Socrates explained that a person’s reputation doesn’t have any effect on whether an action is right or wrong.

Above all, he told them, the most important thing when making decisions is justice. Having spoken, Socrates turned his friends down and accepted his death.

**PART 05 긴 글에서 핵심을 파악하라**

**15 일반 장문**

**기출 깨뜨리기**

There is a difference between getting what you want and getting what you think you want. Technology gives us more and more of what we think we want. These days, looking at sociable robots and digitized friends, one might assume that what we want is to be always in touch and never alone, no matter who or what we are in touch with. One might assume that what we want is plenty of weak ties, the informal networks that underpin online acquaintanceship. But if we pay attention to the real consequences of what we think we want, we may discover what we really want. We may want some stillness and solitude. As an American writer once put it, we may want to live less ‘thickly’ and wait for more infrequent but meaningful face-to-face encounters. As we put in our many hours of typing — with all fingers or just thumbs — we may discover that we miss the human voice. We may decide that it is fine to play chess with a robot, but that robots are unfit for any conversation about family or friends. A robot might have needs, but to understand desire, one needs language and flesh. We may decide that for these conversations, we must have a person who knows, firsthand, what it means to be born, to have parents and a family, to wish for love and perhaps children, and to anticipate death. And, of course, we must not let the virtual take us away from the real world that doesn’t go away with a power outage.

**적용독해**

1~2

Psychologists conducted an experiment to find out the relationship between rewards and children’s behavior. They selected a group of children from the ages of three to five who were interested in drawing. They then divided the children into three groups. The children in group A were promised that they would be awarded a certificate as a prize if they spent their free time drawing. In group B, the children were not told about the certificates, but received one anyway if they chose to draw. Finally, the children in group C were neither given nor told about the certificates. The children were then observed during their free time, and those in groups A and B who chose to spend their time drawing were given certificates. Two weeks after finishing the experiment, the psychologists returned. What they found was that the children in group A had lost much of their interest in the activity of drawing, while the children in the other two groups continued to draw enthusiastically. This phenomenon is now known as the “overjustification effect.” It occurs when the offer of a material reward actually reduces a person’s intrinsic motivation to perform a task. The psychologists’ experiment showed that attempting to encourage children with certificates or prizes can have an adverse effect when it comes to activities the children naturally enjoy. The problem is that doing so causes the children’s motivation to shift from internal satisfaction to external factors. Once these external factors are removed, the children’s internal motivation fails to return, and they eventually lose interest in the activity.

3~4

Actions that are meant to signal closeness in a relationship can sometimes seem intrusive if they are unwanted. Because of this, asking for details about someone’s problems might cause resentment if that person doesn’t feel like talking about a certain situation or event. This often occurs when parents ask their children questions about their personal lives. For example, a young woman who has just broken up with her boyfriend might turn to her mother, needing someone to talk to during a difficult time. Later, however, after the woman has gotten over her initial emotions, her mother may continue to ask her questions about her relationship. These questions are likely to be unwelcome, and, in many cases, a confrontation will follow. Knowing about a close acquaintance’s distress often leads to a dilemma: Not asking about the situation might make us look uncaring, while asking about it too often can cause the person to become upset. In the case of parents, they clearly want to express their concern about their children’s lives and to show them that they care. When it is the child who initiates the discussion, such as in the case of a heartbroken daughter after a recent breakup, this attention will likely be welcomed. But when the topic is raised by the parent and the child doesn’t feel like talking about it, expressing concern by asking questions is not likely to be appreciated. Even if it is done with the best of intentions, it can cause an uncomfortable situation that has the potential to damage the bond between a parent and child.

5~6

Did you ever wonder how famous writers come up with their ideas? Well, certain writers, such as Erika Nordstrom, use their own life experiences as a source of material for their books. In a recent interview, Nordstrom explained that after her family’s adoption of a lost puppy when she was a child, she began to keep a journal. Each day, she would write about all the funny things her new pet did and her efforts to train him. After some time, she found herself writing about other things in the journal as well. First, she wrote about her experience visiting a neighbor’s farm, where she had the chance to ride a horse for the first time. Later, she wrote about the many interesting people who visited her home that summer. Eventually, many of these memories became the starting points for the popular books for teenagers Nordstrom wrote as an adult. When writing them, she would often go back to her childhood journals in order to remember what it was like to be young, and to find inspiration for interesting characters and events to include in her books. Today, Nordstrom’s stories are loved by young people around the world. However, if it hadn’t been for her new puppy and the journal she decided to keep as a child, we might never have had the chance to share her wonderful stories.

