



ОЛИМПИАДА РГУУ ДЛЯ ШКОЛЬНИКОВ ПО ИНОСТРАННОМУ ЯЗЫКУ

АНГЛИЙСКИЙ ЯЗЫК

2025/2026 учебный год

Заключительный этап

11 класс

Вариант № 26-ОШ-2-11 Английский язык-3

ЗАДАНИЯ

На выполнение олимпиадных заданий отводится 150 минут. Вам предлагается выполнить четыре категории заданий.

При выполнении заданий внимательно читайте инструкцию к каждому заданию.

Максимальное количество баллов за ответы:

- Часть 1. (Reading) - 30 баллов;
- Часть 2. (Writing) - 30 баллов;
- Часть 3. (Use of English) - 20 баллов;
- Часть 4. (Cultural Studies) - 20 баллов.

Part 1. Reading

Tasks 001-010. (10 баллов, по 1 баллу за каждый правильно расположенный абзац текста)

You are an editor of a magazine. You have come across an interesting article but some parts of the article have been mixed up. Use the headline and the initial paragraph of the article and put the parts to the title and in the right order so that you should receive the original article.

Article 1.

A NEW WIRELESS BRAIN IMPLANT HELPS PARALYZED MONKEYS WALK. HUMANS COULD BE NEXT

The two paralysis patients were up and walking on treadmills in no time. This impressive **feat** was made possible by an unprecedented new surgery, in which researchers implanted wireless devices in the patients' brains that recorded their brain activity. The technology allowed the brain to communicate with the legs – **bypassing** the broken spinal cord pathways – so that the patient could once again regain control. These patients, it turns out, were monkeys. But this small step for monkeys could lead to a giant leap for millions of paralyzed humans: The same equipment has already been approved for use in humans, and clinical studies are underway in

Switzerland to test the therapeutic effectiveness of the spinal cord stimulation method in humans (minus the brain implant).

A) The technique of “hacking” the brain’s neural networks has produced remarkable feats, such as helping to create touch-sensitive prosthetics that allow wearers to perform delicate tasks like cracking an egg. But many of these efforts use cable connections between the brain and recording devices, meaning the subjects aren't able to move freely. “Neural control of hand and arm movements was investigated in great detail, while less focus has been given to the neuronal control of leg movements, which required animals to move freely and naturally,” Milekovic says. Christian Ethier, a neuroscientist at Quebec’s Université Laval who was not involved in the research, called the work a “major step forward in the development of neuroprosthetic systems.” He added: “I believe this demonstration is going to accelerate the translation of invasive brain-computer interfaces toward human applications”. Earlier this year, brain-controlled muscle stimulation enabled a quadriplegic person **to grasp** items, among other practical hand skills, after the same feat was achieved in monkeys in 2012.

B) Jackson concludes from this history that “it’s not unreasonable to speculate that we could see the first clinical demonstrations of interfaces between the brain and spinal cord by the end of the decade.” The Blackrock electrode array implanted in the monkeys’ brains has been used for 12 years to successfully record brain activity in the BrainGate clinical trials; numerous studies have demonstrated that this signal can accurately control complex neuroprosthetic devices. “While it does require surgery, the array is an order of magnitude smaller than the surgically implanted deep brain stimulators already used by more than 130,000 people with Parkinson's disease or other movement disorders,” Milekovic adds. While this test was limited to just a few phases of brain activity related to walking gait, Ethier suggests that it could potentially enable a greater range of movement in the future. “Using these same brain implants, it is possible to decode movement **intent** in a lot more detail, similar to what we have done to restore grasp function. ... I expect that future developments will go beyond and perhaps include other abilities like compensating for **obstacles and adjusting** walking speed.”

