

Listening

Time: 20 min

Task 1.

You will hear people talking in eight different situations. For questions 1-8, choose the best answer (A, B or C).

- 1 You hear a news item about some teenage scientists.
The girl's discovery could
A lead to a beneficial use of waste materials.
B help to encourage more students to study science.
C reduce the country's dependence on oil.
- 2 You hear an interviewer introducing a recorded interview with Darren Grey, a young writer.
What did the interviewer find surprising?
A Darren's adult writing style
B Darren's other leisure interests
C Darren's way of speaking
- 3 You hear a radio interview on a programme for teenagers with a biology teacher.
What does she think the students enjoy about her lessons?
A her sense of humour
B the way she uses the Internet
C doing projects outdoors
- 4 You hear two friends talking about a concert they have been to.
What most impressed the girl about the singer?
A the range of her voice
B her ability to express feeling
C her interaction with the audience
- 5 You hear a mother talking to her son about a rugby match.
What problem did her son have?
A He had difficulty getting to the stadium on time.
B He forgot to take something he needed with him.
C He got some basic information about the match wrong.
- 6 You hear a teacher talking to her class about some coursework.
What would she like the class to focus on?
A doing a statistical analysis
B making a detailed comparison
C reading some information critically
- 7 You hear two friends talking about their holidays.
On holiday the girl enjoyed
A swimming in the evening.
B visiting a place she had seen in a film.
C eating something she had never tried before.
- 8 You hear a news item about a wildlife campaign.
What is the aim of the campaign?
A to learn more about the habits of the butterfly
B to help conserve various types of butterfly
C to discover whether butterfly numbers are decreasing

Task 2.

You will hear an Irishman called Michael Gallagher giving a talk about the traditional methods he uses to forecast the weather. For Questions 1-10, complete the sentences.

Michael Gallagher has been predicting the weather for over (1) years.

Michael has gained a lot of his knowledge from local people, especially (2)

The title of the book that Michael has written is *Traditional* (3)

Michael says that if you see swallows flying (4), it means the weather will improve.

A cat with its back to the fire is a sign that (5) weather is on its way

If a storm is coming, cows, horses and (6) keep their backs to a hedge while eating.

Michael successfully predicted a warm summer by observing sheep moving towards the (7) at the end of spring.

The late growth of (8) in October helped Michael predict a cold winter.

One popular saying predicts good weather if there is a (9) at the end of the day.

Michael forecasts very (10) for his area over the next few days.

TRANSFER YOUR ANSWERS TO ANSWER SHEET

ANSWER SHEET
Listening

ID number _____

Task 1

1	A	B	C
2	A	B	C
3	A	B	C
4	A	B	C
5	A	B	C
6	A	B	C
7	A	B	C
8	A	B	C

Task 2

1		6	
2		7	
3		8	
4		9	
5		10	

ANSWER SHEET
Listening

ID number _____

Task 1

1	A	B	C
2	A	B	C
3	A	B	C
4	A	B	C
5	A	B	C
6	A	B	C
7	A	B	C
8	A	B	C

Task 2

1		6	
2		7	
3		8	
4		9	
5		10	

Reading

Time: 25 min.

Task 1.

Read the text and choose the correct answer A, B, C or D for questions 1-5.

When I first agreed to go on a tornado-chasing tour in Tornado Alley* with my friend Jonas, I wasn't sure what to expect. I wondered if it would be like the thrilling film I had seen, *Twister*, and, in a way, it was!

After we got on board the tour leaders' state-of-the-art storm-chasing van, they showed us the radar, radios, satellite images and GPS systems they had to help them find the best storms. Eric and Larry told us that the weather was looking good for some storms that day, so we set out excitedly, each of us with a screen in front of our seat so that we could see the radar and maps. A couple of hours into our drive, on the horizon we saw a column of rain in the centre of thick swirling clouds. Larry explained that it was a super-cell storm, a type of storm that often produces tornadoes. On that occasion, we were disappointed, but as dusk fell, we witnessed the most incredible lightning storm! Late into the evening, bolt after bolt of lightning lit up the sky over the landscape. It was magical.

The real excitement, however, began on the second afternoon of the tour. After analysing forecast models and other data and driving for hours, Larry and Eric caught up with a huge storm. As

we got closer, the sky darkened, wind whipped around the van and hail the size of golf balls pounded on the top. Then, at the base of the clouds, the funnel of a tornado began to form. That day we saw three tornadoes!