**16 순서 장문**

**기출 깨뜨리기**

How much space do you need to be happy? Part of the American story is that bigger is better, and with cheap credit and tax breaks for home buyers, it’s tempting to stretch one’s finances to build or buy a larger house. My grandpa Otto chose a different path. He didn’t want to find himself working longer and longer hours just to pay for more space and the stuff to fill it. He grew up in a farming community and within a very large family, so living simply was integral to his life philosophy.

In the 1950s, when my dad was a little boy, my grandpa built a 600-square-foot cottage. He put the twenty-by-thirty-foot structure on a small plot of land in Pleasant Hill. Dad remarked, “Reusing and recycling was a necessity. In essence, he was recycling before it became ‘cool.’” Grandpa got most of the materials for his little house from the Oakland docks, where he was working. It took four years to build the small cottage, and when they moved in, the roof wasn’t even on!

My dad recalled looking up at the stars in the roofless house as a twelve-year-old kid before falling asleep. Dad didn’t mind living in an unfinished house. He described Pleasant Hill as “open and private. It felt like all the homes were on ten acres.” Over the years, my dad and grandpa noticed dramatic changes in their community. Each year more farmland was devoured to build strip malls and neighborhoods with larger homes. As real estate prices rose, many of their neighbors sold their homes and lots. Soon my grandpa had the only small house on the block, surrounded by a sea of homes four times the size of his dwelling.

Yet my grandpa was content with what he had. Even though the house was small, it wasn’t cramped. My dad said, “Everyone was satisfied. The size of the house didn’t matter.” My grandpa taught me that living a simple life isn’t about self-deprivation. It’s about giving yourself the time, freedom, and money to pursue your dreams. In many ways, I’ve modeled my life after my grandpa’s. I learned from him that simplicity isn’t about austerity. It’s a revolution in personal growth.

**적용독해**

1~3

Louis Braille, famous for the system that shares his name, was born on January 4, 1809 in Coupvray, France. When he was only three, Louis lost his sight in an accident. Later, he became a student at the Paris Blind School. Desperately wanting to read, he discovered that the school did have books designed to be read by the blind. The books used very large, raised letters that could be touched. Unfortunately, due to the large size of the letters, it took Louis a very long time to read a sentence.

To solve this problem, Louis searched for a more efficient way for the blind to read. Luckily, someone at the school told him about codes being used by the French army to deliver messages at night. French officers created the codes using dots and dashes instead of letters. They were raised above the paper so that the soldiers on the battlefield could read by touch without any light at night.

Louis tried reading this code himself. It was raised like the gigantic letters in the library’s books, but the dashes and dots were much smaller. It was easier, but it still took a long time to read. Dashes took up too much space, which meant each page contained only one or two sentences. Louis felt that he could make a better system.

At home for vacation, Louis sat in his father’s leather shop, surrounded by all of his father’s tools. While working on creating a new system, Louis unintentionally touched one of his awls. Suddenly, he realized the tool could help him make his new alphabet. He spent days working on it, basing it on six dots that could be arranged in different ways to represent the letters of the alphabet. He used the awl to punch out a sentence and attempted to read it. It all made sense. That was the moment when the Braille alphabet was created!

4~6

Charles Plumb was a graduate of the U.S. Naval Academy who flew 75 combat missions as a jet pilot during the Vietnam War until his plane was destroyed by a surface-to-air missile. He ejected and survived thanks to a parachute, but spent six long years as a prisoner of war in a Vietnamese prison. After a lot of twists and turns, he came back to the U.S. and now lectures about his experiences.

One day, Plumb was having dinner after one of his lectures when a man approached him. “You’re Plumb!” he said excitedly. He knew who Plumb was and that he had been shot down in Vietnam, which surprised Plumb. How did he know all this? “I packed your parachute!” the man told him. He’d served in the navy with Plumb, on the aircraft carrier Kitty Hawk, which Plumb flew off of. Plumb shook the man’s hand and thanked him, saying that without that parachute, he would not have survived. Thinking of the man, Plumb was unable to sleep that night and decided to tell the next audience the story.

At his next lecture, Plumb told the audience about the man he’d met. Plumb wondered what he had looked like in uniform back then and how many times they had seen each other. Because Plumb was a pilot and the other man was just a sailor, they would never have talked to each other, except to say hi. Plumb said that he thought about the man working all those long hours on the parachutes, sitting at a table deep inside the ship, folding and packing the material that controlled the fates of pilots he didn’t even know.

