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Listening

Time: 10 minutes
Task 1

_		14	SK I		
\widetilde{W}		_	r each answer. You wi	ll hear the text once .	
1.	Who is Mrs Sutton w	orried about?			
2.	What is the name for	a group of family de	octors working in the	same building together?	
~	uestions 3-7	ow Write NO MOD	E THAN THREE WA	ORDS OR A NUMBER	
	each answer.	ow. While NO MOR	E IIIAN IIIKEE WC	KDS OK A NUMBER	
101		N. 1 61 4	100 10 11	Y. C	
	Name of Health Centre	Number of doctors	Other information	Information about doctors	
	Dean End	3	Appointment system	Dr Jones is good with	
			5than South Hay	patients.	
			than bouth thay	Dr Shaw is good with	
				small children.	
	South Hay	4	Building less modern than Dean End	Dr Williams helps people with 7	
0	0				
~	<i>sestion 8</i> rite NO MORE THAI	N TWA WADDS AD	A MIIMDED		
			entre from	o'clock	
	uestion 9	ionis at the Health Ce		o clock.	
~	oose TWO letters A-	E.			
W	hich TWO groups of	patients receive free	medication?		
\mathbf{A}	people over 17 years	old			
	unemployed people				
	non-UK residents	1.1			
_	people over 60 years	ola			
•	oregnant women uestion 10				
_	rite NO MORE THAI	N TWO WORDS OR	R A NUMBER		
			ut £		

TRANSFER YOUR ANSWERS TO THE ANSWER SHEET!

9-11 классы

Use of English

9 класс

Time: 35 min.

Task 1

For questions 1-8, read the text below and decide which answer (A, B, C or D) best fits each gap. Mark your answers **on the separate answer sheet**.

ANGER ON THE ROADS

The anger that descends on people when they get behind the steering wheel of a car used to be (1).... as a joke. But the laughter is getting noticeably quieter (2).... that the problem has become increasingly widespread.

(3).... in a traffic jam, with family cars inching their (4).... past, the driver of a fast sports car begins to lose his temper. (5) the capabilities of his car, there is nothing he can do. The (6).... is anger.

Many people live in (7) of losing control. This is true of many situations but driving is a good example. People think that the car might not start, it might break (8)...., or someone might run into it. Before anything even happens, people have worked themselves up into a state of anxiety. And when something does happen, they're ready to explode.

1	\mathbf{A}	found	В	thought	\mathbf{C}	treated	D	intended
2	\mathbf{A}	once	В	even	\mathbf{C}	since	D	now
3	\mathbf{A}	Set	В	Stuck	\mathbf{C}	Held	D	Fixed
4	\mathbf{A}	path	В	way	\mathbf{C}	course	D	route
5	\mathbf{A}	However	В	Besides	\mathbf{C}	Although	D	Despite
6	\mathbf{A}	outcome	В	event	\mathbf{C}	issue	D	effect
7	\mathbf{A}	worry	В	fright	\mathbf{C}	fear	D	concern
8	A	un	В	down	\mathbf{C}	out	D	off

Task 2

For questions **9-16**, read the text below and think of the word which best fits each space. Use only **one** word in each space. Write your word on the separate answer sheet There is an example at the beginning **(0)**.

Example: 0 to

MISSION TO MARS

The Americans are keen to win the race (0).... send human beings to Mars. In 1992, the new boss of NASA*, Dan Goldin, called on the American people to be the first to send explorers to (9).... planet in the solar system. He reminded them (10).... the symbolic gift carried to the moon and back by the Apollo 11 mission. It bears (11).... message intended for the crew of the first spaceship to visit Mars. Goldin thinks (12) is time to begin the preparations (13) this historic journey. His speech echoed the words of the President, (14)... promised that in 2019, 50 years after Neil

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Armstrong (15).... the first man to set foot on the Moon, the first astronaut would stand on Mars.

(16).... the end of the twentieth century, various unmanned spaceships will have thoroughly investigated the surface of the planet. But, however clever a robot may be, it cannot match the type of information that can be gained from direct human experience.

