

## 一、綜合測驗

### 25 ANS

Are you too busy or tired to cook? Is eating out too expensive for you? Do you feel TV dinners too unhealthy? If your answer is “Yes!” to these questions, then you have good 1 to take the course we have designed especially for people like you. In this course, you will learn 2 to cook two weeks of healthy, inexpensive meals in just one day. Specifically, you will learn to prepare 3 delicious items as roasted chicken, chili, turkey loaf, meatballs, pasta, among others. You will also learn important information about 4 for fresh and inexpensive foods, the use of herbs and spices, and the proper ways of storing different kinds of food.

At the end of the class, you 5 with your classmates the meals you have created, and you will leave with recipe handouts and, more importantly, the ability to cook two weeks of fantastic, low-cost meals.

|                      |                |                 |                |
|----------------------|----------------|-----------------|----------------|
| (1) ( ) (A) answer   | (B) reason     | (C) health      | (D) food       |
| (2) ( ) (A) what     | (B) where      | (C) when        | (D) how        |
| (3) ( ) (A) many     | (B) much       | (C) such        | (D) so         |
| (4) ( ) (A) shopping | (B) buying     | (C) marketing   | (D) growing    |
| (5) ( ) (A) share    | (B) are shared | (C) are sharing | (D) will share |

### 26 ANS

There are six international science Olympiads in the world. They are all organized with a simple intention — to 1 global understanding and mutual appreciation among young scientists in all countries. Each of the six science Olympiads 2 its specific aims. The aims of the International Mathematical Olympiad (IMO), for example, are three-fold. With arduous but interesting math problems, the first aim of the IMO is to discover, to encourage and, most important of all, to challenge 3 gifted young people all over the world. Secondly, it is by participating in any IMO contest that young mathematicians of all countries can foster friendly 4. Based upon its second aim, more international exchanges are encouraged and established. Any IMO contest brings not only young mathematicians together but also their instructors; 5, the IMO has its final aim to create opportunities for the exchange of information on math schedules and practice throughout the world.

|                           |                  |                 |                                    |
|---------------------------|------------------|-----------------|------------------------------------|
| (1) ( ) (A) sponsor       | (B) promote      | (C) determine   | (D) calculate                      |
| (2) ( ) (A) has           | (B) is           | (C) have        | (D) are                            |
| (3) ( ) (A) destructively |                  | (B) effectively | (C) mutually (D)<br>mathematically |
| (4) ( ) (A) behaviors     |                  | (B) messages    | (C) relations (D) guests           |
| (5) ( ) (A) whereas       | (B) nevertheless | (C) therefore   | (D) likewise                       |

### 27 ANS

Brushing your teeth regularly will help you maintain a healthy smile. But that smile won't last long if you don't take proper care of your toothbrush and switch to a new one often. According to the American Dental Association (ADA), toothbrushes can harbor bacteria. These germs come from the mouth and can 1 in toothbrushes over time.

Many Americans replace their toothbrushes only once or twice a year. The ADA, however, recommends 2 a new toothbrush every three to four months. Children's toothbrushes may need to be changed more 3.

During those three to four months of use, there are several ways to keep a toothbrush clean. 4, rinse your toothbrush thoroughly with tap water after use, making sure to remove any toothpaste and debris. Store your toothbrush in an upright position, and let 5 air dry. Most importantly, do not share toothbrushes.

- (1) ( ) (A) accumulate (B) crumble (C) establish (D) radiate
- (2) ( ) (A) use (B) to use (C) using (D) used
- (3) ( ) (A) essentially (B) frequently (C) typically (D) objectively
- (4) ( ) (A) In short (B) Otherwise (C) Nevertheless (D) For example
- (5) ( ) (A) it (B) one (C) the (D) which

## 28 ANS

Glaciers are usually associated with colder climates. But some mountain ranges of South America, Africa, and Indonesia are also 26 glaciers and ice sheets. These tropical glaciers serve as a major source of water supply to one-sixth of the world's population.

A newly published study, however, revealed that rising temperatures are posing an 27 threat to the last tropical glaciers in Indonesia's Papua region. The ice sheets, which once spanned 20 square kilometers, are thinning over five times as quickly compared to a few years ago. 28 already shrunk by 85% to a mere 0.5 square kilometers, Papua's glaciers will completely disappear within a decade, researchers have predicted.

The disappearance of the glaciers will also leave a significant 29 impact. For many indigenous Papuans, the ice sheets represent a sacred symbol. "The mountains and valleys are the arms and legs of their god and the glaciers are the head," explained the head researcher.