C) Now that researchers have a proof-of-concept, this kind of wireless neurotechnology could change the future of paralysis recovery. Instead of trying to repair the damaged spinal cord pathways that usually deliver brain signals to the limbs, scientists tried an innovative approach **to reverse** paralysis. The implant worked as a bridge between the brain and the legs, directing leg motion and stimulating muscle movement in real time, says Tomislav Milekovic, a researcher at Switzerland’s École Polytechnique Fédérale de Lausanne (EPFL). Milekovic and co-authors report their findings in a new paper published Wednesday in the journal *Nature*. When the brain’s neural network processes information, it produces distinctive signals – which scientists have learned to interpret. Those that drive walking in primates originate in the dime-sized region known as the motor cortex. In a healthy individual, the signals travel down the spinal cord to the lumbar region, where they direct the activation of leg muscles to enable walking.

If a traumatic injury severs this connection, a subject is paralyzed. Although the brain is still able to produce the proper signals, and the leg’s muscle-activating neural networks are **intact**, those signals never reach the legs. The researchers managed to reestablish the connection through real-time, wireless technology – an unprecedented feat.

D) Ethier notes another intriguing possibility: The wireless system might actually help the body heal itself. “By re-synchronizing the activity in the brain and spinal motor centers, they could promote what is called ‘activity-dependent neuroplasticity,’ and consolidate any spared connections linking the brain to the muscles,” he says. “This could have long-term therapeutic

effects and promote the natural recovery of function beyond what is possible with conventional rehabilitation therapies.”

This phenomenon is not well understood, and the possibility remains speculative at this point, he stresses. But the **tangible** achievement this research demonstrates – helping the paralyzed walk again with their brains – is already a huge step.

E) How does the system work? The team’s artificial interface begins with an array of almost 100 electrodes implanted in the brain’s motor cortex. It’s connected to a recording device that measures the spiking of electrical activities in the brain that control leg movements. The device sends these signals to a computer that decodes and translates these instructions to another array of electrodes implanted in the lower spinal cord, below the injury. When the second group of electrodes receives the instructions, it activates the appropriate muscle groups in the legs.

Article 2.

ENHANCED BRAIN IMPLANT TRANSLATES STROKE SURVIVOR’S THOUGHTS INTO NEARLY INSTANT SPEECH USING ARTIFICIAL INTELLIGENCE

The system harnesses technology similar to that of devices like Alexa and Siri, according to the researchers, and improves on a previous model. A brain implant that converts neuron activity into audible words has given a stroke survivor with severe paralysis almost instantaneous speech. Ann Johnson became paralyzed and lost the ability to speak after suffering a stroke in 2005, when she was 30 years old. Eighteen years later, she consented to being surgically fitted with an experimental, thin, brain-reading implant that connects to a computer, officially called a brain-computer interface (BCI).

A) Neuroprostheses are devices that can aid or replace lost bodily functions by connecting to the nervous system. “Using a similar type of algorithm, we found that we could decode neural data and, for the first time, enable near-synchronous voice streaming,” he adds. “The result is more naturalistic, fluent speech synthesis.” Previously, the research team had worked with Johnson to generate speech using an automated voice and digital avatar. That system, which had a delay of about eight seconds to decode her brain patterns, would speak full sentences at once. Older BCIs like that, which generate speech only after processing an entire sentence, are similar to a conversation via text, says Christian Herff, a computational neuroscientist at Maastricht University in the Netherlands who wasn’t involved in the study, to *Nature News*’ Miryam Naddaf. “I write a sentence, you write a sentence, and you need some time to write a sentence again,” he says. “It just doesn’t flow like a normal conversation.”

B) Researchers placed the implant on her motor cortex, the part of the brain that controls physical movement, and it tracked her brain waves as she thought the words she wanted to say. As detailed in a study published Monday in the journal *Nature Neuroscience*, researchers used advances in artificial intelligence (A.I.) to improve the device’s ability to quickly translate that brain activity into synthetic speech – now, it’s almost instantaneous. The technology “brings the same rapid speech decoding capacity of devices like Alexa and Siri to neuroprostheses,” study co-author Gopala Anumanchipalli, a computer scientist at the University of California, Berkeley, says in a statement.

