

Test 2

READING AND USE OF ENGLISH (1 hour 30 minutes)

Part 1

For questions 1–8, read the text below and decide which answer (A, B, C or D) best fits each gap. There is an example at the beginning (0). Mark your answers on the separate answer sheet.

Example:

0 A crammed B crushed C massed D piled

0	A	B	C	D
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reading the slow way

It's 7 pm and I'm sitting in a café I've never been in before. It's (0) with people, but nobody's talking. Nothing (1) about this in a big city, but we're not just sitting there ignoring each other. (2) the opposite; we're all reading together, silently, in a 'Slow Reading Club', an idea from New Zealand. (3) our lives, clearing some mental (4) where our attention is not constantly divided between ten different things is the trend of the moment, but it's not easy to (5)

The Slow Reading Club aims to meet that challenge by encouraging people to apply the same discipline to reading as to going to the gym or completing a task at work. The rules are (6) straightforward: bring a book and (7) yourself in it the way you did as a child. I've brought a thriller which has lain (8) on my bookshelves for years. At the end of our hour, we're told it's time to stop reading and it feels like emerging from a deep sleep. I'm off home to carry on reading.

- | | | | | |
|---|---------------|--------------|---------------|-------------|
| 1 | A contrary | B abnormal | C variable | D disparate |
| 2 | A Fully | B Thoroughly | C Wholly | D Quite |
| 3 | A Simplifying | B Relieving | C Moderating | D Relaxing |
| 4 | A place | B span | C space | D area |
| 5 | A deliver | B attain | C perform | D acquire |
| 6 | A exactly | B rather | C thereby | D somewhat |
| 7 | A lose | B place | C concentrate | D free |
| 8 | A negated | B deserted | C declined | D neglected |

Part 2

For questions 9–16, 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).

Write your answers **IN CAPITAL LETTERS on the separate answer sheet.**

Example: 0 T O

Discovering new material

Vulcanised rubber, celluloid and plastic – these materials were, (0) a certain degree, invented by accident. In fact, the history of materials can be described (9) a history of accidents, but this is not as catastrophic as it sounds. (10) the beginning of scientific investigation, scientists have stumbled across new and wonderful materials in (11) course of exploring something completely different. But this chance discovery of useful materials (12) undergoing a change.

Scientists sitting at their desks, now turn to computers to design materials and to work out their properties long (13) they need to go anywhere near a laboratory. But the element of chance is still present as the ultimate application of these new materials remains tentative. (14) scientists are confident about is that each has the potential to be revolutionary. The race is now on to make these materials reality. (15) the history of materials is any guide, how we eventually use them will, (16) part, be discovered accidentally.

Part 3

For questions 17–24, read the text below. 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**. There is an example at the beginning (0). Write your answers **IN CAPITAL LETTERS on the separate answer sheet.**

Example: 0 A P P R E N T I C E S H I P

“Mouseman”

The furniture maker, Robert Thompson, was born in 1876. As a young man he started an engineering (0) He described this time as like a prison sentence with harsh, (17) conditions. This experience resulted in him taking the decision to work (18) his father, who was making handcrafted oak furniture following traditional methods. Following his father’s death in 1895, Robert was left with full (19) for the family business.

The company decided to include a (20) of a mouse on all its items of furniture as a sort of logo. This gave Thompson the nickname, “Mouseman”, which remains the (21) trademark of his company’s furniture.

Time-honoured methods are still used for the (22) of the furniture and any upholstery is always made of the highest quality leather, (23) to water and other stains. The company is still run by the Mouseman’s (24) , and now enjoys worldwide distribution of its products.

APPRENTICE

TOLERATE

ALONG

RESPONSE

CARVE

DISTINCT

ASSEMBLE

RESIST

DESCEND

Part 4

For questions **25–30**, 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.** You must use between **three** and **six** words, including the word given. Here is an example (0).

Example:

- 0 James would only speak to the head of department alone.

ON

James to the head of department alone.