Plumb finished talking about him and turned to his audience. “Who packs your parachute?” he asked them. He told the audience that everyone has people in their lives that help them get through the day. “We just never get to tell them how grateful we are.” Plumb ended his lecture by telling the audience to take a moment. “Find those people who support you and thank them for packing your parachute.”

7~8

In 1966, an American woman named Dian Fossey went to Africa to do research on mountain gorillas, despite the fact that she had no experience or formal training in studying them. Her life there was not easy - the jungles of Rwanda were cold, dark and muddy, and the high elevation of her camp made the air thin and difficult to breathe. To make matters worse, she had to battle intense feelings of loneliness.

However, she refused to give up and continued to spend her days tracking mountain gorillas. It took her six months, but eventually she was able to get within 30 feet of some of them, which enabled her to record their behavior in great detail. Unfortunately, poaching was a serious problem in the national park where she did her research. She feared that something terrible would happen to the gorillas unless they were better protected.

Unfortunately, her concerns about the gorillas turned out to be justified. In 1978, on New Year’s Day, the body of one of them was discovered. He had been killed while defending his family against poachers. His killers had taken his body parts to sell. Just six months later another local gorilla was killed, and then some more. Fossey sadly buried each one in a cemetery she made near her camp. Finally, she decided to stop the poachers by fighting back against them.

She organized security patrols to stop the poachers and offered money to anyone who captured one. She even killed their cattle if they entered the national park and burned down their houses. Although she called this “active conservation,” other people complained that it was more like a war. Sadly, Fossey was murdered in 1985, most likely by one of the poachers. She was buried next to her gorillas in the cemetery she had made for them.

**REVIEW TEST 5**

1~2

In 1919, the American president Woodrow Wilson suffered a stroke, which left him in poor health and partially paralyzed. In order to allow him to continue running the country, his wife, Edith Wilson, got involved in administering affairs of state. To protect him against his political opponents, she let only a few people know how serious the president’s condition was, keeping this information from the public and other politicians. Anyone who wanted to talk to the president had to go through the first lady. Consequently, during the period of the president’s illness, Edith Wilson became the power behind the presidency. Eventually, however, members of Congress began to suspect that the president was unable to run the country on his own. Displeased that the first lady seemed to be in control, they demanded that the vice president take over. Still, there were others who admired Edith Wilson for her actions and felt she had proved herself capable. By the middle of November, President Wilson had recovered, but his wife continued to assist him until he left office in 1921. There have been other American first ladies who have played a role in their husband’s presidency. However, none have had the influence that Edith Wilson did for those six weeks. Although some have questioned the motives of her actions, it is clear that her primary interest was protecting her sick husband from his political enemies and assuring that the country continued to be run smoothly.

3~5

One day, one of Mary’s neighbors asked her if she could take care of a lost dog for a while. The neighbor had found it wandering around the building’s parking lot. Mary agreed, but told her she could only do it for a few days. The two women took a picture of the dog and posted it on a local community website in the “lost pets” section. They also printed fliers and put them up around the neighborhood.

After they had posted all the fliers, Mary went to buy some pet supplies with her daughter Becky, who had a serious heart condition. Mary warned Becky not to get too excited about having a dog, reminding her that it was just for a few days. A few days passed, with no word from the dog’s owner. Then, one morning, Mary was awakened by the sound of the dog furiously barking and scratching on her bedroom door.

Getting out of bed, she found the dog standing outside the door. Upon seeing her, it ran to Becky’s room, where the girl was lying unconscious on the floor. As soon as Mary bent over to take care of her daughter, the dog stopped barking. Mary rushed Becky to the hospital, where she was given vital medical treatment for her disease. The doctors said that if she had brought Becky in a few minutes later, the girl could have died. The dog was a hero.

After Becky was released from the hospital, Mary’s family named the dog Berry and welcomed him as a new family member. Two days later, Mary received a call from the dog’s owner. He told her that he had seen one of the fliers and wanted his dog back. He arrived at their apartment, where he was surprised to see the girl crying and her mother hugging her tight. Mary explained that the dog had saved her daughter’s life. After thinking for a few moments, the dog’s owner said, “Maybe he was supposed to find you guys. You’d better keep him.”