C) The A.I. was also trained on recordings of Johnson’s voice before her stroke to make its speech sound more like her. The system performed well when the team tested it with words outside of the training data, demonstrating that it is “indeed learning the building

blocks of sound or voice,” study co-author Kaylo Littlejohn, a researcher at UC Berkeley’s Department of Electrical Engineering and Computer Sciences, says in the statement. Despite clear improvements from previous trials – and a huge jump in efficiency over Johnson’s current communication system – the enhanced BCI was still not quite as natural as regular human speech. It produced between 47 and 90 words per minute, while humans usually speak around 160 words per minute, according to *Nature News*. “This is where we are right now,” Edward Chang, a study co-author and neurosurgeon at UC San Francisco, says to the publication. “But you can imagine, with more sensors, with more precision and with enhanced signal processing, those things are only going to change and get better.” The groundbreaking brain-computer interface developed for Ann Johnson signifies a monumental leap at the intersection of neuroscience and artificial intelligence.

D) It transcends previous technological limitations, synthetic speech through a sophisticated streaming decoder, effectively bridging the gap between silent intention and audible expression. While current speeds have not yet matched natural human conversation, the foundational architecture of this system—rooted in a deep, personalized understanding of neural patterns and individual identity – provides a robust and scalable platform for future advancement. The research compellingly demonstrates that with continued refinement in sensor precision, signal processing, and adaptive AI, such neuroprostheses hold the transformative potential to restore not only the function of speech but also the profoundly human capacity for connected, fluent, and identity-affirming communication for countless individuals locked in by paralysis.

E) Now, the enhanced experimental device can continuously identify words from brain activity and translate them into speech within about three seconds, per *Nature News*. “It’s not waiting for a sentence to finish,” Anumanchipalli says to the Associated Press’ Laura Ungar. “It’s processing it on the fly.” To train the artificial intelligence, researchers asked Johnson to mouth phrases that appeared on a screen from a list of 1,024 words, such as, “hey, how are you?” The system learned to interpret the resulting brain activity in continuous, 80-millisecond **increments**, which Anumanchipalli calls a “streaming approach,” per the AP. It “converts her intent to speak into fluent sentences,” he adds.

Tasks 011-020. (10 баллов, по 1 баллу за правильный ответ на каждый вопрос).

Reread the two assembled texts. Choose the meaning the words and phrases in bold have in one of the texts.

011. The underlined word “**feat**” means the same as:

- A. features
- B. attempts
- C. failures
- D. achievements

012. The underlined word “**bypassing**” means the same as:

- A. traversing
- B. circumventing
- C. repairing
- D. overriding

013. The underlined word “to grasp” means the same as:

- A. to release
- B. to seize
- C. to ignore
- D. to describe

014. The underlined word “intent” means the same as:

- A. attraction
- B. reluctance
- C. reflex
- D. desire

015. The underlined words “obstacles and adjusting” mean the same as:

- A. smooth progress
- B. hurdles and adapting
- C. help and staying
- D. paths and ignoring

016. The underlined word “to reverse” means the same as:

- A. to worsen
- B. to study
- C. to undo
- D. to accept

017. The underlined word “intact” means the same as:

- A. inviolate
- B. firm
- C. impaired
- D. injured

018. The underlined word “tangible” means the same as:

- A. elusive
- B. noticeable
- C. perceptible
- D. evasive

019. The underlined phrase “instantaneous speech” means the same as:

- A. immediate utterance
- B. delayed response
- C. non-verbal communication
- D. hesitant utterance

020. The underlined word “increments” means the same as:

- A. modules
- B. sequences
- C. segments
- D. pauses

Tasks 021-030. (10 баллов, по 1 баллу за правильный ответ на каждый вопрос)

Here is a summary of the article “A new wireless brain implant helps paralyzed monkeys walk. Humans could be next” lived to regret his invention”. However, it contains some vocabulary, grammar and factual errors. Decide which of the sentences contain an error if any. There can be more than 1 error in a sentence. Some sentences do not have errors at all. If there are no errors in the sentence choose “0”.

