

## 2004 年硕士研究生入学考试试题

科目：基础英语

### Section A

Directions: beneath each of the following sentences, there are four choices marked (a), (b), (c) and (d). Choose the best completes the sentence. Mark your answer on the ANSWER SHEET by blackening the corresponding letter in the brackets. (5 points)

1. Jack didn't like driving on the freeways, but after a while he \_\_\_\_\_ it.  
 a. used to      b. got used to      c. had been gotten used to      d. will be getting used to
2. As I have nothing to do now, I \_\_\_\_\_ as well go with you.  
 a. should      b. would      c. could      d. might
3. Some scientists say it is essential that mankind \_\_\_\_\_ the amount of air pollution in big cities.  
 a. reduce      b. reduced      c. be reduced      d. will reduce
4. Computers that once took up entire room are now \_\_\_\_\_ to put on desktops and into wristwatches.  
 a. small enough      b. smaller than      c. so small      d. as small as
5. With age, the mineral content of human bones decreases, \_\_\_\_\_ them more fragile.  
 A, make      b. and to make      c. thereby making      d. which it makes
6. \_\_\_\_\_ many copper mines in the south, a fact which contributes significantly to the state's economy.  
 a. they are      b. there are      c. of the      d. the
7. The colors and patterns of the wings of butterflies and moths help \_\_\_\_\_ the organism against predators.  
 a. protect      b. being protected      c. protecting      d. protection of
8. Jupiter, the closest of the giant planets to Earth, has \_\_\_\_\_ solid surface and is surrounded by zones of intense radiation.  
 a. not      b. nor      c. no      d. neither
9. Earthquakes can damage a tree \_\_\_\_\_ violently, and it can take several years for the tree to heal.  
 a. to cause shaking      b. when shaking it causes      c. by causing it to shake      d. to cause to shake it
10. Volcanoes are divided into three main groups, based on their shape and the type of material they \_\_\_\_\_.  
 a. are made      b. made of      c. are made of      d. make of

### Section B

Directions: each of the following sentences has four underlined parts marked (a), (b), (c) and (d). Identify the part of the sentences that is incorrect Mark your answer on the ANSWER SHEET by blackening the corresponding letter in the brackets. (5 points)

11. Though both (a) cats and dogs existed before man, without (b) man neither one group and (c) the other would have developed (d) so many varieties.
12. Although they (a) reflect a strong social conscience, Arthur Miller's stage works are typical (b) more concerned (c) with individuals than with (d) system.
13. Antique collecting became (a) a significant pastime in the 1800's (b) when old object (c) began to be appreciated (d) for their beauty as well as for their historical importance.
14. The importance of environmental stimuli (a) in the development of coordination between (b)

sensory input and motor response varies according to (d) species to species.

15. A mortgage enables a person (a) to buy (b) property without paying for it outright(c); thus more people are able to enjoy to own (d) a house.

16. A number of (a) the American Indian languages spoken (b) at the time of the European arrival in the New World in the late fifteen (c) century have become extinct (d).

17. Numerous (a) types of cells, such as skin cells and white blood cells (b), have (c) the power reproduce (d) asexually.

18. One of the many machines invented (a) in the late nineteenth century, none (b) had a great (c) impact on the United States economy than the automobile (d).

19. Members of a nation's foreign service represent (a) that country's interests (b) abroad and report on (c) the conditions, trends, and policies of the country which (d) they are stations.

20. During the 1940's science and engineering had an impact on the way (a) music reach (b) its (c) audience and even influenced the way in which (d) it was composed.

## Academic reading practice test (60 points)

### Reading passage 1

Questions 1-12

You should spend about 20 minutes on Questions 1-12 which are based on Reading Passage 1.

Questions 1-4

The reading passage below has five sections.

Choose the most suitable heading for each section from the list of headings below. Write the appropriate numbers (i-viii) in boxes 29-32 on your answer sheet.