The study warned that Papua's glaciers are only the "first to go" if greenhouse gases are 30 and temperatures continue rising. And this is certainly a serious warning about the depressing fate of other glaciers around the world.

- (1) ( ) (A) home to (B) covers of (C) roofs over (D) room for
- (2) ( ) (A) occasional (B) elaborate (C) immediate (D) offensive
- (3) ( ) (A) Have (B) Had (C) Having (D) Having been
- (4) ( ) (A) cultural (B) moral (C) political (D) environmental
- (5) ( ) (A) kept balanced (B) made released (C) seen dismissed (D) left unchecked

## 二、文意選填

## 09 ANS

|                |                  |          |              |                  |
|----------------|------------------|----------|--------------|------------------|
| (A) conform    | (B) prevent      | (C) obey | (D) guidance | (E) excellent    |
| (F) techniques | (G) professional | (H) team | (I) at risk  | (J) to the limit |

Athletes and sports competitors compete in organized, officiated sports events to entertain spectators. When playing a game, athletes are required to understand the strategies of their game and 1 the rules and regulations of the sport. The events in which they compete include both 2 sports, such as baseball, basketball, and soccer, and individual sports, such as golf, tennis, and bowling. The level of play varies from unpaid high school athletics to 3 sports, in which the best from around the world compete in events broadcast on international television.

Being an athlete involves more than competing in athletic events. Athletes spend many hours each day practicing skills and improving teamwork under the 4 of a coach or a sports instructor. They view videotapes not only to critique their own performances and 5 but also to learn their opponents' tendencies and weaknesses to gain a competitive advantage. Some athletes work regularly with strength trainers to gain muscle and to 6 injury. Many athletes push their bodies 7 during both practice and play, so career-ending injury always is a risk. Even minor injuries may put a player 8 of replacement. Because competition at all levels is extremely intense and job security is always unstable, many athletes train year round to maintain 9 form and technique and peak physical condition. Athletes also must 10 to strictly controlled diets during their sports season to supplement any physical training program.

## 10 ANS

|                  |                |               |               |               |
|------------------|----------------|---------------|---------------|---------------|
| (A) possible     | (B) sensation  | (C) risky     | (D) cost      | (E) witnessed |
| (F) professional | (G) called for | (H) tried out | (I) necessity | (J) career    |

A stunt person is a man or a woman who performs dangerous acts, usually in the television or movie industry. In this line of work, the person is paid to do daring actions that are deemed too 21 for the regular actor to perform, including jumping from heights, crashing cars, or fighting with weapons.

Stunt work emerged out of 22 over time. In the early days of the film industry, actors themselves shot acrobatic acts and dangerous scenes, until they began to get injured. There were, however, no 23 crew members to perform impressive stunts at that time. If something dangerous needed to be done for a scene, the producers would hire anyone crazy or desperate enough to do it. These people were not trained to perform stunts, so they often 24 things for the first time during the actual shooting. They had to learn from their own mistakes, which 25 some their lives, and almost all suffered light or severe injuries.

Beginning around 1910, audiences developed a taste for serial action movies, which 26 the use of dedicated stunt people to perform in dangerous scenes. Such demand increased with the rise of western movies, and many cowboys with masterful skills on horseback found a new 27 as a stunt person. Tom Mix and Yakima Canutt were among the most famous. The 1960s and '70s 28 the development of most modern stunt technology, like air rams and bullet squibs. That technology has continued to evolve into the present.

Today, CGI (computer generated imagery) is widely used in filmmaking, and it is now 29 to create very lifelike scenes without using real stunt people. However, CGI has difficulties of its own, and there will always be a demand for the realism and thrilling 30 of an actual stunt. So the stunt industry is probably in no immediate danger of dying off.

### 三、閱讀測驗

#### 25 ANS

Some of the world's largest beetles are getting smaller because their habitats are warming up, according to new research from the University of British Columbia, Canada. The study, published in the *Journal of Animal Ecology* in January 2018, shows that climate change is having an impact on these "teeny tiny" organisms.

The study began with a **deep dive** into the scientific literature. Evolutionary ecologist Michelle Tseng and her students combed through all the articles they could find, looking for laboratory studies of temperature effects on insects. They found 19 that indicated at least 22 beetle species shrank when raised in warmer than normal temperatures.

To see whether this pattern held true in the wild, the team made use of the university's 600,000-specimen insect collection, which included thousands of bugs collected locally since the late 1800s. The researchers took photographs of more than 6,500 beetles from the eight species with the most extensive records. They also looked at climate records to determine trends in rainfall and other factors besides temperature. Sorting the beetles into size categories, they found that five of the eight species have shrunk over the past century. The four largest species of beetles, including the snail-killer ground beetles, shrank 20% in the past 45 years. In contrast, smaller beetles were unaffected or even slightly increased in size.