021. Scientists have created a proof-of-concept in monkeys that uses a fully wired system to decode brain activity for walking, a method already approved and proven effective in human clinical trials.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

022. The technology works by planting electrodes in the brain’s sensory cortex, which sends signals to a second set of electrodes in the spine above the injury site to trigger walking.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

023. A new surgery involves implanting devices in the spinal cord to read brain waves, which are then sent to a computer that tells the legs how to move, effectively healing the broken nerve pathways.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

024. This breakthrough represents the first time any primate has controlled its paralyzed legs using thought alone, thanks to a completely internal and permanent implant system.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

025. Experts believe this wireless interface could promote natural recovery by increasing neuroplasticity, though this therapeutic effect is already well-understood and proven.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

026. The brain implant used is significantly larger and more invasive than the deep brain stimulators currently used only in people with Parkinson's disease.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

027. The historical precedent, wherein a brain-controlled system enabled a quadriplegic human to grasp objects in 2012 following primate studies, provides a robust framework for projecting that human trials of the walking interface will commence by the decade's conclusion.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

028. Christian Ethier, a lead researcher on the study, suggests this work is a major step forward and will accelerate the development of non-invasive brain-computer interfaces for humans.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

029. While the brain-spine interface has been validated in primates, its translational trajectory to human therapeutics is hindered by the prohibitive invasiveness of the neural implant, which is considerably more substantial than established deep-brain stimulation systems.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

030. By translating neural signals from the motor cortex, the system allows for real-time control of walking gait and could potentially expand to include adjusting speed and navigating obstacles.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. 5

Part 2. Writing

Tasks 031-035. (10 баллов, по 2 балла за каждое правильно составленное предложение)

Use the following separate words in the order given to write a coherent sentence, based on information in the article “Enhanced brain implant translates stroke survivor’s thoughts into nearly instant speech using artificial intelligence”. You can change the form of the given words.

You may use your sentences as parts of your outline for your commentary on the article “Enhanced brain implant translates stroke survivor’s thoughts into nearly instant speech using artificial intelligence”.

031. brain-computer /use/ artificial intelligence / help / loose / ability

032. design / advanced implant / paralyzed woman / neural signals

033. technology processes / brain activity / to be formed

034. artificial intelligence /translate / intent to speak / electrical patterns / thoughts

035. naturalistic and fluent sentences / use / voice modeled / strike

Task 036. (Максимальное количество - 20 баллов)

Write your commentary on the article “Enhanced brain implant translates stroke survivor’s thoughts into nearly instant speech using artificial intelligence”. Your commentary is to be between 180-200 words. You are not allowed to cite from the original text pieces longer than 4 words running. Your text should contain various points of view, including your own.

To fulfill the task successfully you are:

- to briefly convey the content of the article;
- to mention various/possible views of the issue;
- to divide your text into logically connected paragraphs.

Part 3. Use of English

Tasks 037-046. (20 баллов, по 2 балла за правильный ответ)

Complete the second sentence so that it has a similar meaning to the first sentence, using the word given. DO NOT CHANGE the word given. DO NOT USE SHORT FORMS. The number of words you should write is specified in the sentence.

The example (0) is done for you.

(0) Her condition improved so rapidly she went home four days after the operation. (5 words)

such

= There **was such a rapid improvement** in her condition she went home four days after the operation.