List of headings

- |        |   |
|--------|---|
| (i)    | The workers and their families                    |
| (ii)   | The managers of the Snowy Mountains Scheme        |
| (iii)  | The workers' problems                             |
| (iv)   | The unique nature of the scheme                   |
| (v)    | Why the Snowy Mountains Scheme began              |
| (vi)   | The people who came to the Snowy Mountains Scheme |
| (vii)  | Learning a new language                           |
| (viii) | The dangers of the job                            |

Example SECTION 1

Answer v

- SECTION 2
- SECTION 3
- SECTION 4
- SECTION 5

## THE DAMS THAT CHANGED AUSTRALIA

### Section 1

Inland Australia has had a problem with drought from the time of white settlement in 1788 until today, and this is why the Snowy Mountains Scheme was conceived and founded. Before the Snowy Scheme a large proportion of the snowfields on the roof of Australia melted into the

Snowy River every year, and the water flowed into the sea, not into the dry interior where people needed it so desperately. This was first recognized by the Polish geologist and explorer Strezlecki in 1840, who commented that there could be no development of the inland without irrigation. The river would have to be diverted if irrigation were to succeed.

Before Federation in 1901, Australia consisted of a group of colonies, all anxious to protect their own interests. After federation the states retained rights to the water, and thus to what might happen to the rivers. Arguments between New South Wales, Victoria and South Australia led to a deadlocked Premiers' Conference in 1901. The Hydro-electric Power Act just two years later, on July 7, the project was officially commenced on October 17 that year, barely three months after the Act had been passed.

The scheme set out to harness water for electricity and to divert it back to the dry inland areas for irrigation. To do this, thousands of kilometers of tunnels had to be drilled through the mountains, and sixteen major dams and seven hydro-electric power stations built over a period of nineteen years. The first of these was Guthega Power Station, commissioned in 1954, and the last, Tumut III.

## Section 2

The Snowy Mountains Scheme was to alter the face of Australia forever. One important change was the recruitment people from outside Australia to work on the scheme. In 1949, while the world was still recovering from the effects of World War II (1939 to 1945), the Australian government needed immense numbers of people to work on the Snowy. It sought labour from overseas, and 60,000 of the 100,000 people who worked on the scheme came from outside the country.

They came from thirty different countries: from Italy, Yugoslavia, and Germany, from sophisticated cities like Budapest, Paris and Vienna, and from tiny hamlets. These European workers left countries which had fought against each other during the war, and which had vastly different cultures, and they found themselves in a country which was still defining itself. They were adventurous young men, some highly skilled, some not, and they came to a place which offered both enormous challenges and primitive conditions. Many were housed in tents in the early days of the scheme, although some fortunate men were placed in barracks. The food was basic, female company extremely scarce and entertainment lacking.

## Section 3

Many new arrivals spoke only limited English, and were offered English classes after work. The men needed primarily to understand safety instructions, and safety lectures were conducted in English and other languages. In fact a great deal of communication underground was by sign language, especially when the conditions were noisy. The signs were peculiar to the business at hand: for instance, a thumb placed near the mouth meant water, but did not indicate whether the water needed on the drill the man was using, or for a drink.

The constant reference to the men who worked on the Snowy is appropriate because few women worked on the scheme, and those who were employed usually held office jobs. Women, however, were active in the community, and the members of the Country Women's Association gave English lessons. Other English instruction was provided by The Australia Broadcasting Commission which ran daily broadcasts to help the newcomers with the language.

## Section 4

These circumstances could have caused great social trouble, but there were relatively few serious

problems. The men worked long and hard, and many saved their money with a view to settling in Australia or returning home. At a reunion in 1999 many were happy to remember the hardships of those days, but it was all seen through a glow of achievement. This satisfaction was felt not only by the men who worked directly on the project, but by the women, many of whom had been wives and mothers during the scheme, and indicated that they had felt very much part of it.

The children of these couple went to school in Happy Jack, a town notable for having the highest school in Australia, and the highest birthrate. In one memorable year there were thirty babies born to the eighty families in Happy Jack.

Older children went to school in Cooma, the nearest major town..

#### Section 5

The scheme is very unlikely to be repeated. The expense of putting the power stations underground would now be prohibitive, and our current information about ecology would require a different approach to the treatment of the rivers. Other hydro-electric schemes like the Tennessee Valley Authority preceded the Snowy Mountains Scheme, and others have followed. The Snowy Mountains Scheme is the only hydro-electric scheme in the world to be totally financed from the sale of its electricity.

As well as being a great engineering feat, the scheme is a monument to people from around the world who dared to change their lives. Some are living and working in Australia, many have retired there, some have returned to their countries of origin. Every one of them contributed to altering Australian society forever.

#### Question 5-8

Complete the table below. Write a date or event for each answer. Use no more than **THERE WORDS OR NUMBERS** for each answer.

