

ЗАДАНИЯ ДЛЯ ОБУЧАЮЩИХСЯ

ВРЕМЯ ВЫПОЛНЕНИЯ ЗАДАНИЙ – 120 МИН.

МАКСИМАЛЬНОЕ КОЛИЧЕСТВО БАЛЛОВ - 85

LISTENING

Time 20 minutes

Task 1. You will hear five short extracts in which people are talking about listening to music. For questions 1-5, choose from the list (A-H) what each speaker says about listening to music. Use the letters only once. There are three extra letters which you do not need to use.

- | | |
|--------------|--|
| 1. Speaker 1 | A It helps me to focus at work. |
| 2. Speaker 2 | B It brings back memories. |
| 3. Speaker 3 | C It is a good way to relax. |
| 4. Speaker 4 | D It provides me with inspiration. |
| 5. Speaker 5 | E It is a requirement of my job. |
| | F It makes me feel more energetic. |
| | G It makes time seem to pass more quickly. |
| | H It is something I can sit and enjoy with other people. |

Task 2. You will hear an expert giving a lecture on Product Life Cycles. Listen and fill in gaps 6-15.

Complete the sentences below. Write ONE WORD for each answer.

Recycling is principally the responsibility of 6 _____.

The second stage in the cycle relates to acquiring 7 _____ in general.

Harvesting includes cutting down trees and 8 _____.

Chemical processes create 9 _____.

A significant proportion of the 10 _____ stage is unnecessary.

Complete the flowchart. Write ONE WORD OR A NUMBER for each answer.

Packaging

As well as maintaining freshness and hygiene, packaging is used to provide 11 _____.

Distribution

Transportation and energy play a big part.

Product use

We should avoid products intended for single **12** _____ only.

Disposal

Even in a landfill site, a product has a **13** _____.

Reuse and recycle

Paper can be recycled into cereal **14** _____.

The recycling of newspapers can save **15** _____ trees.

Transfer your answers to the answer sheet!

READING

Time 40 minutes

Task 1. You are going to read a newspaper article about a German boy. Six sentences have been removed from the article. Choose from the sentences A-G the one which fits each gap (1-6). There is one extra sentence which you do not need to use.

The tree planter

A boy who started planting trees in Germany has become an international hero.

At the age of nine, Felix Finkbeiner set up an organisation called 'Plant for the Planet', whose aim is to plant one million trees in each country of the world. It now exists in more than 130 countries worldwide and there is a Children's Coordination Council made up of young people who organise plantings and give lectures.

It all started when Felix had to give a presentation at school about climate change. He looked for information on the Internet and was inspired by a woman who had planted 30 million trees in Africa. Her work made him realise how much could be achieved starting from nothing. **1** _____. The talk was so well received that it was suggested he talked to other schools. He started getting calls from students who wanted to join in and others offered help in building a website. The first tree was planted and 'Plant for the Planet' was launched.

There was a lot to do so Felix asked his parents if he could employ someone to help if he could find the money to pay them. He contacted Toyota, the large car manufacturers, asking for support. **2** _____. Once he had received the money, Felix was able to deliver his climate-change talk to more and more people.

Six months after the planting of the first tree, Felix gave a talk to a local club of business people. In the audience was the Chief Executive Officer of Toyota Germany, who wanted to hear what his money was being spent on. **3** _____. This was to talk to that year's annual meeting of German Toyota car dealers. The participants were so interested in the idea that they donated €11,000 to 'Plant for the Planet'. Suddenly the project spread nationally.

Felix invited newspaper and TV journalists to a press conference to announce that 50,000 trees had been planted in Germany. His parents warned him that very few journalists might come. **4** _____. As a result, Felix and his family realised what a big success this could all be. He has since given hundreds of speeches, encouraging children around the world to plant trees, think about climate change and to act responsibly.

Felix's parents were always determined, however, that their child's feet would stay firmly on the ground. They insist that their family home was very ordinary and that their aim was never to make Felix and his sisters special; that it all came from Felix himself rather than from them. **5** _____. This was because of a concern about how it would all affect his schoolwork. But Felix came through it all without any problems.

There is actually nothing new in the facts and figures about climate change which Felix put forward. When he is talking about other topics he sounds like any other young person. **6** _____. He turns into the most confident public speaker. But whatever he does in the rest of his life, he has already achieved more than most of us ever do.

A But once he gets started on climate issues, a change comes over him.

B Indeed, his ambitions continued to expand.

C It was unusual for them to receive such a request but they agreed to help.

D It gave him the idea that children could do something similar.

