

Listening Cloze Test 6

متن را گوش کنید و سعی کنید جای خالی ها را پر کنید. برای سادگی بیشتر، تعداد کلمات جای خالی با فاصله مشخص شده است. هر چند بار که خواستید می توانید pause کرده و دوباره گوش کنید. وقتی کلمات را نوشتید بررسی کنید که آیا این کلمات از نظر گرامری و معنایی به جای خالی ها می خورند یا نه.

I'm going to be talking to you today about nuclear fusion. Before I proceed further, I would like to apologise on behalf of some of our newspapers for the sensationalist and hopelessly **1) _____** that have been published on the subject over the years. I must confess that my own interest in the subject was actually stimulated by an article published more than **2) _____** in a popular Sunday tabloid with the impressive title: 'Power from the Sea'. Today, most people would probably interpret such a title as an introduction to a discussion on the latest developments in **3) _____** such as wave technology or generating electricity from **4) _____**, but back then little, if any, progress had been made in these fields since the invention of the **5) _____**.

As I recall, following coverage of the opening of the world's first commercial **6) _____**, more than 50 years ago now, at Calder Hall in 1956, the article promised that we would have limitless, **7) _____**, electricity within ten years. It claimed that we could do this using an isotope of water, deuterium, from the sea. This would be used in reactors to combine simple molecules of hydrogen to form helium, releasing energy in the process. Of course, this is different from the process of nuclear fission, which today's nuclear reactors use.

I wouldn't like to say that the article I read as a boy was totally inaccurate. It's true that the concept of producing energy from nuclear fusion, essentially **8) _____** by which our sun and other stars produce energy, depends on fusing atoms of hydrogen, but the time-scale suggested was hopelessly wrong. To this day, despite some very **9) _____** from scientists who should have known better, we have not been able to produce energy from nuclear fusion in a controllable way.

Let me make clear what I mean by this statement, before some journalist in the audience gets hold of the wrong end of the stick! Yes, we have been able to fuse hydrogen atoms to produce helium and **10) _____**, but the balance account has always been negative - we've always had to put more energy into the reaction than we've ever succeeded in getting out. We know the theory works, but we still do not know if we can get fusion to work for us and solve the problem of our energy needs.

Here, I will briefly explain these problems before going on to give you a summary of the **11) _____** being tested to overcome them. First of all, we have to try to understand the incredible physical conditions that exist inside a natural nuclear fusion reactor such as the sun. To start with, we have to create temperatures never experienced on our planet. Indeed, if we had experienced the temperatures required, then our planet would never have formed. We have to generate temperatures of at least 100 million degrees Celsius in a carefully-controlled environment before we can even hope to produce a fusion reaction. The problems are immense, **12) _____**. Many of you will know that you can put your hand into a very hot oven and not get burnt, provided you do not touch any of the surfaces. I won't go into the reasons for this phenomenon here, but we are applying roughly the same principles in designs for fusion reactors. I think I can promise you that the heat will be confined to a very small area!

The other major problem we have to find a solution to is pressure. The pressures in a massive body like the sun **13) _____**, and this is what brings the hydrogen atoms into **14) _____** that they fuse into helium. We may not have to **15) _____** in a fusion reactor, but even so it is a huge technological problem.