037. I'd love to go to the cinema tonight, but I've got to do the ironing.

wish

I _____ the cinema tonight, but I've got to do the ironing (5 words)

038. Jack has such a vivid imagination, it is possible that he invented the whole story.

made

Jack has such a vivid imagination that he might _____ the whole story. (3 words)

039. Simon found the recipe book very hard to follow.

difficulty

Simon _____ in following the recipe book. (3 words)

040. There has been a sharp rise in the price of petrol this month.

risen

The _____ this month. (6 words)

041. Did anything about his behaviour seem strange to you?

strike

Did anything about his behaviour _____ strange? (4 words)

042. Would you mind helping me move this sofa?

hand

Would you mind _____ this sofa? (5 words)

043. I think it was a mistake to lend your car to Joe.

should

I don't think _____ your car to Joe. (4 words)

044. Because she postponed buying the plane ticket, Vanessa lost the opportunity to go to China.

put

If Vanessa _____ the plane ticket, she wouldn't have lost the opportunity to go to China. (5 words)

045. Franz didn't get to the office until lunchtime.

not

It _____ Franz got to the office. (5 words)

046. The photocopier broke down three days ago.

order

The photocopier _____ for three days. (5 words)

Part 4. Cultural Study

Tasks 047-056. (20 баллов, по 2 балла за каждый правильный ответ)

Now show how well you know English-speaking countries. Read the article and choose the correct option to complete the text.

THE TUDORS

The first Act of Supremacy in 1534 made King Henry VIII the “supreme head” of Church of England. Henry VIII died in (047. _____), leaving three children as potential heirs: The first Act of Supremacy had made King Henry VIII the supreme head of the Church of England and the second Act of Supremacy (048. _____) in (049. _____) these powers for Elizabeth I, reversing Catholic legislation passed during the reign of (050. _____), though the title Elizabeth gained was “Supreme Governor of the Church of England” rather than “supreme head” so as not to imply that she had control over the church's doctrine. The act also required all officials and clergy to make (051. _____) acknowledging her as the governor of the Church of England.

The monarchy had to get the (052. _____) of Parliament in all issues, but with the threat of war, Parliament showed great loyalty toward Queen Elizabeth I since she was a strong leader. When the (053. _____) was defeated, the Parliament felt safe and thus it decreased its loyalty to the monarchy.

The House of Commons had grown sharply, doubling in size due to the prosperity of the middle-class during that time. There were a number of vocal (054. _____) in the House of Commons (although the extent to which they influenced the Commons is disputed, Sir John Neale identified a unified bloc of 43 MPs, whereas revisionists have suggested that this is an exaggeration) who they began asking for more rights for them, but Elizabeth I was strong enough not to ignore their demands. (055. _____) would have problems with them.

John Aylmer, a Greek scholar, saw an immediate resemblance of the Tudor constitution with that of the classical republic of Sparta. Geoffrey Elton, who wrote “The Tudor Constitution”, gave hearty approval to Aylmer’s conclusions. It was the Greek scholars, such as Aylmer, that popularized the Greek classical political terminology and influenced British constitutionalist thought. They brought forward the idea of (056. _____) from Classical antiquity and applied it to their form of government.

047.

- A. 1547
- B. 1537
- C. 1557
- D. 1567

048.

- A. 1547
- B. 1536
- C. 1559
- D. 1568

049.

- A. dismantled
- B. abolished
- C. blocked
- D. restored

050.

- A. Mary I
- B. Anne Boleyn
- C. Edward VI
- D. Henry VII

051.

- A. a sworn affidavit
- B. an oath of allegiance
- C. an attestation of fidelity
- D. a vow of defiance

052.

- A. consent
- B. financial support
- C. military assistance
- D. interference

053.

- A. Dutch Rebels
- B. French Fleet
- C. Scottish Army
- D. Spanish Armada

054.

- A. Anglicans
- B. Catholics
- C. Puritans
- D. Protestants

055.

- A. William III
- B. Charles I
- C. Richard III
- D. James I

056.

- A. absolute monarchy
- B. mixed government
- C. theocracy
- D. direct democracy

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