7. Read the text and fill in the blank space (A-E) with the given parts of the sentences (1-6). There is one extra part.

THE THREE LAWS OF ROBOTICS

The Three Laws of Robotics ...(A)*... created by the science fiction author Isaac Asimov. The rules assume that robots will be human-type machines, and do different things. The first mention of the laws was in ...*(B)*... Asimov's short story Runaround written in 1942.*

The Three Laws of Robotics are:

1. A robot ...(C)*... a human being or, by failing to act, allow a human being to come to harm.*
2. A robot must obey orders given to it by human beings, except where carrying out those orders would break the First Law.
3. A robot must protect ...(D)*... as long as the things it does to protect itself do not break the First or Second Law.*

The Three Laws form a unifying theme for Asimov's robotic – based fiction. Other authors working in Asimov's fictional universe have adopted them, and references (often parodic) appear in science fiction and other genres. Technologists in the field of artificial intelligence ...(E)*... the role the Laws might have in the future.*

1) *able to walk about*
2) *argue about*
3) *its own existence*
4) *are a set of rules*
5) *will remember its importance*
6) *may not injure*

A	B	C	D	E

WRITING

8. Speculate on the following: Do you think we have got the right to colonize the planet Mars? Give your own opinion

Дорогой друг! Обязательно скажи себе после олимпиады:
Я прошел это испытание! У меня все получилось! Я горжусь собой!
Стремись быть ПЕРВЫМ во всем, и ты станешь ПЕРВЫМ!

РЕСПУБЛИКАНСКАЯ ОЛИМПИАДА ШКОЛЬНИКОВ НА КУБОК ИМЕНИ Ю.А. ГАГАРИНА

2018-2019 УЧЕБНЫЙ ГОД

КУБОК ГАГАРИНА олимпиада школьников

АНГЛИЙСКИЙ ЯЗЫК

РЕСПУБЛИКАНСКИЙ ЭТАП — **8 класс**

Город/район _____ **Школа** _____ **Класс**_____

Фамилия _____ **Имя** _____

Персональная итоговая таблица (заполняется учителем – членом жюри республиканского этапа)

Задания	1	2	3	4	5	6	7	8	Сумма
Количество баллов									

_____ / _____
Подпись учителя ФИО учителя

ЖЕЛАЕМ УДАЧИ!

LISTENING

1. You will hear five different people talking about famous places. For questions 1-5, choose from the list A-H what each speaker says about their visit to each site. Use letters only once. There are three extra letters, which you do not need to use. You will hear the recording twice.

Speaker 1 – _____
Speaker 2 – _____
Speaker 3 – _____
Speaker 4 – _____
Speaker 5 – _____

A) *Visitors are not permitted to walk inside the site.*
B) *We did not take enough water on our trip.*
C) *A very large animal tried to attack us.*
D) *Motor vehicles are not allowed to enter the site.*
E) *It was very expensive to enter the site.*
F) *We respected the wishes of the local people.*
G) *The guidebook I was carrying was very useful.*
H) *All the people we met or saw were tourists.*

READING

2. Read and answer the following questions.

INVISIBILITY MAY BE POSSIBLE

The cap of invisibility (a magic hat you can put on, so that others won't see you) has appeared in different folk tales, fantasy and films more than once. What seemed to be impossible some time ago may become real in the future.

Is it possible to make only humans invisible? The same principles may work for cars, planes and even buildings. The experiment on invisibility was started by a British physicist Sir John Pendry from London Imperial College. He believes that the first model will be ready for demonstration in a few years, but in practice, the technology might be used much later. Of course, we speak only about the experiment in visible light (with the length of the light waves, which human eyes can perceive).

A couple of years ago a group of scientists from Duke University in North Carolina presented a technology, which made a flat object fully invisible in microwaves. The same kind of wavelength is used in radar detection. The experiment proved that invisibility was not only a thing from fairy tales but also quite a possible phenomenon in real life.

Normally light moves in a straight line in usual conditions. Albert Einstein discovered that sometimes light may change its direction under the influence of gravity of some space objects. The same principle works in the new technology: the light beams bend around an object thanks to the material it is made of. Thus this object becomes invisible from any angle of view. Such materials are called "metamaterials." They do not exist in nature and are purely artificial.

It is easier to imagine the process if you take a look at a stone in a river – it divides the stream of water in two parts which bend around the stone and mix together again behind it.

The new technology differs greatly from already existing ones (for example, a special coating which does not reflect the waves of radar; it is used on military jet-fighters).

The optical properties of water gave the scientists one more idea. When we put a stick into water, it seems broken, because light changes its direction in a different substance. The idea of creating a metamaterial implies that the lower part of the stick should not be visible at all. The material does not exist yet, but theoretically, it is possible to create such a material, which makes the object invisible even in usual daylight. You will never understand that there is something in front of you until you bump into the object wrapped up in this unusual "fabric" yourself.