* The North American Space Agency

Task 3

For questions 17-21 read the famous lines from literature. Match each famous line with its source (the book title) A-F and its author 1-6. The first example is done for you.

0.6F

	Authors		Book Titles		Lines
0	Daniel Defoe	1	The Adventures of Huckleberry Finn	A	"Bah", said Scrooge. "Humbug!"
17	Charles Dickens	2	The Red Badge of Courage	В	"My name is Ishmael. A whale-ship was my Yale College and my Harvard"
18	Mary Shelley	3	A Christmas Carol	С	"There warn't no home like a raft, after all. Other places feel so cramped up and smothery, but a raft don't."
19	Mark Twain	4	Frankenstein	D	"I beheld the wretch – the miserable monster whom I had created."
20	Stephen Crane	5	Moby Dick	E	"Henry was going to look at war, the red animal – war, the blood-swollen god."
21	Herman Melville	6	Robinson Crusoe	F	"I was exceedingly surprised with the print of a man's naked foot on the shore"

	0	17	18	19	20	21
Book Title	6					
Line	F					

TRANSFER YOUR ANSWERS TO THE ANSWER SHEET

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10 класс

Time: 35 min.

Task 1

For questions 1-8, read the text below and decide which answer (A, B, C or D) best fits each gap. Mark your answers on the separate answer sheet.

New uses for salt mines

Geological provision of salt were formed millions of years ago, when what is now land, lay under the sea. It is hard to believe that salt is now such a cheap (1), because centuries ago it was the commercial (2) of today's oil. The men who mined salt became wealthy and, although the work was (3) and frequently dangerous, a job in a salt mine was highly (4)

Nowadays, the specific microclimates in disused mines have been (5) for the treatment of respiratory illnesses such as asthma, and the silent, dark surroundings in a mine are considered (6) in encouraging patients to relax.

In addition, some disused mines have been (7) to different commercial enterprises, although keeping up-to-date with the technology of mining is essential to (8) visitors' safety. Some of the largest underground chambers even host concerts, conferences and business meetings.

1	A	provision	В	utility	\mathbf{C}	material	\mathbf{D}	commodity
2	\mathbf{A}	match	В	similarity	\mathbf{C}	parallel	D	equivalent
3	\mathbf{A}	critical	В	demanding	\mathbf{C}	extreme	D	straining
4	\mathbf{A}	regarded	В	admired	\mathbf{C}	approved	D	honoured
5	\mathbf{A}	exploited	В	extracted	\mathbf{C}	exposed	D	extended
6	\mathbf{A}	profitable	В	agreeable	\mathbf{C}	beneficial	D	popular
7	\mathbf{A}	put down	В	turned over	\mathbf{C}	made out	D	set about
8	\mathbf{A}	enable	В	retain	\mathbf{C}	ensure	D	support

Task 2

For questions **9-16**, read the text below and think of the word which best fits each space. Use only **one** word in each space. Write your word on the separate answer sheet There is an example at the beginning **(0)**.

Example: 0 to

Managing change

Most people find change unsettling and difficult to adapt (0) Many societies have experienced (9) rapid change in the early years of the 21st century that life can feel very daunting (10) times. Various commentators have (11) forward suggestions for coping with change on a personal level.

One suggestion involves thinking of three solutions to a problem, rather (12) two. Apparently, many people faced (13) change respond by considering two possible courses of action, but invariably tend to reject both of these. However, thinking

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instead of three potential solutions is a strategy which, according to research, provides a reliable way of finding a solution to the initial problem.

Another strategy advocates learning to avoid set patterns of routine behaviour. Something simple, (14) taking another route to work at (15) once a week, is seen as encouraging confidence in the face of uncertainty. (16) the simplicity of these ideas, they nevertheless help prepare people mentally to manage major change if necessary.

Task 3

For questions 17-21 read the famous lines from literature. Match each famous line with its source (the book title) A-F and its author 1-6. The first example is done for you.