Write your answer in boxes 5-8 on your answer sheet.

	DATE (Year)	EVENT
5		White settlement begins
example	1939-1945	World War II
6		Snowy Mountains Scheme begins
7		Tumut III Power Station commissioned
8	1999	

#### Question 9-12

Do the following statements agree with the views of the writer? In boxes 37-40 on your answer sheet write:

YES	if the statement agrees with the writer
NO	if the statement does not agree with the writer
NOT GIVEN	if there is no information about this in the passage

9. The Snowy Mountains Scheme was designed to meet Australia's energy needs.
10. Few women played a direct part in the development of the Snowy Mountains Scheme.
11. The Snowy Mountains Scheme has led to a new set of environmental problems.
12. The Snowy Mountains Scheme may be considered the beginning of a multicultural Australia.

### Reading Passage 2

You should spend about 20 minutes on Questions 13-26 which are based on Reading Passage 2.

#### Power from the Earth

- A. Geothermal power refers to the generation of electrical power from the tapping of heat



sources found well below the earth's surface. As most people know, if a hole were to be drilled deep into the earth, extremely hot, molten rock would soon be encountered. At depths of 30 to 50 km, temperatures exceeding 1000 degrees Celsius prevail. Obviously, accessing such temperatures would provide a wonderful source for geothermal power. The problem is, such depths are too difficult to access-drilling down some 30 or more kilometers is simply too costly with today's technology.

- B. Fortunately, sufficiently hot temperatures are available at considerably shallower depths. In certain areas, where the earth's surface had been altered over time- through, for example, volcanic activity-temperatures exceeding 300 degrees Celsius can be found at depths of a mere 1 to 3 km, which can be feasibly accessed. These particular areas are potentially ideal for the generation of electricity through geothermal means.
- C. It is possible to explain geothermal power penetration as a steam power system that utilizes the earth itself as a boiler. When water is sent down to the depths of 1 to 3 km, it returns to the surface as steam and is capable of generating electricity. Electricity generated in this manner hardly produces any carbon dioxide or other waste materials. If the steam and hot water are routed back underground, the generation of electricity can be semipermanent in nature.
- D. Furthermore, geothermal power can provide a stable supply of electricity unlike other natural energy sources such as solar power and wind power, which both rely heavily on weather conditions. Accordingly, the generation of electricity through geothermal power is four to five times more efficient than through solar power. As for wind power, geothermal power is some two times more cost effective. Only the generation of hydroelectric power comes close the cost of power production from each is about the same.
- E. Although geothermal power generation appears to be a most attractive option, development has been slow. The world's first successful attempt at geothermal power generation was accomplished in Italy in 1904. power generation in Japan first started in 1925 at Beppu City. Since that time, countries as diverse as Iceland and New Zealand have joined the list of nations tapping this valuable source of energy. In the year 2000, Beppu City hosted the World Geothermal Congress, whose goal was to promote the adoption of geothermal energy production throughout the world.
- F. The international geothermal community at the World Geothermal Congress 2000 called upon the governments of nations to make strong commitments to the development of their indigenous geothermal resources for the benefit of their own people, humanity, and the environment. However, several factors are still hindering the development of geothermal power generation. Firstly, it has a low density of energy which makes it unsuitable for large-scale production in which, for example, over 1 million kilowatts need to be produced. Secondly, the cost is still high when compared to today's most common sources of energy production: fossil fuels and atomic energy.
- G. A further consideration is the amount of risk involved in successfully setting up anew geothermal power production facility. The drilling that must extend 2,000 to 3,000 m below the surface must be accurate to within a matter of just a few meters one side or the other of the targeted location. To achieve this, extensive surveys, drilling expertise and time are needed. It is not uncommon for a project to encompass ten years from its planning stage to the start of operations. The extent of the risks involved is clear.
- H. Although is has long been considered a resource-poor nation, Japan, which is thought to have

about 10% of the world's geothermal resources, may well have considerable advantages for tapping into geothermal power. It does have one of the longest serving power stations using geothermal energy. The station, built in 1966, pointed the way to the future when the country was affected by the two global oil shocks in the 1970's. now there are some 17 plants in operation throughout the country which are responsible for a total output of over 530.000 kilowatts. This figure, though impressive, accounts for a mere 0.4% of Japan's total generation of electricity.