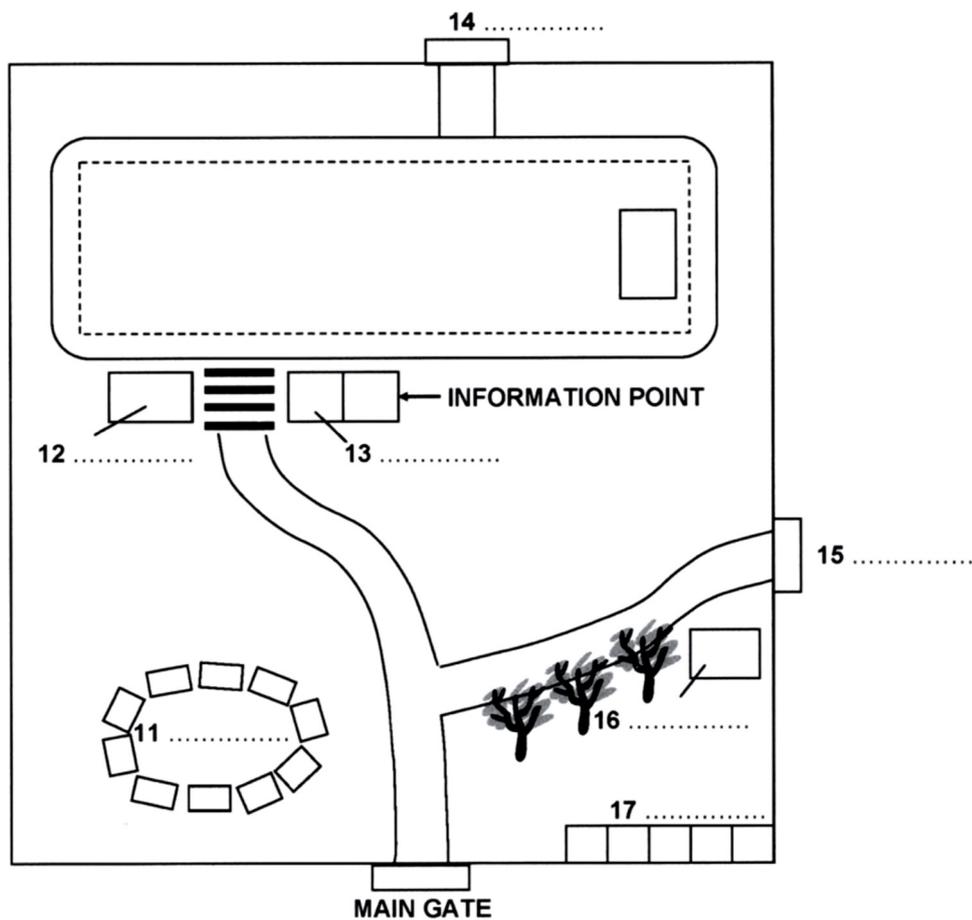
What, then, makes me hopeful about the future of energy from nuclear fusion? Perhaps surprisingly, it is **16)** _____. We can now use lasers to control the nuclear fuel pellets so that they **17)** _____ inside the reactor, without touching the sides. Remember that these pellets are quite small, and because they contain atoms of deuterium and tritium, the two isotopic forms of hydrogen that can be used in these reactions, they are quite light. The lasers will also compress the fuel pellet to raise the pressure to that required to initiate the fusion reaction.

Another, far more powerful, laser will be used to heat the fuel pellet to the temperature required. This laser, if you like, will act as the **18)** _____. Once started, it is hoped that the reaction will produce enough energy to maintain itself and also that it will produce a surplus in the form of heat that can be used to produce the **19)** _____ in order to generate the electricity the world needs. To give you some idea of how much energy we can produce, it has been calculated that just one kilogram of fusion fuel is capable of producing the same amount of energy as **20)** _____ of fossil fuel. I think you would agree that such an objective is worth working towards. I believe, and I am not alone in this, that nuclear fusion could supply the world's energy needs for centuries to come.