0.6F

	Authors		Book Titles		Lines
0	Daniel Defoe	1	The Adventures of Huckleberry Finn	A	"Bah", said Scrooge. "Humbug!"
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21	Herman Melville	6	Robinson Crusoe	F	"I was exceedingly surprised with the print of a man's naked foot on the shore"

	0	17	18	19	20	21
Book Title	6					
Line	F					

TRANSFER YOUR ANSWERS TO THE ANSWER SHEET

9-11 классы стр. 6 из 17

11 класс

Time: 35 min.

Task 1

For questions 1-8, read the text below and decide which answer (A, B, C or D) best fits each gap. Mark your answers on the separate answer sheet.

Studying black bears

After years studying North America's black bears in the conventional way, wildlife biologist Luke Robertson felt no closer to understanding the creatures. He realised that he had to (1) their trust. Abandoning scientific detachment, he took the daring step of forming relationships with the animals, bringing them food to gain their acceptance.

The (2) this has given him into their behaviour has allowed him to dispel certain myths about bears. (3) to popular belief, he contends that bears do not (4) as much for fruit as previously supposed. He also (5) claims that they are ferocious. He says that people should not be (6) by behaviour such as swatting paws on the ground, as this is a defensive, rather than an aggressive, act.

However, Robertson is no sentimentalist. After devoting years of his life to the bears, he is under no (7) about their feelings for him. It is clear that their interest in him does not (8) beyond the food he brings.

1	\mathbf{A}	catch	\mathbf{B}	win	\mathbf{C}	achieve	D	receive
2	\mathbf{A}	perception	B	awareness	\mathbf{C}	insight	D	vision
3	\mathbf{A}	Opposite	В	Opposed	\mathbf{C}	Contrary	D	Contradictory
4	\mathbf{A}	care	B	bother	\mathbf{C}	desire	D	hope
5	\mathbf{A}	concludes	B	disputes	\mathbf{C}	reasons	D	argues
6	\mathbf{A}	misguided	В	misled	\mathbf{C}	misdirected	D	misinformed
7	\mathbf{A}	error	В	doubt	\mathbf{C}	illusion	D	impression
8	\mathbf{A}	expand	В	spread	\mathbf{C}	widen	D	extend

Task 2

For questions **9-16**, read the text below and think of the word which best fits each space. Use only **one** word in each space. Write your word on the separate answer sheet There is an example at the beginning **(0)**.

Example: 0 is

The origin of language

The truth (0) nobody really knows how language first began. Did we all start talking at around the same time (9) of the manner in which our brains had begun to develop?

Although there is a lack of clear evidence, people have come up with various theories about the origins of language. One recent theory is that human beings have evolved in (10) a way that we are programmed for language from the moment of birth. In (11) words, language came about as a result of an evolutionary change in our brains at some stage.

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Language (12) well be programmed into the brain but, (13) this, people still need stimulus from others around them. From studies, we know that (14) children are isolated from human contact and have not learnt to construct sentences before they are ten, it is doubtful they will ever do so. This research shows, if (15) else, that language is a social activity, not something invented (16) isolation.

Task 3

For questions 17-21 read the famous lines from literature. Match each famous line with its source (the book title) A-F and its author 1-6. The first example is done for you.

0.6F

	Authors		Book Titles		Lines
0	Daniel Defoe	1	The Adventures of Huckleberry Finn	A	"Bah", said Scrooge. "Humbug!"
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21	Herman Melville	6	Robinson Crusoe	F	"I was exceedingly surprised with the print of a man's naked foot on the shore"

	0	17	18	19	20	21
Book Title	6					
Line	F					

TRANSFER YOUR ANSWERS TO THE ANSWER SHEET

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Reading

9 класс

Time: 30 minutes

Task 1

Read the text below and answer Questions 1–13. Correct spelling is needed in all answer.

RESEARCH ON IMPROVING AGRICULTURAL YIELDS IN AFRICA

Three programmes are investigating ways of improving agricultural productivity in Africa. More than, half of the global population growth between now and 2050 is expected to occur in Africa. And more people means a requirement for more food.