E In fact, they were always likely to hold him back rather than push him forward.

F But it turned out to be packed and his picture was on TV screens and in newspapers around the country.

G So impressed was he that he gave Felix an unusual invitation for someone of his age.

Task 2. You are going to read an article about people's attitudes humanlike robots. Answer questions 7-19 after reading the article.

Human distrust of robots that look like us

A Humans have developed to relate emotionally to inanimate objects, which is odd when you think about it. Children play with dolls and toy soldiers as if they were people. Adults talk to their cars. As

long as they are robotlike and 'mechanical', we are comfortable around them, and can display affection (as for an old car). But when it comes to human-like robots, something different happens. As they become more human-like, our affection disappears and we begin to feel less comfortable. Our liking turns to revulsion. Androids that look too human freak us out.

B This strange phenomenon is called the 'uncanny valley', a term coined by robotics professor Masahiro Mori. But the effect has particularly confused and puzzled engineers and scientists who design robots and interactive software. The term comes from the dip in a graph with two parameters: affection and human likeness. As human likeness increases, so does our affection. As soon as the resemblance becomes too great, though, affection drops below zero - hence the 'valley'. The effect was highlighted by studies of machines such as the Geminoid F robot, created by Professor Hiroshi Ishiguro of Kyoto University. His robots have human-like bodies but their movements, although impressively humanlike, show something of the mechanism beneath their 'skin' and people didn't respond well to them. Making robots look human is a major goal of robotic engineers and scientific writers have long dreamt of androids, so the 'uncanny valley' could potentially spell the end to their dream.

C Scientists have tried to find the cause of the 'uncanny valley'. One of the most interesting insights has come from an international team led by Ayse Pinar Saygin of the University of California, San Diego (UCSD). Saygin and her team conducted an experiment scanning the brains of twenty subjects aged 20-36 while they were looking at three different things: a human, a mechanical-looking robot, and a human-like robot. Interpreting the results from the fMRI scans, the researchers suggested that the cause for the valley is a conflict in perception between two processes in the brain: that of recognising a human-like face and that of recognising different kinds of movement.

D These processes, or pathways, meet in an area of the brain called the parietal cortex. There, information from the visual cortex relating to bodily movement is integrated with information from the motor cortex that contains mirror neurons, the brain cells that register that what we are seeing is 'one of us'. Alarm bells go off in the brain when there is a conflict between the human-like features of the robot and its inhuman movement. This mismatch creates a feeling of revulsion similar to what we feel when looking at a movie zombie. We instinctively expect human-like creatures to have human-like movements. As Saygin says: 'The brain ... look(s) for its expectations to be met - for appearance and motion to (match).'

E The discomfort we feel is not logical and has its roots in our evolutionary past. Researchers believe that the modern mind came into being between 60,000 and 40,000 years ago when pathways in the brain became connected, probably thanks to the evolution of language. The way we understand our

world then emerged from these new connections. Robotic evolution challenges this mental 'software' of ours. The 'uncanny valley' seems to represent the point at which logic stops and our instincts start to react.

F Despite such studies, many (e.g. MacDorman et al) believe that cultural factors also contribute to the effect, and researchers have pointed to the fact that young people who are used to technology seem less affected by the effect. Furthermore, the 'uncanny valley' effect has been observed in our response to still photographs of humans that have been altered slightly with Photoshop software. Even as far back as the 19th century, the great naturalist Charles Darwin noticed that we react most adversely to species with eyes, nose and mouth arranged like our own. The phenomenon may therefore be more complex than Saygin's research suggests.

G So is this the end of robots as we have dreamt them? Are our brains unable to cope with mechanical doubles? Perhaps not. It may just be a temporary phenomenon. The positive response to recent androids shows that once the design and movements of robots become even more human-like, the affection graph rises again from the 'uncanny valley'; acceptability returns steeply to normal. We seem to be at ease with androids that have human bodies and human movements, even if we know they are not human. As we cross the 'uncanny valley' another basic instinct comes into play: empathy. It is possible to mix human and mechanical characteristics without getting trapped in 'uncanny valley'. Eventually, human-like robots will make us love them, too.

Some of the paragraphs in the text contain the following information (7-10). Choose the correct paragraph (A-G) for each piece of information (7-10)

7 a belief that we may have strong, positive feelings for robots in the future

8 a description of how the human brain developed over time

9 a contrast between our reaction to various objects and our reaction to robots

10 an example of robots which people have a *very* negative reaction to

Match each statement 11 -13 to the correct scientist, A-E.