Listening 18

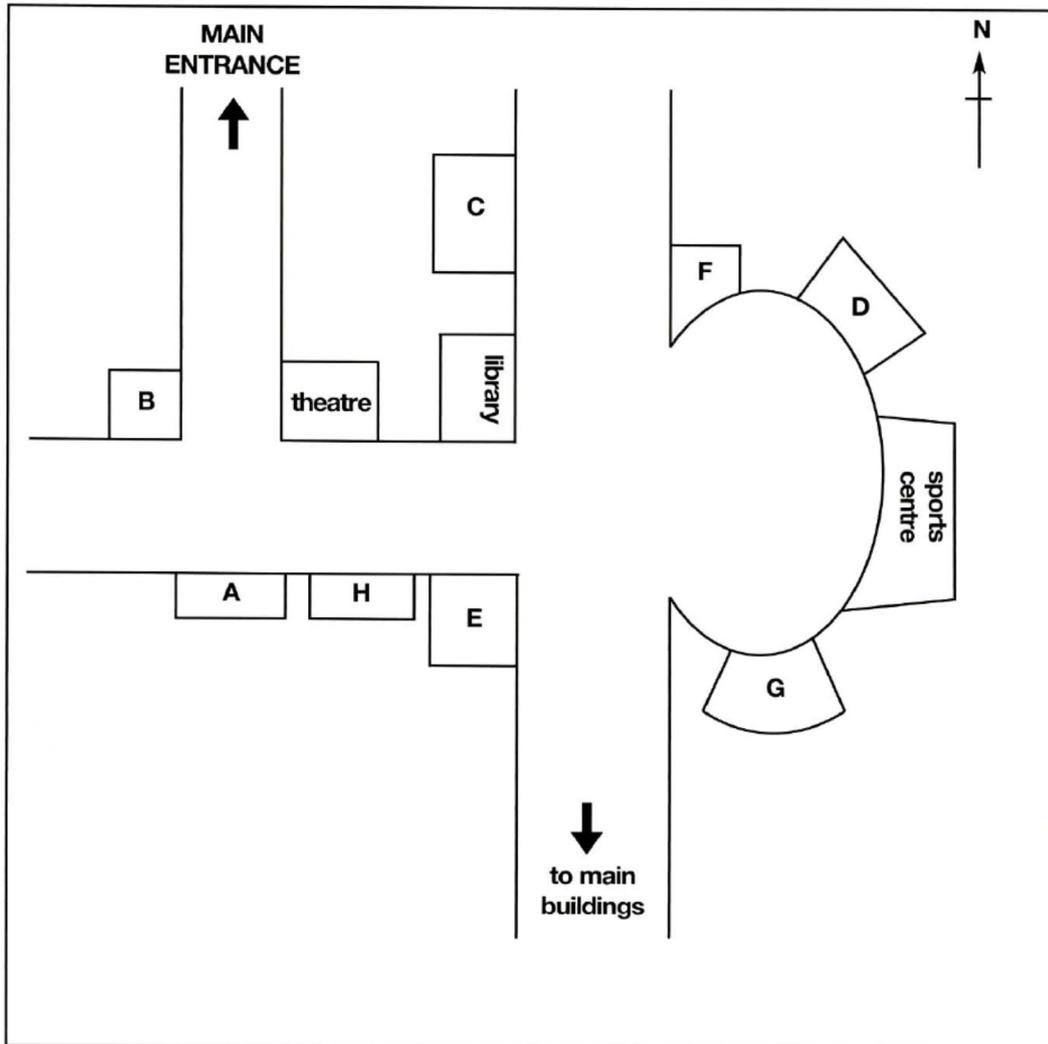
Complete the plan of the ROCK FESTIVAL SITE below. Choose A-I.

- A art exhibition
- B band entrance
- C car park
- D craft fair
- E exhibitors' entrance
- F fringe stage
- G lock-up garages
- H main stage
- I restaurant



Listening 19

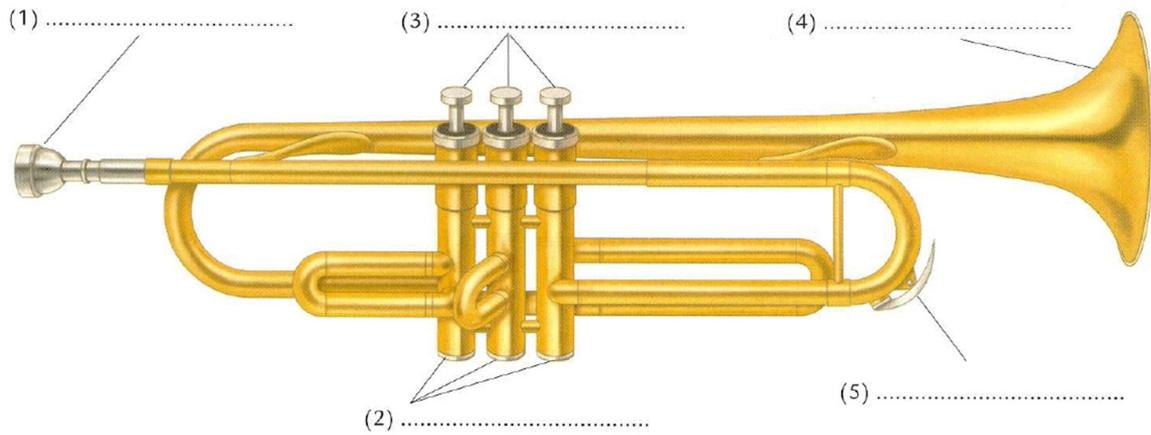
Label the map below. Write the correct letter A-G.