Ethiopia, for example, has the largest livestock population in Africa but with a growing population, even its 53 million cattle are not enough. And now efforts to develop fanning there are bringing a significant health concern. Professor James Wood from the University of Cambridge explains that new breeds that are being introduced are more vulnerable to bovine TB (tuberculosis) than the zebu cattle which were previously reared there. 'This may have health implications for those who work with and live alongside infected cattle, and also raises concerns about transmission to areas which previously had low levels of TB,' he warns.

Wood leads a research programme which is looking at the feasibility of control strategies, including cattle vaccination. The programme brings together veterinary scientists, epidemiologists, geneticists, immunologists and social scientists in eight Ethiopian and UK institutions. 'We need this mix because we are not only asking how effective strategies will be, but also whether farmers will accept them, and what the consequences are for prosperity and wellbeing,' says Wood.

The impact that increasing productivity can have on farmers' livelihoods is not lost on an insect expert at the University of Ghana, Dr Ken Fening, who is working on another food-related research project. Cabbages are not indigenous to Africa but have become a major cash crop for Ghanaian farmers and an important source of income for traders from markets and hotels. 'A good crop can bring in money to buy fertilisers and farm equipment, and also help to pay for healthcare and education for the family,' he says. Recently, however, fields of stunted, yellowing cabbages, their leaves curled and dotted with mould, have become a familiar and devastating sight for the farmers of Ghana.

From his field station base in Kpong, Ghana, Fening works closely with smallholder farmers on pest-control strategies. Two years ago they started reporting that a new disease was attacking their crops. 'It seemed to be associated with massive infestations of pink and green aphids,' says Fening, 'and from my studies of the way insects interact with many different vegetables, I'm familial* with the types of damage they can cause.'

But farmers were typically seeing the total loss of their crops, and he realised that the devastation couldn't just be caused by sap-sucking insects. Despite no previous reports of viral diseases affecting cabbage crops in Ghana, the symptoms suggested a viral pathogen.

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Together with Cambridge plant biologist Dr John Carr, Fening collected samples of cabbage plants in Ghana showing signs of disease, and also aphids on the diseased plants. Back in Cambridge, Fening used screening techniques including a type of DNA 'fingerprinting' to identify the aphid species, and sophisticated molecular biology methods to try to identify the offending virus.

'Aphids are a common carrier of plant-infecting viruses,' explains Carr. 'The "usual suspects" are turnip mosaic virus and cauliflower mosaic virus, which affect cabbages in Europe and the US.'

'We found that two different species of aphids, pink and green, were generally found on the diseased cabbages,' says Fening. 'It turned out this was the first record of the green aphid species ever being seen in Ghana.' The pink aphid was identified as Myzus persicae (Sulzer).

What's more, the virus was not what they expected, and work is now ongoing to identify the culprit. The sooner it can be characterised, the sooner sustainable crop protection strategies can be developed to prevent further spread of the disease not only in Ghana, but also in other countries in the region. Another researcher who hopes that eradication strategies will be the outcome of her research project is Dr Theresa Manful. Like Fening, she is a researcher at the University of Ghana. She has been working with Cambridge biochemist Professor Mark Carrington on a disease known as trypanosomiasis.

'This is a major constraint to cattle fearing in Africa,' she explains. 'Although trypanosomiasis is also a disease of humans, the number of cases is low, and the more serious concerns about the disease relate to the economic impact on agricultural production.'

The parasite that causes the disease is carried by the tsetse fly, which colonises vast swathes of sub-Saharan Africa. Carrington says that a lot is now known about the parasite's molecular mechanisms, in particular the way it evades the immune system of the animal acting as its host by altering the proteins in its coat so as to remain 'invisible'. 'But then when you look at the effect on large animals, you realise that there is almost nothing known about the dynamics of an infection, and even whether an infection acquired at an early age persists for its lifetime,' he says. So Manful and Carrington set about testing cattle in Ghana. They discovered that nearly all were infected most of the time.

For Manful, one of the important gains has been the ability to expand the research in Ghana: 'I now have a fully functional lab and can do DNA extraction and analysis in Ghana -1 don't have to bring samples to Cambridge. We are teaching students from five Ghanaian institutions the diagnostic methods.'