The gap can be filled with the words 'insisted on speaking', so you write:

Example: 0 INSISTED ON SPEAKING

Write **only** the missing words **IN CAPITAL LETTERS** on the separate answer sheet.

- 25 The tutors said we can't use the computers in the library for anything except assignments.

MEANT

The tutors said we use the computers in the library for anything except assignments.

- 26 No other students apart from Martha were selected for the trip overseas.

BE

Martha was selected for the trip overseas.

- 27 She loved the book, but she wondered whether the events were historically accurate.

ACCURACY

She loved the book, but she wasn't the events.

- 28 Most people these days would be completely lost without their mobile phones.

IDEA

Most people these days would manage without their mobile phones.

- 29 Pat realised that trying to sleep before the neighbours' party ended was a waste of time.

POINT

Pat realised that trying to sleep before the neighbours' party ended.

- 30 If you hadn't taken me to the station, I wouldn't have caught my train.

GIVING

But to the station, I wouldn't have caught my train.

Part 5

You are going to read a newspaper article about food. For questions 31–36, choose the answer (A, B, C or D) which you think fits best according to the text.

Mark your answers on the separate answer sheet.

The food scientist

Alice Baines meets the influential food scientist Charles Spence

Charles Spence will eat just about anything. 'We've got ice cream made from bee larvae at home,' says the Professor of Experimental Psychology in his office at Oxford University in the UK. They may be maggoty in appearance, but they apparently have a 'slightly nutty, floral' flavour. How to make bug-eating acceptable is just one of the many gustatory challenges that Spence and his team are tackling. Through his studies into how the senses interact to form our perception of flavour, Spence is influencing, in a stealthy but not inconsiderable manner, what we eat and drink, from the hefty output of food-industry giants (he sits on the scientific advisory board of one well-known multinational conglomerate, and receives funding from another), to the menus of leading restaurants.

Spence and his peers have, through a line of scientific inquiry that is informally referred to as gastro physics, studied in minute detail how we experience food and drink. Who we eat with; how food is arranged and described; the colour, texture and weight of plates and cutlery; background noise – all these things affect taste. Spence's book, *The Perfect Meal*, written with Betina Piqueras-Fiszman, is packed with insights that are fascinating to anyone in possession of an appetite.

Were you aware that the person in a group who orders first in a restaurant enjoys their food most? And did you realise that we consume about 35% more food when eating with one other person, rising to 75% more when dining with three others?

Spence's lab in Oxford is noticeably un-space-age. 'Low-tech, paper and drawing pin stuff,' he readily admits. There are soundproof booths that resemble human-sized safes ('most of my PhD was done in one of those,' he says fondly), along with stacks of ancient-looking audio-visual equipment. By keeping overheads low, he can afford to work more creatively with cooks who can't fund academic research themselves. Much of his work is funded by a major food multinational. Historically, he says, undertaking research which attracts industry funding has been seen in university circles as 'what you do if you can't do proper science'. But since the government insisted that universities demonstrate their work has an impact and that people are interested in it, this type of research has become a strategically good thing to do.

Spence is currently helping famous brands through (often government-imposed) reductions in salt and sugar. It is in their interests, he points out, to help loyal customers stay alive for longer. Perhaps surprisingly, many have been making these reductions furtively, behind closed doors. They do it gradually, so regular consumers don't notice the difference from one pack to the next. 'The research shows that when you tell people what you're doing, it makes them focus on the taste and for whatever reason they don't like it as much,' he says.

It was while working on a project for a major food producer that Spence was first introduced to Heston Blumenthal, the renowned experimental chef. 'At the time, people thought: "Science and food – that's horrible," although most food is scientific, in fact. Who better to change the mindset than Heston?' It was through Blumenthal's collaborations with Spence, who had been studying the effects of sound on flavour, that the 'Sound of the Sea' dish came about in Blumenthal's five-star restaurant. Interestingly, Spence says that members of the early-twentieth-century art movement, the Italian futurists, were 'doing sounds of croaking frogs with frogs' legs a century ago', but that it didn't catch on.