- 16 Brown Hall
- 17 Blake Residence
- 18 Queens Building
- 19 Parkway Flats
- 20 Temple Rise

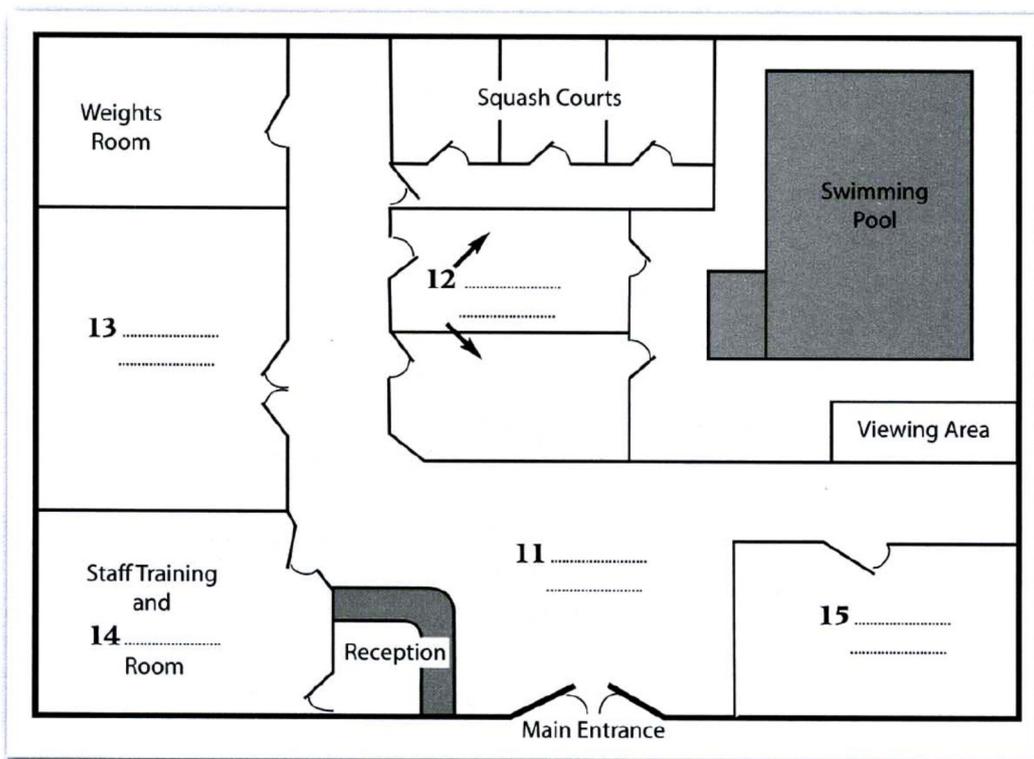
Listening 20

Complete the diagram below. Write **NO MORE THAN THREE WORDS** for each answer.