'Agriculture faces increasing challenges,' adds Carr. 'Bioscience is playing a crucial part in developing ways to mitigate pest impact and reduce the spread of parasites. We want to ensure not only that every harvest is successful, but also that it's maximally successful.'

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 1-5 on your answer sheet.

1 What is the main problem faced by cattle farmers in Ethiopia, according to Professor Wood?

A TB is being transmitted from people to cattle.

^{*} aphids: small insects which feed by sucking liquid from plants.

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- **B** New breeds of cattle have led to an increase in TB.
- C The traditional breeds of cattle are being affected by TB.
- **D** TB has spread into places where it was previously unknown.
- 2 When discussing the cultivation of cabbages in Ghana, the writer says that this crop
- A was introduced from outside Africa.
- **B** is not eaten much by local people.
- **C** is not grown correctly by many farmers.
- **D** requires the use of fertiliser and special equipment.
- 3 Fening believed that the new disease destroying cabbages was
- **A** caused by overuse of pesticides.
- **B** also affecting other locally grown vegetables.
- C linked to insect attacks on these vegetables.
- **D** connected with the development of new insect breeds.
- 4 Fening first suspected that the cabbage disease was caused by a virus because
- **A** evidence of viral disease could be seen on the cabbage leaves.
- **B** pink and green aphids did not commonly attack cabbages.
- C viral diseases affecting vegetables had occurred elsewhere in Africa.
- **D** aphids would not have caused so much damage to the crops.
- 5 When doing further research in Cambridge, Fening and Carr discovered that
- **A** the virus was unfamiliar to them.
- **B** two different viruses were present.
- **C** the aphids' DNA was more complex than expected.
- **D** one aphid was more harmful than the other.

Ouestions 6-9

Look at the following statements (Questions 6-9) and the list of researchers below.

Match each statement with the correct researcher, A-E.

Write the correct letter, A-E, in boxes 6-9 on your answer sheet.

NB You may use any letter more than once.

- **6** A particular crop may make an important contribution to the local economy in one African country.
- 7 Tests will be carried out by local people in the country where the research is focused.
- **8** Different specialists must work together to ensure the success of a programme.
- **9** One type of insect attacking plants in Ghana was previously unknown there.

List of Researchers

- A James Wood
- **B** Ken Fening
- C John Carr
- **D** Theresa Manful
- **E** Mark Carrington

Questions 10-13

Complete the summary below.

Choose NO MORE THAN TWO WORDS from the text for each answer.

Write your answers in boxes 10-13 on your answer sheet.

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Trypanosomiasis

Trypanosomiasis is a disease	caused by	a paras	ite which	ı is spre	ead by an ins	ect	called
the 10	The pa	rasite	can re	emain	unaffected	by	the
host's 11	because i	t is able	to chang	ge the 12	2		
on its outer covering. It is u	incommon	among	humans	but has	been found	to	affect
most 13	in Ghana						

TRANSFER ALL YOUR ANSWERS TO YOUR ANSWER SHEET

10 класс

Time: 30 minutes

Read the text below and answer Questions 1–13. Correct spelling is needed in all answer.

Task 1

Vanilla – the most wonderful flavor in the world

Vanilla is the most popular and widely used flavor in the world. And, yet, the vanilla orchid is only grown in a few countries. Below you'll discover why these countries are ideal and how the vanilla from each region differs.

Mexico

Vanilla (*Vanilla planifolia* Andrews) originated in Mexico and for centuries was the exclusive secret of the native Totonac Indians, who were later conquered by the Aztecs. The Aztecs, in turn, were conquered by the Spanish forces led by Cortez in 1520. He brought vanilla pods home to Spain, thus introducing the flavorful pods to the rest of the world.

However, Mexico remained the sole grower of vanilla for another 300 years. The particular relationship between the vanilla orchid and an indigenous bee called the Melipone was crucial. It was responsible for pollinating the flowers, resulting in fruit production.

Vanilla pods should be picked when the tip begins to turn yellow. The curing process gives the pods their characteristic brown color as well as their flavor and aroma. In Mexico, farmers cure the pods by wrapping them in blankets and straw mats and then placing them in ovens for 24 to 48 hours. After that, the pods are spread outdoors to absorb heat during the day and then placed in wooden boxes overnight. Once properly cured, they are stored to further develop the flavor. The entire curing process takes three to six months, making it a very labor-intensive process.