1) A model of an invisible object:
   - ☐ A) *has been presented recently.*
   - ☐ B) *was presented a couple of years ago.*
   - ☐ C) *may be presented in a few years.*
   - ☐ D) *is used by military forces.*

2) The technology developed North Carolina makes objects:
   - ☐ A) *invisible at night.*
   - ☐ B) *in sunlight.*
   - ☐ C) *in daylight.*
   - ☐ D) *in the light with a very short wavelength.*

3) Metamaterials...
   - ☐ A) *change the properties of objects they cover.*
   - ☐ B) *change the direction of light beams.*
   - ☐ C) *are found in nature.*
   - ☐ D) *work only when they are underwater.*

4) The scientists have:
   - ☐ A) *not created a metamaterial because it is impossible.*
   - ☐ B) *created a metamaterial but they have not tested it yet.*
   - ☐ C) *not created a metamaterial yet, though it is possible.*
   - ☐ D) *created and tested the metamaterial.*

USE OF ENGLISH

3. For questions 1-9, read the text below and decide which answer (A, B, C or D) best fits each gap.

WHAT ON EARTH WOULD WE DO WITHOUT SATELLITES?

Since the first satellites were ...(1)... by rocket over 50 years ago, the number of communication satellites in space has increased enormously.

As part of ...(2)... positioning systems they tell us where we are on the planet, and can help save lives by, for instance, directing the emergency ...(3)... to the scene of an accident.

Satellites are essential for accurate weather forecasting and also for space ...(4)... . Because they are above the Earth's atmosphere, right on the edge of ...(5)... space, telescopes on satellites can see distant objects up to ten ...(6)... more clearly than they could from the surface of the Earth.

We rely, too, on satellites to make ...(7)... phone calls, and in some remote regions they make it possible for us to ...(8)... the Internet. And of course many people watch TV programmes ...(9)... from the other side of the world thanks to satellites, which enable us to watch hundreds of channels in a whole variety of languages.

1)	☐ A) *fired*	☐ B) *launched*	☐ C) *flown*	☐ D) *lifted*
2)	☐ A) *global*	☐ B) *universal*	☐ C) *regional*	☐ D) *external*
3)	☐ A) *brigades*	☐ B) *services*	☐ C) *agencies*	☐ D) *departments*
4)	☐ A) *exploration*	☐ B) *appreciation*	☐ C) *examination*	☐ D) *investigation*
5)	☐ A) *outer*	☐ B) *further*	☐ C) *broader*	☐ D) *fainter*
6)	☐ A) *points*	☐ B) *times*	☐ C) *items*	☐ D) *numbers*
7)	☐ A) *long-running*	☐ B) *long-range*	☐ C) *long-term*	☐ D) *long-distance*
8)	☐ A) *connect*	☐ B) *link*	☐ C) *access*	☐ D) *log*
9)	☐ A) *published*	☐ B) *browses*	☐ C) *displayed*	☐ D) *broadcast*

4. Read the text and use the right words given under the text. Mind Grammar and Lexis.

TELESCOPE

A telescope is an optical instrument used in the [1)]..... of distant objects by collecting electromagnetic radiation (such as visible light). The first known practical telescopes were invented 16 in the Netherlands at the [2)]..... of the 17th century, by using glass lenses. They found use in both terrestrial and astronomical applications.

The first known version of what we now call "refracting" telescope appeared in 1608. It was invented by a German optician Hans Lippershey. His earliest instrument was simply two lenses in place so that an [3)]..... could look through them to distant objects. Its invention immediately led to the [4)]..... of spyglasses and other magnifying devices.

The 20th century also saw the invention of telescopes that worked in a wide range of wavelengths. The first purpose built radio telescope went into operation in 1937. Since then, a lot of complex astronomical [5)]..... has been developed.

[1)] *OBSERVE* [2)] *BEGIN* [3)] *OBSERVE* [4)] *DEVELOP* [5)] *EQUIP*

5. Complete the second sentence so that it has a similar meaning to the first sentence, using the words given. Do not change the word given. You must use between two and five words, including the word given.

1) *It's a pity I got rid of those old shoes of mine.* (THROWN)
   I wish _____ *those old shoes of mine.*

2) *I'm fed up with them trying to sell me things I don't want.* (WISH)
   I _____ *to sell me things I don't want.*

3) *The dressmaker is going to alter this skirt completely, I think.* (HAVE)
   I'm going to _____*, I think.*

4) *I'm sorry I didn't have enough time while I was shopping.* (OUT)
   I wish I _____ *time while I was shopping.*

5) *I wish someone would iron my clothes for me this weekend.* (HAVE)
   I wihs I _____ *this weekend.*

6) *It's very sad that we couldn't meet last week. (ONLY)*
   If _____ *to meet last week.*

6. Read the text and change the words in the brackets.

CROP CIRCLES

A crop circle or crop formation is a pattern created in fields by flattening a crop. In 1932, archaeologist E.C. Curwen [1)].....(discover) four dark rings in a field at Stoughton Down near Chichester, but he [2)].....(can) examine only one of [3)].....(they).

The majority of reports of crop circles [4)].....(appear) and spread since the late 1970s when many circles began appearing throughout the English countryside.

The UK researcher Jeremy Northcote found that crop circles were not spread accidentally across the landscape. They appeared near roads, areas of medium-to-dense population, and cultural heritage monuments such as Stonehenge or Avebury.

The circles always appeared in areas that [5)].....(be) easy to access. This suggests strongly that these crop circles were [6)].....(likely) to be results of human action than of some paranormal activity.

Crop circles remain a [7)].....(mystery) phenomenon without any universal [8)].....(explain). Scientists suggest that the patterns in the fields may be connected with weather or animal [9)].....(active). Many people say that the circles are created to attract public [10)].....(attentive). Two men even confessed to making the first crop circles in South England with simple instruments. When some people refused to believe them, they deliberately added straight lines and squares to show that they could not have [11)].....(nature) causes.