- I. Clearly then, further progress needs to be made in the development of geothermal energy. As long as costs remain high in comparison to other sources of energy, geothermal power will struggle to match the efficiency of existing power sources. Further research and innovation in the field, as well as government support and a sense of urgency, are needed to help propel geothermal energy towards its promising future.

Questions 13-18

Reading Passage 2 has 9 paragraphs labeled A-I.

Which paragraphs contain the following information?

Write the appropriate letters A-I in boxes 13 to 18 on your answer sheet.

- 13. History of the development of geothermal power
- 14 one country's use of geothermal power
- 15. Comparisons between various energy sources
- 16. How geothermal energy can produce electricity
- 17. Conditions which permit access to geothermal power
- 18. Problems of geothermal exploration

Questions 19-26

Do the following statements agree with the information given in the passage "Power from the Earth"?

In boxes 19-26 on your answer sheet write

- YES if the statement agrees with the writer
- NO if the statement does not agree with the writer
- NOT GIVEN if there is no information about this in the passage

- 19. Accessing geothermal energy at depths greater than 3 km is currently not possible.
- 20. Geothermal power is unlikely to be economically sensible while carbon fuel is available.
- 21. The generation of geothermal power does produce some byproducts damaging to the environment.
- 22. The World Geothermal Congress has been able to raise money for research in this area.
- 23. Geothermal energy is still relatively expensive to generate.
- 24. It can take a decade to develop a single geothermal power station.
- 25. Japan will soon be capable of generating one quarter of its energy needs using geothermal energy.
- 26. The future of geothermal energy depends upon the decline of fossil fuel resources.

### Reading Passage 3

You should spend about 20 minutes on Questions 27-40 which are based on Reading Passage 3.

#### Are We Managing to Destroy Science?

[ The government in UK was concerned about the efficiency of Research institutions and set up a Research Assessment Exercise (RAE) to consider what was being done in each university. The

article which follows is a response to the imposition of the RAE.]

MICHAEL LARKIN

In the year ahead, the UK government is due to carry out the next Research Assessment Exercise (RAE). The goal of this regular five-yearly check up of the university sector is easy to understand-perfection, of a kind, in public sector research. But perfection extracts a high price. In the case of the RAE, one risk attached to this is the creation of a tyrannical management culture that threatens the future of imaginative science.

Academic institutions are already preparing for the RAE with some anxiety-understandably so, for the financial consequences of failure are severe. Departments with a current rating of four or five (research is rated on a five point scale, with five the highest) must maintain their score or face a considerable loss of funding. Meanwhile, those with ratings of two or three are fighting for their survival.

The pressures are forcing research management onto the defensive. Common strategies for increasing academic output include grading individual researchers every year according to RAE criteria, pressurizing them to publish anything regardless of quality, diverting funds from key and expensive laboratory science into areas of study such as management, and even threatening to close departments. Another strategy being readily adopted is to remove scientists who appear to be less active in research and replace them with new, probably younger, staff.

Although such measures may deliver results in the RAE, they are putting unsustainable pressure on academic staff. Particularly insidious is the pressure to publish. Put simply, RAE committees in the laboratory sciences must produce four excellent peer-reviewed publications per member of staff to meet the assessment criteria. Hence this is becoming a minimum requirement for existing members of staff, and a benchmark against which to measure new recruits.

But prolific publication does not necessarily add up to good science. Indeed, one young researcher was told in an interview for a lectureship that, "although your publications are excellent unfortunately there are not enough of them. You should not worry so much about the quality of your publications."

In a recent letter to Nature I analysed the publication records of ten senior academics in the area of molecular microbiology. All of them are now in very senior positions in universities or research institutes, with careers spanning a total of 262 years. All have achieved considerable status and respect within the UK and worldwide. However, their early publication records would preclude them from academic posts if the present criteria were applied.

Although the quality of their work was clearly outstanding--- they initiated novel and perhaps risky projects early in their careers which have since been recognized as research of international importance--- they generally produced few papers over the first ten years after completing their PhDs. Indeed, over this period, they have an average gap of 3.8 years without publication or production of a cited paper. In one case there was a five-year gap. Although these enquiries were limited to my own area of research, it seems that this model of career progression is widespread in all of the chemical and biological sciences.