6~7

Interest in artificial intelligence, also known as AI, has been rapidly expanding in recent years. In the near future, AI could be controlling almost all of the machines that are part of our daily lives, from automobiles to washing machines. A positive aspect of AI is that it gets rid of human error — computers never make math mistakes or forget to do things. However, a number of serious concerns have also arisen. When machines can think, they must make decisions which could directly affect human lives. And, although AI can make logical decisions based on our preferences, there are some obvious limitations, such as hardware wearing down. But the biggest questions concern ethics. For example, imagine you own a driverless car. One day, as it is driving you to work, it hits and seriously injures a child running across the street. Who is to blame: you, the car manufacturer, or the car itself? Although AI has the potential to change the world for the better and make our lives much easier, using it wisely and safely will require many regulations and restrictions. Clearly, there is a lot to be considered before we allow artificial intelligence to become such an important part of the world we live in.

8~10

A wise old man owned a gas station in a small town. One day, his granddaughter came to visit. She sat with him in his rocking chair and watched the drivers come and go. After some time, a car pulled up and a man they didn’t recognize got out. He stretched and looked around at the town.

The stranger then walked up to the old man and greeted him. “I’m not from around here,” he said. “What is this town like?” “Well,” the old man replied, “what is your hometown like?” “Oh, it’s terrible,” said the man. “Everyone is rude and dishonest.” The old man in his rocking chair nodded and said, “This town is the same.”

Soon after the stranger had left, another unfamiliar car pulled into the gas station. A man got out and walked over to the old man and his granddaughter. “Hi,” he said. “I was wondering if this town is a good place to live.” The old man thought about it and asked him what his town was like. The man smiled at him and said, “It’s a great place. Everyone is warm and friendly.” The old man nodded at him and said, “This town is the same.”

After the man had driven away, the little girl looked at her grandfather with curiosity on her face. “Grandpa,” she said, “when the first man asked, you told him our town was a terrible place to live. But you told the second man that it was a great place. Why?” “Well,” said the old man, “people always find the same thing wherever they go. That’s because no matter where you go, you take your attitude with you.”

**PART 06 기본에 충실하라**

**17 문법성 판단**

**1 수의 일치**

기출예제

In the twentieth century, advances in technology, from refrigeration to sophisticated ovens to air transportation that carries fresh ingredients around the world, contributed immeasurably to baking and pastry making. At the beginning of the twenty-first century, the popularity of fine breads and pastries is growing even faster than new chefs can be trained. Interestingly enough, many of the technological advances in bread making have sparked a reaction among bakers and consumers alike. They are looking to reclaim some of the flavors of old-fashioned breads that were lost as baking became more industrialized and baked goods became more refined, standardized, and — some would say — flavorless. Bakers are researching methods for producing the handmade sourdough breads of the past, and they are experimenting with specialty flours in their search for flavor.

**2 시제**

**기출예제**

A driver saw two men carrying heavy bags on a lonely country road. This reminded him of the news that he had heard on the radio: two thieves stopped a train and stole mailbags full of money. He at once called the police. The police soon arrived on the scene and arrested them. They questioned both men but neither of them could speak English. They just kept shouting loudly at the police. Later, the police realized that they had made a terrible mistake. The men were French onionsellers and their bags were full of onions!

**3 수동태**

**기출예제**

The process of job advancement in the field of sports is often said to be shaped like a pyramid. That is, at the wide base are many jobs with high school athletic teams, while at the narrow tip are the few, highly desired jobs with professional organizations. Thus there are many sports jobs altogether, but the competition becomes increasingly tough as one works their way up. The salaries of various positions reflect this pyramid model. For example, high school football coaches are typically teachers who are paid a little extra for their afterclass work. But coaches of the same sport at big universities can earn more than $1 million a year, causing the salaries of college presidents to look small in comparison. One degree higher up is the National Football League, where head coaches can earn many times more than their bestpaid campus counterparts.

**4 보어의 형태**

**기출예제**

One of the best ways of creating what is known as a “possibility mindset” is to prompt yourself to set more ambitious goals than you usually do. This is because people tend not to dream big enough. One expert suggests that you make your future plans as fantastic as you can because 25 years later, they will not seem very special. He believes that if you make your plans 10 times bigger than they originally were, in 25 years you will be wondering why you didn’t make them 50 times bigger. By dreaming more expansively and setting goals beyond what makes you comfortable, you will be forcing yourself to grow as an individual. This will encourage you to believe that you can achieve even greater goals in the future.