Some ecologists are cautious about Tseng's findings, saying that it hasn't yet been proved whether the warming temperatures are the actual cause for the beetle shrinkage. UK biologist Alan Ronan Baudron, however, is convinced. Baudron's studies have documented shrinkage of certain fish species due to climate warming. His account is that warmer temperatures lower the concentration of oxygen in the water, causing fish to burn energy faster and mature at a smaller size. But neither he nor Tseng is convinced that decreased oxygen can explain the shrinkage in the beetles.

(1) ( ) What is the best title for the passage?

- (A) Large Beetles Are Shrinking, Thanks to Climate Change
- (B) Beetles vs. Fish: Are They Becoming Smaller?
- (C) What We Know About Evolutionary Ecology
- (D) Animal Ecology: Past and Present

(2) ( ) What does "a **deep dive**" most likely mean in the second paragraph?

- (A) A clear indication.
- (B) An important finding.
- (C) A thorough examination
- (D) An insightful comment.

(3) ( ) Which of the following is true about the research method of Tseng's team?

- (A) They conducted both laboratory and field studies.
- (B) They took pictures of 600,000 specimens of insects.
- (C) They divided the beetles into different size groups for examination.
- (D) They recorded the degrees of oxygen concentration since the late 1800s.

(4) ( ) Which of the following is a finding of Tseng's team?

- (A) Eight species of beetles have shrunk over the past century.
- (B) Some beetles were not affected by temperature change.
- (C) Most beetles tend to live longer with climate warming.
- (D) Beetles and fish may shrink down to the same size.

## 26 ANS

For more than two hundred years, the White House has stood as a symbol of the United States Presidency, the U.S. government, and the American people. In 1790, President George Washington declared that the federal government would reside in a district "not exceeding ten miles square . . . on the river Potomac." As preparations began, a competition was held to find a builder of the "President's House." Nine proposals were submitted, and the Irish-born architect James Hoban won the gold medal for his practical and handsome design. Construction began when the first cornerstone was laid in October of 1792. Although President Washington oversaw the construction of the house, he never lived in it. It was not until 1800, when the White House was nearly completed, that its first residents, President John Adams and his wife Abigail, moved in.

American presidents can express their individual style in how they decorate the house and in how they receive the public. Thomas Jefferson held the first inaugural open house in 1805; many of those who attended the swearing-in ceremony at the U.S. Capitol simply followed him home. President Jefferson also opened the house for public tours, and it has remained open, except during wartime, ever since. In addition, Jefferson welcomed visitors to annual receptions on New Year's Day and on the Fourth of July. Abraham Lincoln did the same, but then the inaugural crowds became far too large for the White House to accommodate comfortably, and this also created a security issue. It was not until Grover Cleveland's first presidency that some effective crowd control measures were implemented to address the problem caused by **this practice**.

At various times in history, the White House has been known as the "President's Palace," the "President's House," and the "Executive Mansion." President Theodore Roosevelt officially gave the White House its current name in 1901.

(1) ( ) What is this passage mainly about?

- (A) The design of the White House. (B) The location of the White House.
- (C) The importance of the White House. (D) The history of the White House.

(2) ( ) What does "**this practice**" refer to in the second paragraph?

- (A) Holding an inaugural open house.
- (B) Accommodating the crowds comfortably.
- (C) Decorating the White House.
- (D) Joining in the swearing-in ceremony.

(3) ( ) Who initiated the construction of the White House?

(A) John Adams. (B) James Hoban.

(C) George Washington. (D) Thomas Jefferson.

(4) ( ) According to the passage, which of the following is **NOT** true about the White House?

(A) The White House has had several names.

(B) The designer of the White House was an American president.

(C) People were not allowed to visit the White House during wartime.

(D) The White House is located in a district not larger than ten miles square.

## 27 ANS

Like many other five-year-olds, Jeanie Low of Houston, Texas, would use a stool to help her reach the bathroom sink. However, the plastic step-stool she had at home was unstable and cluttered up the small bathroom shared by her whole family. After learning of an invention contest held by her school that year, Jeanie resolved to enter the contest by creating a stool that would be a permanent fixture in the bathroom, and yet could be kept out of the way when not in use.