As we travelled to our hotel that evening, Eric explained how a tornado forms when two different kinds of air meet, such as dry and moist or cold and warm. Winds come from different directions and rotate to form a funnel. As it spins faster and faster, the funnel often stretches towards the ground to become a tornado. I had never been particularly interested in the weather before, but Eric's face lit up when he talked about tornadoes and he just made it all so fascinating and easy to understand.

It's obvious that Larry and Eric love what they do and really want others to enjoy their tours. Despite the fact that we got incredibly close to the storms, I never felt in danger. Nothing beat the thrill of the chase and I can't wait to do another tour next year!

* Tornado Alley: The states in central US that have the most violent tornadoes e.g. Kansas, Oklahoma, Texas

- In the first paragraph, the writer tells us that
 - his friend expected it to be thrilling.
 - he hadn't been on such a tour before.
 - Tornado Alley was featured in a film.
 - the tour was nothing like the film, *Twister*.
- The writer says that in the storm-chasing van, he could
 - follow the route it was taking.
 - help to forecast the weather.
 - watch a film about tornadoes.
 - listen to stories about storms.
- On the first day, what sight seemed to impress the writer the most?
 - a super-cell storm
 - a tornado
 - the scenery
 - a lightning storm
- The writer enjoyed Eric's description of how tornadoes form because
 - they had just seen some tornadoes.
 - he had always been interested in tornadoes.
 - Eric explained it all so well.
 - he liked Eric's sense of humour.
- Overall, what was the writer's impression of the tour leaders?
 - They were fantastic entertainers.
 - They were highly energetic risk-takers.
 - They were enthusiastic and skilled.
 - They were great businessmen.

Task 2.

You are going to read an extract from a magazine article. Choose from the paragraphs A-G the one which fits each gap (1-6). There is one extra paragraph which you do not need to use.

- A** In essence, a musician's piece is just one example of a system where smaller patterns are found inside larger ones – similar to the way characters form words, which form sentences, then chapters and eventually a novel.
- B** Using this theory, we can discover universal patterns that form the blueprints of our world. We may be able to make everything we know – molecules, living tissues, music, the universe – by applying universal patterns in different physical contexts. For example, a pattern of building blocks might be represented as music, to create a certain melody, or might be represented as DNA to create a certain protein.
- C** This approach has implications far beyond the design of new materials. In future, it might be possible to translate melodies to design better sequences of DNA, or even to reinvent transportation systems for cities.
- D** Similarly, in the living world, a limited set of building blocks of DNA and amino acids creates some of the most remarkable materials we know of, the stuff that builds our bones and skin, and complex organs such as the brain.
- E** In this translation from silk to music, they replaced the protein's building blocks with corresponding musical building blocks (tones and melody). As the music was played, they could 'hear' the different series of organic compounds they had used, and could then work out how certain qualities of the material, such as its mechanical strength, appear in musical terms.
- F** As we begin to appreciate the importance of such patterns, engineers are applying this knowledge to the design of synthetic materials. Doing so, they can gain inspiration from a surprising source: music.
- G** Even though nature uses this approach, people have failed to exploit the concept themselves when it comes to developing new materials. We have created thousands of different materials, originating from very different sources, such as plastics, metals or ceramics. But it seems we could benefit considerably from learning more about how nature uses its building blocks.

Beautiful music makes better materials

*The hidden structures of music are universal patterns of nature –
and they can help us create new materials like artificial silk.*

Our world consists of only about 100 different chemical elements. It is the arrangement of these elements, or building blocks, into molecules that gives rise to the rich set of materials around us – from the sugar molecules in the food we eat to the oxides in the Earth's crust.

1

The properties of a piece of matter, however, are defined not by these basic building blocks themselves but by the way they are arranged. For instance, spider silk is one of the most remarkable examples of nature's materials, created from a simple protein but spun into fibres stronger than steel.

2

A composer uses a limited set of tones as the starting point for melodies, which in turn are arranged into complex structures to create symphonies. Think of an orchestra, where each instrument plays a relatively simple series of tones. Only when combined do these tones become the complex sound we call classical music.