**5 to부정사와 동명사**

**기출예제**

Do you remember the first time you completed an article before a deadline? Or when you first interviewed a local politician? Or learned to use a desktop publishing program? Our university’s journalism program was likely the source of many of these firsts for you. Today, we continue to provide budding journalists with these new experiences. And we hope you’ll help these students have the opportunity to complete the program. The costs of providing young people with a quality education have increased sharply. We’re doing whatever we can to contain these costs without compromising the quality of our classes. One of these things is the establishment of a scholarship fund for students with financial problems. Please consider contributing generously to this fund. You’ll get a wonderful feeling knowing you’re helping educate future leaders of journalism.

**6 분사와 분사구문**

**기출예제**

The term *objectivity* is important in measurement because of the scientific demand that observations be subject to public verification. A measurement system is objective to the extent that two observers evaluating the same performance arrive at the same (or very similar) measurements. For example, using a tape measure to determine the distance a javelin was thrown yields very similar results regardless of who reads the tape. By comparison, evaluation of performances such as diving, gymnastics, and figure skating is more subjective — although elaborate scoring rules help make it more objective. From the point of view of research in motor behavior, it is important to use performances in the laboratory for which the scoring can be as objective as possible.

**7 관계사와 접속사**

**기출예제**

It is often taken for granted that the recycling of plots is a natural part of modern filmmaking. Adapting novels into films is considered a respectable undertaking; on the other hand, the novelization of a film is generally looked upon as being culturally barbarous. Because filmmaking is such a recently developed art form, as well as a hybrid one, it has always been intermixed with other genres. In the silent era, movies were seen simply as a potent type of theatre, with the screen corresponding to the proscenium of the stage, on which appear actors. For this reason, many plays were made into films. But filming plays did not allow directors to take advantage of movies’ most distinctive feature — namely, the mobile vision of the camera. Therefore, novels actually proved to be more suitable as a source of film plots. Many of the most successful early movies were based on popular books.

**8 조동사와 가정법**

**기출예제**

There are several events that take place while jury selection is proceeding. First, everyone who has been summoned to appear for jury duty must arrive by nine o’clock in the morning and assemble in the jury room. A few minutes later, the court clerk usually shows a movie outlining what is going to happen throughout the day as the jury is chosen for a particular trial. At around ten o’clock, 20 people are chosen from the jurors in attendance and are taken to a courtroom where a judge describes how the process is going to work. About 30 minutes later, 10 people are called to sit in the jury box to be questioned by the lawyers in the case.

**9 병렬구조와 어순**

**기출예제**

People tend to anticipate the future as though they were impatient for its slow arrival. So imprudent are they that they’ll focus all of their attention on times that are not theirs while ignoring the one that does belong to them. They try to use the present to control the future and think only of things that have not yet happened, arranging events that have no certainty of ever occurring. If you were to examine your own thoughts, it’s likely that you’d find them wholly occupied with either the past or the future. The present is used only as a launching point for our future plans, as if it were nothing more than a means to an end.

**10 품사 관련 주의할 용법**

**기출예제**

During my childhood, my bedroom was always a mess. My mother constantly told me I should straighten it up, shouting, “Clean your room right now!” However, I avoided doing so at every opportunity. I really disliked being told what to do, so I was determined to keep my room the way it was. Whether I actually enjoyed having a messy bedroom or not was another subject. To be honest, I never considered the benefits of having a clean room. At that time, I felt it was more important to do things my own way. My mother, like most parents, didn’t encourage me to discover these benefits for myself. Instead, she settled for lecturing me.

**REVIEW TEST 6**

1

You might expect that a country sharing the same latitude as Alaska would be a cold and unpleasant place to live. And while it is true that some parts of Norway can be quite cold and wintry, the country’s overall climate is surprisingly mild. The main reason for this is the warm water of the Gulf Stream, which passes by the west coast of Norway. This warm current allows regions located inside the Arctic Circle to enjoy moderate weather even in winter. However, during the course of all four seasons, the temperatures in Norway can vary quite a bit. In summer, Norway can experience temperatures as high as 30 °C. Winter, on the other hand, tends to be cold and snowy.

2

Scientists know that life has existed in Earth’s oceans for more than three billion years. However, just where the billions upon billions of tons of water in these oceans originally came from is still unknown. Based on the available evidence, it seems to have condensed out of the atmosphere of the Earth long ago; however, scientists can’t figure out for sure how it got into the atmosphere in the first place. The most popular theory is that water was brought to Earth by comets and meteors that collided with our planet over the years. These kind of astronomical bodies contain large concentrations of water, which would have been left behind in the atmosphere after a collision. In fact, tiny meteors continue to hit Earth all the time, adding more water to our oceans.