It seems that the atmosphere surrounding the RAE may be stifling talented young researchers or driving them out of science altogether. We urgently need a more considered and careful nurturing of our young scientific talent. A new member of academic staff in the chemical or biological laboratory sciences surely needs a commitment to resources over a five-to ten-year period to establish their research. Senior academics managing this situation might be well advised to



demand a long-term view from the government.

Unfortunately, management seems to be pulling in the opposite direction. Academics have to deal with more students than ever and the paperwork associated with teaching quality assessments is increasing. On top of that, the salary for university lecturers starts at only \$16,665 (rising to \$29,048). Tenure is rare, and most contracts are offered on a temporary contract basis. With the mean starting salary for new graduates now close to \$18,000, it is surprising that anybody still wants a job in academia.

It need not be like this. As part of my duties with the QUESTOR Centre (Queen's University Environmental Science and Technology Research Centre), I have dealings with many senior research managers in the chemical and water industries. The overall impression is that the private sector has a much more sensible and enlightened long-term view of research priorities. Why can the universities not develop the same attitude?

Tyrannies need managers, and these managers will make sure they survive when those they manage are lost. Research management in UK universities is in danger of evolving into such a tyranny that it will allow little time for careful thinking and teaching, and will undermine the development of imaginative young scientists.

Dr Larkin is a senior lecturer in microbiology at The Queen's University Belfast.

*Question 27-34*

*Complete the summary below. Choose NO MORE THAN ONE WORD from the box below for each answer, and write them in boxes 27-34 on your answer sheet.*

rated	academic	publish	carried	business	
disagree	worried	strict	excited	scientific	conducted
negotiate	counterproductive		published	expensive	
retrain	complex	abstract	popular	replace	

The next Research Assessment Exercise (RAE) is due to be \_\_\_\_27\_\_\_\_ next year. Already, universities in the UK are \_\_\_\_28\_\_\_\_ about the exercise. It involves individual departments being \_\_\_\_29\_\_\_\_ for their ability to measure up to specified criteria. The purpose of the exercise is to increase \_\_\_\_30\_\_\_\_ output, yet the author considers the exercise to be counterproductive.

To meet the \_\_\_\_31\_\_\_\_ criteria, some departments will force their staff to \_\_\_\_32\_\_\_\_ anything.

Others may reallocate funds toward subjects that are less \_\_\_\_33\_\_\_\_ than laboratory science.

One further approach is to \_\_\_\_34\_\_\_\_ existing staff.

*Question 35-40*

*Do the following statements agree with the views of the writer in Reading Passage 3? In boxes 35-40 on your answer sheet write.*

- YES                      if the statement agrees with the writer  
 NO                        if the statement does not agree with the writer  
 NOT GIVEN          if there is no information about this in the passage