Vanilla from Mexico has a flavor that combines creamy tones with a deep, spicy character, making it a delicious complement to chocolate, cinnamon and other warm spices. It also works wonderfully in tomato sauces.

Madagascar

Around 1793, a vanilla plant was smuggled from Mexico to the Island of Reunion, east of Africa. For almost 50 years, the production of vanilla struggled. The vines grew successfully with beautiful blossoms but vanilla pods were infrequent. Without the Melipone bee, the flowers weren't being fertilized beyond occasional pollination by other

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insects. It wasn't until 1836 that Charles Morren, a Belgian botanist, discovered the pollination link between bee and plant. And then in 1841, Edmond Albius of Reunion developed an efficient method for fertilizing the flower by hand. Now, growers could choose the best flowers to pollinate, resulting in a healthier and higher quality vanilla pod.

Eventually, the plants arrived on the nearby island of Madagascar, where hand pollination proved its worth. Assisted by the climate and rich soil, hand pollination by the country's skilled farmers has enabled Madagascar to become the world's top vanilla producer in quantity and, many would argue, quality.

The curing process is similar to that in Mexico with one difference. The farmers initiate the process by immersing the green vanilla pods in hot water for some time. They then store them in sweat boxes before beginning the routine of spreading them outdoors during the day and packing them away at night. The different curing method used contributes to the overall flavor of the vanilla.

The sweet, creamy and mellow flavor is the one most people identify with vanilla. This flavor and the pod's ability to hold that flavor in both hot and cold applications make it an exceptional 'all-purpose' vanilla which is many people's first choice for a wide range of sweet recipes – from cooking and baking to ice creams and buttercreams.

Tahiti

Like the other countries, Tahiti's tropical climate makes it ideal for growing vanilla. However, Tahiti differs in the species of vanilla that is most common: *Vanilla tahitensis* Moore. This is the hybrid of two vanilla species introduced in the 1800s. These two species were skilfully crossed in the next few decades, to create the plump Tahitian vanilla pods we know today.

The curing process also differs from other countries'. Mature pods are first stacked in a cool place until they are completely *brown* (*five* to ten days) and then rinsed briefly in clear water, a unique characteristic of the method used in Tahiti. For the next month, growers expose the pods to the gentle morning sunlight. In the afternoon, they bind the pods in cloths and store them in crates until the next morning, to promote transpiration. Little by little, the vanilla pods lose weight and shrink. Throughout this phase, the workers carefully smooth and even out the pods with their fingers. Then after a month, the final step is to leave the pods in a shaded and well-ventilated spot for 40 days to lower their moisture content.

This species of orchid combined with Tahiti's advantageous climate and soil results in a vanilla that has fruity and sweet tones. Tahitian vanilla is especially vulnerable to heat and is therefore best used in refrigerated and frozen desserts, fruit pies and smoothies.

Indonesia

Indonesia is the second largest producer of vanilla. However, Indonesian production methods focus on quantity over quality. Unlike other regions, where vanilla beans are picked only when ripe, Indonesian growers harvest all the beans at one time, a labor-saving adjustment.

The curing process also features production shortcuts such as the use of propane heaters to speed up drying. The use of such heat, which chemically alters the beans, essentially 'bums off flavor components while adding a smoky tone, resulting in a less complex taste and a sharper flavor. Indonesian vanilla works well when blended with vanillas from other regions and, because it's more economical, it makes the end product more affordable.

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Questions 1-4

Look at the following statements (Questions 1-4) and the list of countries below.

Match each statement with the correct country, A, B, C or D.

Write the correct letter, A, B, C or D, in boxes 1-4 on your answer sheet.

- 1 The vanilla that is grown here was created from more than one type of vanilla plant.
- 2 This vanilla is often mixed with other types of vanilla.
- 3 Some people claim that this country produces the finest vanilla.
- 4 This vanilla goes well with both sweet and savoury ingredients.