3

Providing hundreds of billions of dollars to more than 47 million people in a single year, the United States’ Social Security system is one of the most successful governmental programs in the nation. Although it is sometimes viewed as simply being a retirement program, approximately one third of the people who receive money from Social Security are not retirees. The Social Security system guarantees that U.S. workers and their family members will be taken care of financially in a variety of circumstances. There are multiple types of benefits available, including retirement benefits for people who have worked for at least ten years, disability insurance for injured workers, and survivors’ insurance for the families of workers who have died. Without this valuable program, many families would face extreme financial difficulties in times of crisis.

4

According to wildlife experts, once an animal has lived in captivity, there is much that must be done before it can be returned to the wild. Releasing such animals prematurely has the potential to cause them harm. Take the example of Buck and Luther, two dolphins who were retired from Navy use in 1996. The Navy took them to a retraining center before returning them to the sea, but they were set free too soon and barely survived their first weeks back in the wild. Among other problems, the newly released dolphins had trouble hunting, defending themselves, and staying away from people. Obviously, the issue of how to return captive animals to their natural habitat still needs to be worked out.

5

Earl S. Tupper first encountered plastic during his job with a chemical company that had been developing plastics prior to World War II. He was fascinated by this newly invented substance but was too poor to purchase a sample to work with. So Tupper asked his supervisor if there was any waste material he could take home. He was able to obtain a piece of polyethylene slag, a by-product of the oil refining process conducted at the factory. By purifying the slag, Tupper discovered how to mold it and created sturdy, light-weight containers. Later, he made special airtight lids for his containers by copying the design of paint can lids. In 1938, Tupper founded the Tupperware Plastics Company, and by 1946 his products were being sold to the public in department stores.

6

Archaeologists working in Cyprus have uncovered a moment from the late Roman Empire frozen in time. Discoveries in the city of Kourion, where a powerful earthquake struck in the year 365, have revealed the remains of two men who must have died in the disaster. Prior to this, archaeologists found many artifacts, along with seven other skeletons, in what was probably an ancient marketplace. Of these, one was a man barely older than 20 who was likely working alone at a workbench when the building he was in collapsed. Nearby were other finds, such as various coins and cooking vessels. Another skeleton was found just one room over. There, archaeologists found a pot still on a fireplace and an ornate lamp lying at the entrance to the room.

7

Having some free time, I wandered around the beautiful old house. I was impressed by all the magnificent artwork and especially loved the portraits of family members that lined the halls. As I examined them one by one, I came across a painting of an elderly woman which was hung in a hallway near the dining room. Surprised, I stopped and took a closer look. The woman seemed extremely familiar, but at first I wasn’t sure why. And then it came to me. Digging through my purse, I pulled out the old photograph of my grandmother that my father had given me. The woman in the photograph was the same as the one in the painting, wearing the same white gown and looking calmly into the camera.

8

When my children were young, our family didn’t have much money. In fact, we had to work hard to save enough just to buy basics like peanut butter and diapers. Obviously, taking vacations was out of the question. But what I didn’t realize was that we still could have taken our own kind of “vacation.” Years later, I read an article in a magazine about a family that designated one day a week as “vacation day” and decorated one room in the house as their “destination spot.” I really wish I had thought of that for my kids. I could have made fake passports for them and given them stamps for each destination. After all, where you go doesn’t always matter as much as who you go with.

9

There has likely always been some form of drug “abuse” — that of alcohol has gone on for thousands of years. Only in the 20th century, however, have people begun to describe certain types of drug abuse as “addiction.” Initially the term simply meant a pattern of behavior, with virtually no negative feeling attached. In fact, uses before the 20th century described addiction “to bad habits,” “to civil affairs,” and even “to useful things.” In those days, the idea of addiction to drugs, which is common today, was not part of any definition. Thus, it was not long ago that people used “addiction” in a neutral way about a mere fondness or tendency.

**ACTUAL TEST**

**실전모의고사 01**

1

Most children have the ability to influence the purchasing decisions of their parents. As this is often accomplished through pestering, the ability to do so is sometimes referred to as “pester power.” Due to trends such as smaller families, dual-income households and postponing parenthood until later in life, today’s parents generally have more money to spend on their kids. However, they also have less time to spend with them. As they feel guilty about this, they are easily pressured into buying whatever their kids demand. Marketing is also a factor — advertisers know what a strong influence “pester power” can have, so they often aim their ads at children rather than their parents.