35. The current management of research projects is unlikely to produce good science.

36. Good researchers are usually good teachers.

37. People in industry seem to understand the long-term nature of research.

39. We can hope for more exciting research under the influence of industry.

40. Managers/ management may be the only winners under the new system.



## Academic Writing Practice Test 5

### Writing task 1 (30 points)

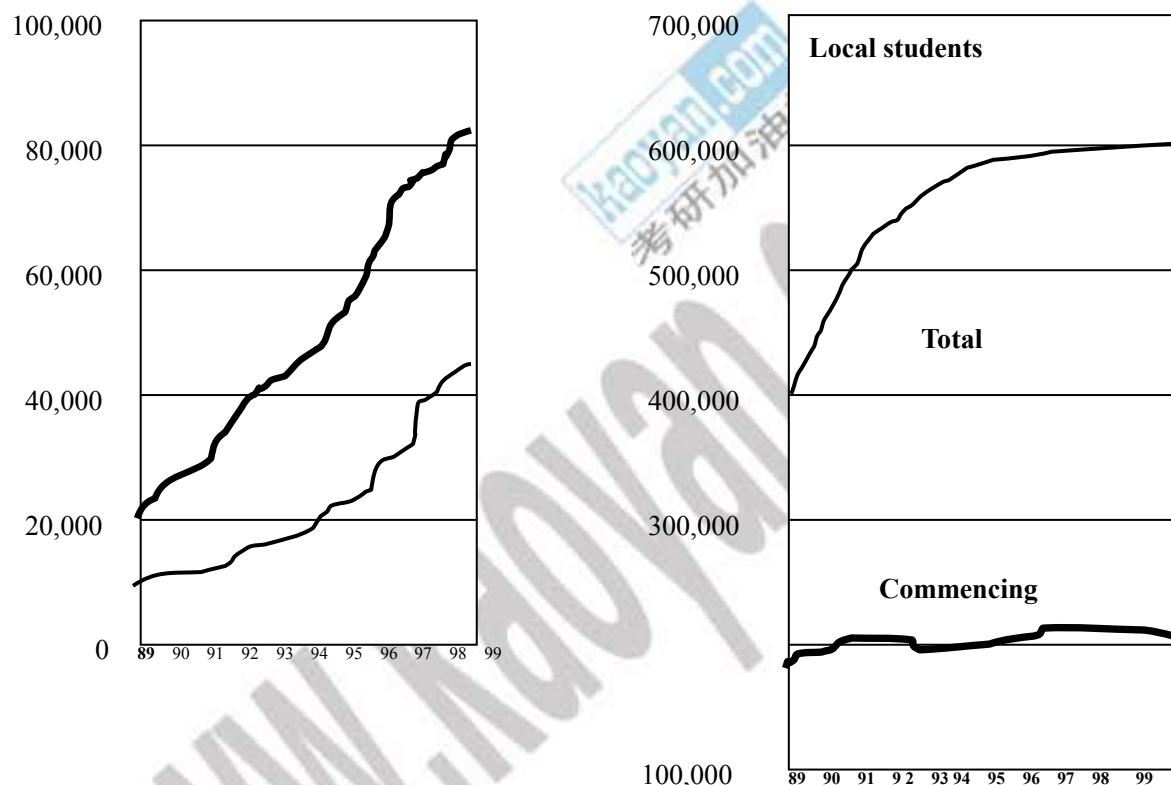
You should spend about 20 minutes on this task.

*The graphs below show the enrolments of overseas students and local students in Australian universities between 1989 and 1999.*

*Write a report for a university lecturer describing the information shown below.*

You should write at least 150 words.

**Enrolments 1989-1999**



### Writing Task 2 (20 points)

You should spend about 40 minutes on this task.

Present a written argument or case to an educated reader with no specialist knowledge of the following topic.

*Some people say that universities should be concerned with educating people so that they will have wide general knowledge and be able to consider important matters from an informed viewpoint. Other people say that universities should simply train students to do the jobs required by society, and not concern themselves with broader issues.*

*What do you think?*

You should write at least 250 words.

You should use your own ideas, knowledge and experience and support your arguments with examples and relevant evidence.

### Section Four: Translation (30 points)

Directions: read the sentences carefully and translate them into English. The translation must be

written clearly on the Answer Sheet.

1. 在未来三年内，一个由政府支持的研究工作者小组将致力于寻找出最好的办法，以使汽车能足以精明到能把它们的司机控制在一定的时速内。
2. 受到交通部的财政资助，这个小组将作出汇报，它们将采用哪些技术措施来强化速度限制。它们还要进行调查这些强制性的措施可能对开车人行为方面造成什么样的影响。
3. 现在很多已经安装在汽车上的交通制导系统都使用数字交通图，这些路线交通图把这些路线的速度限制设成密码印制了进去。
4. 一些特殊的速度限制，如警察根据尘雾和冰雪情况提出的特定速限，可以通过地球定点卫星发出的信号来当即给出。
5. 这一研究项目说明强制服从速度限制的汽车驾驶人员往往会在车辆交汇时乘机发泄他们的沮丧情绪。
6. 目前，这一天灾的后果即将由人类一项大胆的措施予以消除，那就是挖掘地球上一条最长的水下通道——海峡隧道。
7. 届时，两队全体员工将痛饮香槟和威士忌酒，庆贺者条从连绵不断的坚硬的灰蓝色白垩层海底中开凿出来的长达 23 英里的隧道的竣工。
8. 它的资金来源于 200 多家银行和 50 万户股东，建设费用每天超过 5 百万美元。
9. 这项工程的力大无比的勇士是那些隧道钻机，既庞大的钻凿装置，重达 1,300 吨，其足以自豪的旋转叶片宽达 28 英尺。它们的钨钢齿每小时能“啃掉”15 英尺土方。
10. 但毫无疑问，等到 1993 年隧道开放，第一列火车只用 26 分钟疾驰而过时，这两国人民时会克服他们之间的争吵的。