Jeanie decided to make a stool attached to the bathroom cabinet door under the sink. She cut a plank of wood into two pieces, each about two feet wide and one foot long. Using metal hinges, Jeanie attached one piece of the wood to the front of the cabinet door, and the second piece to the first. The first piece was set just high enough so that when it swung out horizontally from the cabinet door, the second piece would swing down from the first, just touching the ground, and so serving as a support for the first piece of the wood. This created a convenient, sturdy platform for any person too short to reach the sink. When not in use, the hinges allowed the two pieces of wood to fold back up tightly against the cabinet, where they were held in place by magnets. Jeanie called her invention the "Kiddie Stool."

Jeanie's Kiddie Stool won first place in her school's contest. Two years later, it was awarded first prize again at Houston's first annual Invention Fair. As a result, Jeanie was invited to make a number of public appearances with her Kiddie Stool, and was featured on local TV as well as in newspapers. Many people found the story of the Kiddie Stool inspiring because it showed that with imagination, anyone can be an inventor.

(1) ( ) Why did Jeanie Low invent the Kiddie Stool, according to the passage?

(A) Many other five-year-olds had problems reaching the bathroom sink.

(B) She did not think that plastic stools were tall enough for her.

(C) The stool in her bathroom was not firm and often got in the way.

(D) She was invited to enter an invention contest held by her school.

(2) ( ) Which of the following statements is true about how the Kiddie Stool works?

(A) The Kiddie Stool will swing out only when the cabinet door opens.

(B) It uses hinges and magnets to keep the wooden pieces in place.

(C) It swings from left to right to be attached to the cabinet door.

(D) The platform is supported by two pieces of metal.

(3) ( ) What are the characteristics of Jeanie's Kiddie Stool?

- (A) Permanent and foldable.
- (B) Fragile and eye-catching.
- (C) Conventional and touching.
- (D) Convenient and recyclable.

(4) ( ) Which of the following sayings best captures the spirit of Jeanie Low's story?

- (A) Failure is the mother of success.
- (B) There's nothing new under the sun.
- (C) Necessity is the mother of invention.
- (D) Genius is 1% inspiration and 99% perspiration.

## 28 ANS

All pop artists like to say that they owe their success to their fans. In the case of British band SVM, it's indeed true. The band is currently recording songs because 358 fans contributed the £100,000 needed for the project. The arrangement came via MMC, an online record label that uses Web-based, social-network-style "crowd-funding" to finance its acts.

Here's how it works: MMC posts demos and videos of 10 artists on its website, and users are invited to invest from £10 to £1,000 in the ones they most enjoy or think are most likely to become popular. Once an act reaches £100,000, the financing process is completed, and the money is used to pay for recording and possibly a concert tour. Profits from resulting music sales, concerts, and merchandise are split three ways: investors get to divide 40%; another 40% goes to MMC; the artist pockets 20%. The payoff for investors can be big. One fan in France who contributed £4,250 got his money back 22 times over.

Crowd-funding musical acts is not new. But MMC takes the concept to another level. First of all, investors can get cash rather than just goodies like free downloads or tickets. Also, MMC is a record label. It has the means to get its music distributed around the world and to market artists effectively. "Artists need professional support," says the CEO of MMC's international division.

While digital technology and the Net have created a do-it-yourself boom among musicians, **success is still a long shot**. Out of the 20,000 records released in the U.S. in 2009, only 14 DIY acts made it to the Top 200. Also, with less revenue from recorded music, music companies have become less likely to take risks, which has led to fewer artists receiving funding. The crowd-funding model, however, allows for more records to be made by spreading risk among hundreds of backers. And the social-network aspect of the site helps expand fan bases; that is, investors become a promotional army.

(1) ( ) Which of the following titles best expresses the main idea of the passage?

- (A) Web-based Music Production
- (B) Fundraising for Music Companies
- (C) Music Fans Profiting from Investments
- (D) Crowd-funding in the Music Industry

(2) ( ) How much money does a band have to raise via MMC to have their music recorded?

- (A) £10. (B) £1,000. (C) £4,250. (D) £100,000.

(3) ( ) Which of the following statements is true about MMC?

- (A) It has helped many do-it-yourself musicians get to the Top 200.
- (B) There are works of fourteen artists posted at a time on its website.
- (C) It allows fans to provide financial support to the musicians they like.
- (D) The biggest share of its profits from a crowd-funding project goes to the musician.

(4) ( ) What does the author mean by “**success is still a long shot**” in the fourth paragraph?

- (A) Success is everlasting in effect.
- (B) Success is not easy to achieve.
- (C) Success often starts with one big shot.
- (D) Success should be every musician’s long-term goal.