2

An experiment with a pike illustrates how powerful the conditioning that guides our thinking and behavior is. In the experiment, a pike is placed in one half of a large, glass-divided aquarium, and numerous minnows are placed in the other. The hungry pike repeatedly tries to get the minnows, but only ends up banging itself against the glass divider, eventually realizing that the minnows are impossible to reach. Though the glass divider is removed after a while, it still makes no attempt to eat the minnows, because it has been conditioned to believe that trying to eat them is futile. Like the pike, when people are faced with a situation in which they have previously repeatedly failed, they exhibit an inability to challenge what was true in the past. They refuse to consider alternative possibilities and different perspectives.

3

The three pie charts pictured above illustrate the differences in the popularity of film genres in three different age groups. While action movies were preferred by the youngest age group, the other two groups ranked them lower. After action movies, younger people ranked romance and sci-fi movies as their favorites. As for people in the middle age range, they liked dramas more than the action, fantasy, and romance films combined. Meanwhile, the people in the oldest age group expressed little appreciation for comedies and horror, with each of these genres receiving zero percent of their votes. Clearly, the movies that the older people liked the most were dramas.

4

Every writer hopes to win the Nobel Prize for Literature, but few may be familiar with a lesser-known award: the Diagram Prize for the Oddest Title of the Year. Conferred every year since 1978 by the British magazine The Bookseller, the prize is meant to celebrate works that are given strange or unlikely titles by their authors. The only other criterion is that the book must be nonfiction. The list of finalists is chosen by publishers, booksellers, and librarians from around the world, and being selected is a great form of publicity for the writers. Intrigued by the weird titles of the books, readers can’t help but wonder what is contained within their pages.

5

“Animal rain” is a strange phenomenon in which small animals are blown into the sky by powerful winds and later dropped back down to earth. Reports of animal rain go back centuries. Waterspouts, the most common weather phenomenon associated with animal rain, occur when storm clouds spin around and form a whirlwind that stretches down to the surface of a body of water. Spinning at up to 160 kilometers per hour, waterspouts are strong enough to pull small fish up into the sky. Updrafts are another phenomenon that can cause animal rain. They can overpower much larger animals than waterspouts can, such as birds, frogs, and snakes. When waterspouts and updrafts travel over land, they lose energy and drop whatever they have picked up. The heaviest objects fall first, followed by the lighter ones, so animals tend to fall as groups at different times depending on their weight.

6

The United States Air Force saw many of its aircraft involved in crashes between 1950 and 1959. People at the time considered lack of ability the most obvious reason. So the Air Force decided to give pilots better control and comfort by designing pilot-friendly cockpits. To help design a comfortable cockpit, a researcher named Gilbert S. Daniels looked at more than 4,000 pilots, taking 140 measurements of each one. He identified the ten most important measurements — such as sitting height and arm length — and found the average 30 percent for each. Daniels theorized that a cockpit sized for the average pilot would meet the needs of the majority of pilots. However, the opposite proved to be true. There was not a single pilot who was average for all ten measurements, demonstrating that there really is no such thing as normal.

7

When scientists want to study a particular phenomenon, they first make a plausible guess about it and assume that it is true.

This initial assumption is known as a hypothesis, and it is the starting point for the investigation. The scientists then design experiments to test the validity of the hypothesis by making observations about the phenomenon.

Most of the time, the scientists’ first hypothesis will be proven wrong by these experiments. Other times, the hypothesis will be considered correct for a long time before future studies show it to be false.

For example, physicists thought for many centuries that Newton’s laws of motion were comprehensively valid. However, as scientific technology progressed and new observations were made, scientists found that the laws did not apply to objects traveling at high speeds.

8

With its motor off, the boat glided quietly into the hidden lagoon. Lana was stunned by how beautiful everything was: the crystal-clear water, the white sand, the green banana trees swaying in the breeze. Suddenly, all thoughts of home went away. This was the vacation she’d always wanted. Enjoying the moment, Lana turned to Kevin and whispered, “Look at it! Have you ever seen such a perfect scene? Signing up for this boat tour was the best decision of our vacation!” As the boat reached the middle of the lagoon, the captain threw the anchor overboard and invited the passengers to take a swim. “Come on, Kevin!” Lana beckoned. She couldn’t wait to get into the water. Slipping over the rail onto the ladder, she descended into the light blue water. “Oh, it’s so warm. It’s perfect,” she said with a big smile.