List of Countries

- A Mexico
- **B** Madagascar
- C Tahiti
- **D** Indonesia

Questions 5-7

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 5-7 on your answer sheet.

- **5** What prevented countries, apart from Mexico, from growing vanilla in the 17th and 18th centuries?
- A the Aztecs' refusal to let the pods be exported
- **B** the lack of the most suitable pollinating insect
- C the widespread ignorance of the existence of the plant
- **D** the poor condition of the vanilla pods that Cortez collected
- **6** What does the writer suggest was the main reason for the success of vanilla cultivation on Madagascar?
- A the adoption of a particular agricultural technique
- **B** the type of vanilla orchid that was selected
- C the unique quality of the soil on the island
- **D** the rapidly increasing number of growers
- 7 The writer believes that Madagascan vanilla is so popular because
- **A** it works well in a variety of main courses and puddings.
- **B** its pod is less likely than others to break up when it is cooked.
- C its taste is widely considered to be the standard taste of vanilla.
- **D** it is the one that is used in a number of commercial frozen desserts.

Questions 8-13

Complete the summary below.

Choose **ONE WORD ONLY** from the text for each answer.

Write your answers in boxes 8-13 on your answer sheet.

How vanilla pods are cured in Tahiti

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They use their 12	to flatten	them o	ut. For	the la	ast stage	in the	curing
process, the pods are kept in a cool	place whi	ich is oj	pen to	the ai	ir, so th	at the a	amount
of 13 within them	is reduced	1.					

TRANSFER ALL YOUR ANSWERS TO YOUR ANSWER SHEET

11 класс

Time: 30 minutes
Task 1

Read the text below and answer Questions 1–13. Correct spelling is needed in all answer.

A brief history of automata

An automaton is a machine, usually made to resemble a person or animal, that operates on its own, once it has been started. Although few are constructed nowadays, they have a history stretching back well over two thousand years. Several myths show that the ancient Greeks were interested in the creation of automata. In one, Hephaestus, the god of all mechanical arts, was reputed to have made two female statues of pure gold which assisted him and accompanied him wherever he went. As well as giving automata a place in mythology, the Greeks almost certainly created some. These were probably activated by levers and powered by human action, although there are descriptions of steam and water being used as sources of power. Automata were sometimes intended as toys, or as tools for demonstrating basic scientific principles.

Other ancient cultures, too, seem to have developed automata. In Egypt, Ctesibius experimented with air pressure and pneumatic principles. One of his creations was a singing blackbird powered by water. A Chinese text of the third century BC describes a life-size, human-shaped figure that could walk rapidly, move its head up and down, sing and wink its eye.

Much later, Arab engineers of the ninth and thirteenth centuries wrote detailed treatises on how to build programmable musical fountains, mechanical servants, and elaborate clocks. A ninth-century ruler in Baghdad had a silver and gold tree with metal birds that sang. The art of creating automata developed considerably during the fifteenth century, linked with improvements in dock making: the mechanisms of automata and clocks had a great deal in common. Some truly remarkable automata were produced at this time. Muller was reputed to have made an artificial eagle which flew to greet the Emperor on his entry into Nuremberg, Germany, in 1470, then returned to perch on top of a city gate and, by stretching its wings and bowing, saluted the emperor on his arrival. Leonardo da Vinci made a lion in honour of the king of France, which advanced towards him, stopped, opened its chest with a claw and pointed to the French coat of arms.

Automata were normally very expensive toys for the very rich. They were made for royal or aristocratic patrons, to be viewed only by themselves and selected guests – who were expected to be impressed by their wealth. Automata were also created for public show, however, and many appeared on clock towers, such as the one in Bern, Switzerland, built in 1530.

During the eighteenth century, some watchmakers made automata to contribute to the progress of medicine and the natural sciences, particularly to investigate the mechanical

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laws governing the structure and movement of living things. Many of their creations simulated almost perfectly the complex structure of human beings and animals. Maillardet made extensive use of gearing and cogs to produce automata of horses, worked by turning a handle. Vaucanson produced a duck made of gilded copper which ate, drank and quacked like a real duck. He also made a life-size female flute player. Air passes through the complex mechanism, causing the lips and fingers of the player to move naturally on the flute, opening and closing holes on it. This automaton had a repertoire of twelve tunes.