Statements

11 We feel disgusted when things don't *move* as we think they will.

12 We feel visual disgust when animal faces appear similar to human faces

13 The causes of the 'Uncanny Valley' effect are not just biological.

List of scientists

A MacDorman

B Professor Hiroshi Ishiguro

C Charles Darwin

D Ayse Pinar Saygin

E Masahiro Mori

Complete the sentences below. Choose ONE WORD ONLY from the text for each answer.

14 The 'uncanny valley' concerns the relationship between how much a robot looks like a human and the amount of _____ people feel.

15 Scientists think that the development of _____ played an important part in the development of the modern mind.

16 The 'uncanny valley' reaction is also seen when people look at _____ which have been changed a little.

Mark the statements 17- 20 T (if the statement agrees with the views of the author), F (if the statement contradicts the views of the author) or NS (if it is impossible to say what the author thinks about this)

17 It is surprising that people can have strong emotional feelings for objects.

18 The term 'uncanny valley' is very difficult for many people to understand.

19 The research in California adequately explains the 'uncanny valley' effect.

20 Researchers will probably learn to overcome the 'uncanny valley' effect.

Transfer your answers to the answer sheet!

USE OF ENGLISH

Time 20 minutes

Task 1. For questions 1-17, read a prehistoric monument on Salisbury Plain in Wiltshire, England. Use the word given in capitals at the end of some of the lines to form a word that fits in the gap in the same line.

The first time you see the great stone circle rising out of Salisbury Plain is an **1** FORGET
_____ moment. The place has been special for at least 5,000
years: from the **2** _____ of human history. Nobody knows all the BEGIN
secrets of this **3** _____ place, but, as you walk around Stonehenge, you MYSTERY
can look for some of the clues. Stonehenge was built by
4 _____. The seasons were life and death for them. FARM
But why build such a **5** _____ structure simply to predict the turning MASS
point of the year
when a simple **6** _____ of posts would have done the same thing? ARRANGE

Obviously, this was a special event for them and many people gathered to celebrate it in some way. We know from human 7 _____ elsewhere BEHAVE that the sun is often worshipped as a god - it must be right to call Stonehenge a temple.

There is very little 8 _____ for the sacrifice of animals or people EVIDENT although 9 _____ revealed the skeleton of a child whose skull was EXCAVATE split open.

The 10 _____ photograph of Stonehenge in the snow reveals many EXCEPT important features. You can see fragments of the earliest 11 _____ CONSTRUCT before 3000 BC, the circle bank and ditch. Also 12 _____ are the VISION station stones, but their purpose is still 13 _____. If you look CARE 14 _____, you will see a collapsed circle of the famous bluestones, KNOW the remnants of an earlier monument on the same site.

What special 15 _____ the bluestones had and why the earliest SIGNIFICANT 16 _____ of these islands expended so much effort on this special INHABIT site over more than 1000 years are secrets buried with the 17 _____ dead COUNT whose burial mounds cluster around Stonehenge.

Task 2. For questions 18-30, complete two texts by putting the verbs in brackets into the correct tense.

instein once said, «If I 18 _____ (know) the destruction I would cause, I 19 _____ (become) a watch-maker». If we 20 _____ (continue) to use nuclear energy as a means of defence, we 21 _____ (make) our planet uninhabitable. If the public 22 _____ (be) more aware of the dangers, they 23 _____ (demand) the right to live in a safer society. If the Cold War had developed into World War III, the human race 24 _____ (wiped out) forever.

There is a room in the Victoria and Albert Museum called the Raphael Gallery. That is where seven of the Cartoons that Raphael 25 _____ (create) for a great cycle of tapestries called The Acts of the Apostles 26 _____ (hang) for the past half century. Those tapestries 27 _____ (commission) from Raphael by the Medici Pope Leo X, in 1515. They 28 _____ first (bring) to the V&A in 1865. Before that, they 29 _____ (be) on display at Hampton Court. They 30 _____ (be) in this country since early in the 17th century and on display at the V&A for almost 150 years.

Transfer your answers to the answer sheet!

WRITING

Time 40 minutes

Write an answer to one of the following questions. Write your answer in 150-180 words in an appropriate style.

1. You have been invited to write a short **story** for a magazine. The story must either begin or end with the words: «**He was a most peculiar person**».

Write your **story**.

2. Your pen friend wants to throw a party for her twelve-year-old sister's birthday, but she is not sure what to do. Write a **letter** giving her advice about where to have the party and what sort of activities they could do.

Write your **letter**.

Transfer your answers to the answer sheet!