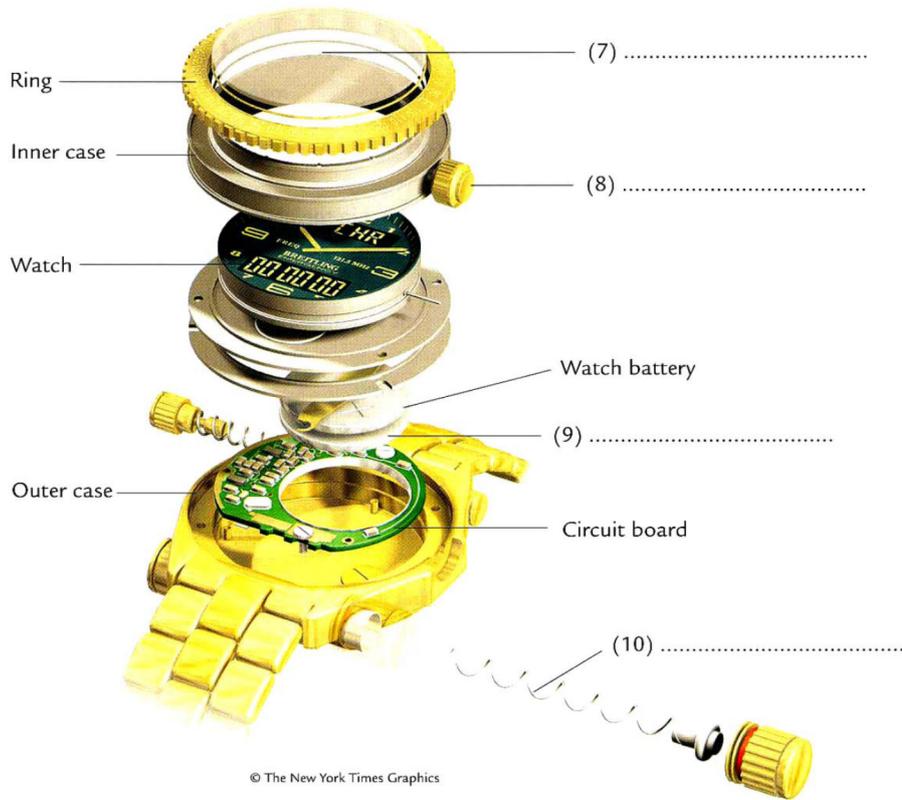
Listening 21

Complete the diagram below. Write **NO MORE THAN TWO WORDS** for each answer.



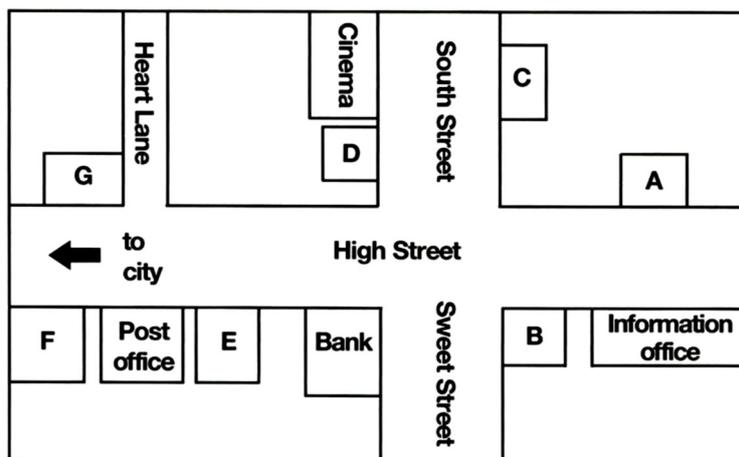
Listening 22

Complete the diagram below. Write **NO MORE THAN THREE WORDS** for each answer.



Listening 23

Label the map below. Write the correct letter A-G.

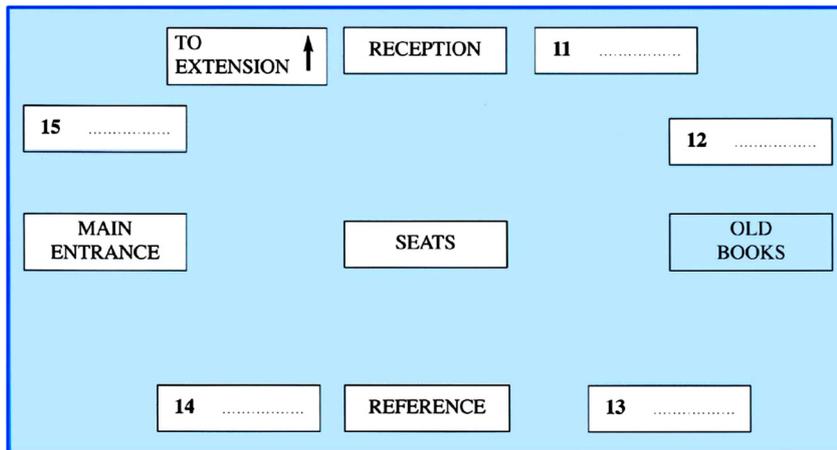


- | | |
|------------------------|----------------------------------|
| 16 bus stop | 19 transport ticket office |
| 17 train station | 20 taxi rank |
| 18 tube entrance | |

Listening 24

Label the map below. Write the correct letter A-G.

- A Arts section
- B Computers
- C Languages section
- D Law
- E Magazines
- F Science
- G study desks



Listening – Spelling and Pronunciation 6

به کلماتی که می شنوید خوب گوش کنید و سعی کنید آنها را بنویسید. در این تمرین املائی کلمات بسیار اهمیت دارد.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____