In another well-known piece, Merlin's silver swan made in 1773, the swan sits in a stream consisting of glass rods where small silver fish are swimming. When the clockwork is wound, a music box plays and the glass rods rotate, giving the impression of a flowing stream. The swan turns its head from side to side. It soon notices the fish and bends down to catch and eat one, then raises its head to the upright position. The mechanism still works.

One of the most skilled makers of automata was the Swiss watchmaker Jaquet-Droz. He produced three automata which, even today, are considered wonders of science and mechanical engineering. One of these, The Writer, simulates a boy sitting at a desk, dipping his pen into the ink and writing perfectly legibly.

Another stunning creation of the eighteenth century was the Mechanical Theatre in the grounds of Austria's Hellbrunn Palace, home of the Archbishop of Salzburg. Designed by the miner Rosenegger, and completed in 1752, this depicts the nobility's idea of a perfect society, with every class in its proper place. The figures inside a palace depict eighteenth century court life, while industrious activity is carried on in and around this building. A total of 141 mobile and 52 immobile little figures demonstrate all manner of trades of the period: building workers bring materials to the foreman, who drinks; butchers slaughter an ox; a barber shaves a man. A dancing bear performs, guards march past the palace, a farmer pushes an old woman in a wheelbarrow over the road. The theatre shows great skill in dock making and water technology, consisting of hidden waterwheels, copper wiring and cogwheels.

During the nineteenth century, mass production techniques meant that automata could be made cheaply and easily, and they became toys for children rather than an expensive adult amusement. Between 1860 and 1910, small family businesses in Paris made thousands of clockwork automata and mechanical singing birds and exported them around the world. However, the twentieth century saw traditional forms of automata fall out of favour.

Questions 1-3

Complete the summary below.

Choose ONE WORD ONLY from the text for each answer

Write your answers in boxes 1–3 on your answer sheet.

Automata and the ancient Greeks

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Questions 4-8

Look at the following descriptions (Questions 4-8) and the list of people below.

Match each statement with the correct person, A-G.

Write the correct letter A-G, in boxes 4-8 on your answer sheet

List of Descriptions

- 4 created an automaton that represented a bird in water, interacting with its surroundings
- 5 created an automaton that performed on a musical instrument
- 6 produced documents about how to create automata
- 7 created automata which required a human being to operate the mechanism
- 8 used air and water power

List of People

- A Ctesibius
- **B** Arab engineers
- C da Vinci
- **D** Maillardet
- E Vaucanson
- F Merlin
- **G** Jaquet-Droz

Questions 9-13

Complete the sentences below.

Choose ONE WORD ONLY from the text for each answer

Write your answers in boxes 9-13 on your answer sheet.

- **9** The Mechanical Theatre shows court life inside a
- **10** In the Mechanical Theatre, building workers, butchers and a barber represent various of the time.
- 11 provides the power that operates the Mechanical Theatre.
- 12 New that developed in the nineteenth century reduced the cost of the production of automata.
- 13 During the nineteenth century, most automata were intended for use by

TRANSFER ALL YOUR ANSWERS TO YOUR ANSWER SHEET

WRITING

Time: 60 minutes

Comment on ONE of the following quotations.

«Action is the foundational key to all success». (Pablo Picasso)

- «The difference between winning and losing is most often not quitting». (Walt Disney)
- «I find that the harder I work the more luck I seem to have». (Thomas Jefferson)
- «It often requires more courage to dare to do right than to fear to do wrong». (Abraham Lincoln)

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«Be yourself. Everyone else is already taken». (Oscar Wilde)

«Success does not consist in never making mistakes but in never making the same one a second time». (George Bernard Shaw)

Use the following plan:

- make an introduction;
- express your personal opinion and give reasons to support it;
- give examples to illustrate your reasons, using your personal experience, literature or background knowledge;
- make a conclusion.

Write 200-250 words.