**실전모의고사 02**

1

There are many complex organisms out there, but one of the simplest you will ever see is the sponge. Unlike most animals, the sponge has no head, mouth, arms, or legs. Instead, it consists of many tiny cells growing very near each other. Each of the various kinds of cells that it is composed of has a specific purpose. Some cells make up the skeleton of the sponge and give it its shape. Other cells push water around, causing it to flow through holes located throughout the sponge’s body. These holes allow the sponge to hold a lot of water. There are even some cells that are used only for reproduction. It generally lives in the sea, but there are a few species that inhabit fresh water. Some live alone, while others gather together in colonies.

2

Fish get most of their water not by drinking, but through a process called osmosis. When there are different liquids on two sides of a thin layer with many small holes, osmosis allows the liquids to balance out, leaving an equal concentration on both sides. In the case of fish, the layer is their skin, and the liquid on one side is water outside of their bodies. Ocean fish live in water that is saltier than the water in their bodies. So the fish release water through their skin by osmosis and, to replace it, must drink more. Freshwater fish live in water that isn’t as salty as the water in their bodies. Therefore, their skin takes water in rather than letting it out. Fish that live in fresh water normally drink little or no water as a result. Nonetheless, some water is consumed when they open their mouths to feed.

3

Researchers interested in the effects of stress on health created an experiment involving 40 monkeys. They divided the monkeys into four groups and let them get used to their companions. Then they switched some of the monkeys from one group to another. The researchers knew that joining a new group is a stressful event for monkeys, so they monitored the health of the monkeys they had switched. As it turned out, not all the monkeys felt the same level of stress when they joined a new group. The monkeys that had a hard time fitting in felt more stress, and they had the poorest health. On the other hand, the ones that had an easier time fitting in with their new companions remained in good health.

The monkeys that found it less stressful to join a new group were healthier than the ones that did not.

4

It’s true that there are many differences between teenagers in today’s world and those of previous generations. School shootings, AIDS, eating disorders, suicide — these problems which modern teens face today were unknown, or at least less severe, in decades past. However, young people today are still struggling with some of the basic emotional dilemmas that have always plagued teens. They still have trouble finding the right balance between youth and adulthood, and they strive to define themselves as different through their outward appearance or everyday behavior. Things may have changed superficially — instead of bell-bottoms and long hair, today’s teens sport purple hair and body piercings. But at the core, what was true in the past is also true today: teens must travel down that rocky road of self-discovery.

5

Of all the things that parents can give their children, the most precious is time. Although it’s not visible, it’s more important than any material things. Whenever people think back on their relationship with their parents, they seldom remember the individual toys they were given or how many TVs they had in the house. What mattered most in those parent-child relationships had nothing to do with material objects. Instead, we remember the special moments our parents shared with us — offering advice about a problem at school, staying up late to read a bedtime story, or just showing up at an important sporting event or music recital. And we also remember those moments when our parents weren’t there. Most experts will tell you that 99.9% of good parenting involves simply being there.

6

Questions about how life first formed on our planet have puzzled scientists for many years. How could life have possibly emerged from the hostile environment that was present throughout our planet’s early history? And what could have led to the development of multicellular plants and animals from simple, single-celled organisms? Recently, some scientists proposed a theory that could help provide answers to some of these difficult questions. According to this theory, an important cellular component called glycerol could have been created through chemical reactions that took place long ago in outer space. Glycerol is an organic molecule, and it is found in the cell membranes of all living organisms. In addition, it is believed that cell membranes with glycerol were essential to the evolution of multicellular life on Earth.

7

For three years, I have commuted by bicycle from my home to the downtown train station. I was very upset to see flyers at the station yesterday saying that the bike lockers, which up to now have been free and open to everyone, will have to be rented starting next month. How can you charge people to park their bikes while car parking in the adjacent lot is still free? Not only are bicycles better for the environment than motorized vehicles, but they also take up much less space. If anything, you should be charging car owners for their parking spaces, not cyclists. With the current state of our environment, we need to encourage people to travel by bicycle, not charge them for it.

8

A duty is a kind of tax that is placed on products that are either being exported to or imported from another country. It is most common for governments to place a duty tax on products coming into their own country from abroad. This allows the government to collect extra money while also protecting local companies that produce the same or similar products. For example, the Korean government might set a duty tax on televisions made in Japan. If they did, some Japanese companies might decide to stop exporting televisions to Korea in order to avoid paying it. Others might continue to export televisions, but would be forced to raise their prices. In the end, this would encourage Korean consumers to buy televisions made in Korea, as they would be cheaper than those made in Japan.