3

Composers have made use of the idea of interconnecting patterns for thousands of years, but only recently have these systems been understood mathematically. This maths shows that the principles of musical composition are shared by many seemingly quite different systems in the natural world.

4

The problem lies in our ignorance of the ways in which these are arranged. But in fact it is not the building block itself that is limiting our ability to create better materials, but rather our ignorance of the way in which these building blocks are arranged. To try to understand this better, scientists are copying the structure of silk fibres and turning it into musical compositions. This will help them create artificial materials for medical and engineering applications.

5

Listening to the music that was produced in this way improved their understanding of the mechanism by which the patterns of amino acids work together during the silk-spinning process. The patterns of amino acids that formed silk fibres of poor quality, for example, translated into music that was aggressive and harsh, while the ones that formed better fibres sounded softer and more fluid. In future work it is hoped that the design of the silk can be improved by enhancing those musical qualities that reflect better properties.

6

Using music as a tool to create better materials and to improve urban living may seem like an unusual proposal, but when we appreciate that the underlying mathematics of the structure of music are shared across many fields of study, it begins to make sense. Nature does not distinguish between what is art and what is material, as all are merely patterns of structure in space and time.

ANSWER SHEET
Reading

ID number _____

Task 1

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D

Task 2

1	2	3	4	5	6

ANSWER SHEET
Reading

ID number _____

Task 1

1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D

Task 2

1	2	3	4	5	6

Use of English

Time: 30 min.

Task 1.

For questions 1-8, read the text below and think of the word which best fits each gap. Use only one word in each gap. There is an example at the beginning (0).

Sporting superstitions

Most of (0) US have routines, habits and superstitions. We'll wear our lucky shirt to an interview, arrange our cutlery in a particular way or turn the oven off three times, just to (1) ____ sure. In a competitive environment, in (2) ____ athletes are all going for gold, years of training, drastic diets and intense coaching might just (3) ____ be enough. So, sometimes, the Olympians turn (4) ____ luck for extra support.

'Superstition is very common in sport,' says sports psychologist Dr George Sik. 'Athletes use it so they can rely on something else other (5) ____ their own consciousness. Superstition means being in control, adding a safety net. If you convince (6) ____ that you are in luck, you'll boost your confidence and tend to perform better. And if you fail, you can always blame it (7) ____ the luck.'

So, (8) ____ they may know deep down that a 'lucky' pair of socks won't take them over the line any faster, many athletes stick to their rituals for that little bit of confidence, belief and a sense of security.

Task 2.

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. There is an example at the beginning (0).

- 0 She will often panic if there is a problem.

TENDENCY

She _____, *has a tendency to panic if there is a problem* .

- 1 I was surprised when he said he wouldn't work overtime.

REFUSAL

His _____ .

- 2 Don't bother to read that book.

WORTH

It _____ .

- 3 Shall I carry your bag for you?

LIKE

Would _____ ?

- 4 He tried very hard to give up junk food.

EFFORT

He _____ .

- 5 I'm very grateful to you for coming at such short notice.

APPRECIATE

I really _____ .

- 6 I found it impossible not to laugh when he said that.

HELP

I _____ .

Task 3.

Look at the idioms and add the missing colour.

- | | |
|---|---|
| 1. There's too much tape. | 7. I was black and all over. |
| 2. Let's paint the town | 8. He's the-eyed boy. |
| 3. He'll scream murder. | 9. She was caught-handed. |
| 4. That's like a rag to a bull. | 10. It was a-letter day. |
| 5. Ask till you're in the face! | 11. It was a bolt out of the |
| 6. I do it once in a moon. | 12. I got the carpet treatment. |

ANSWER SHEET

Use of English

ID number _____

Task 1

1	A	5	D
2	A	6	D
3	A	7	D
4	A	8	D

Task 2

1	
2	
3	
4	
5	
6	

Task 3

1		7	
2		8	
3		9	
4		10	
5		11	
6		12	

Writing

Time: 45 min.

A student website has asked readers to write a review of a website that they have found useful in their studies. The review should outline the content of the website, explaining why the reader has found it useful. It should also state how the reader would like to see the website develop in future.

Write your **review** (200-250 words).

The specific points here are:

- naming a real website and outlining its contents
- explaining how you have found it useful
- suggesting how the website might usefully be developed in future
- final comments and recommendation

Write your review (200-250 words).