Now the food industry is applying Spence's sensory science to products left, right and centre. This includes his recent findings that higher-pitched music enhances sweetness, and lower-pitched and brassy sounds make food taste bitter. 'It's always surprising when shapes affect taste, or when a tune can impact on how you perceive a flavour,' he says. An airline will soon be matching music with food served to passengers. And last year, a well-known brand released a smartphone app that plays a concerto while your ice cream softens; they omitted to match the music to the taste, though, which is all too frequently the case according to Spence.

What, one wonders, are dinner parties like in the Spence household? There was the time they ate rabbit, with the fur wrapped around the cutlery. And the one at which they played with remote-controlled, multi-coloured light bulbs. 'We've had dinner parties with a tone generator, headphones and ten different drinks lined up to see whether they have different pitches.' Home, sweet shops, food conventions, international gastronomy conferences: they're all extensions of the lab to Spence.

31 Which word in the first paragraph is used to indicate distaste?

- A maggoty (line 4)
- B gustatory (line 7)
- C stealthy (line 10)
- D hefty (line 11)

32 What does the writer suggest about Spence's work in the fourth paragraph?

- A Small-scale projects have brought it most success.
- B It is less forward-looking than might be expected.
- C Perceptions of its value have changed.
- D It suffers from inadequate resources.

33 What point does Spence make about major food companies in the fifth paragraph?

- A They should pay less attention to public opinion.
- B They will benefit in the long term from selling healthier goods.
- C They are reluctant to invest in developing new products.
- D They have been too secretive about the way they work.

34 Spence's view of Heston Blumenthal is one of

- A enthusiasm for his links with innovators from the past.
- B admiration for his influence on ways of thinking about food.
- C fascination for his involvement with large food manufacturers.
- D respect for his thorough knowledge of science.

35 Spence is concerned that his ideas

- A are being developed in unexpected ways.
- B seem too challenging to be widely accepted.
- C appear to attract the wrong sort of organisations.
- D are often applied in a way that neglects some details.

36 What does the final paragraph highlight about Spence?

- A the commitment he shows to his research
- B the unpredictable nature of his character
- C the talent he has for entertaining people
- D the busy daily schedule he follows

Part 6

You are going to read four extracts from articles in which university professors give their views on choosing a degree subject. For questions 37–40, choose from the extracts A–D. The professors may be chosen more than once.
Mark your answers on the separate answer sheet.

Choosing a degree subject: STEM (Science, Technology, Engineering and Maths) or the Arts?

- A In recent years there has been a steady stream of industry bosses trying to persuade students to opt for STEM courses. This is presumably an attempt to suppress the wages of those already employed in the area as, in reality, there is no shortage of STEM graduates seeking employment. The biggest problem such graduates face is the fact that their qualifications point them exclusively in one direction. Many were no doubt attracted to their course by the promise of an enviable salary, despite the fact that a recent survey indicated that those who studied arts subjects make on average between one and two thousand pounds per annum more than their STEM counterparts. This is unsurprising, given that employees trained in the arts bring an alternative point of view in day-to-day decision making. The scientific way of looking at problems, with its emphasis on logic and reason, is valuable of course, but it can be limiting.
- B Traditionally, students were told that maths and the sciences were just for those who wanted to go into a mathematical or scientific profession. Of course, now we know that couldn't be further from the truth. These are the courses that can unlock the doors to all sorts of jobs, and equip graduates to win the top positions and potentially reap the financial rewards, particularly at a time when politicians are promoting STEM as an engine for innovation and national defence. However, when HR managers are asked what kind of skills they look for when recruiting, the majority list critical thinking, complex problem-solving and written and oral communication – in other words, the skills gained from an arts education. That's why I advise those who are in doubt to go with their heart. It's worse than useless to push a student into a subject in which they have little talent or pleasure on the basis of a lifetime's extra earnings.
- C The reason we've been hearing so much lately about the importance of STEM subjects is that our world is changing beyond recognition, and we need to ensure that our graduate workforce keeps up. The skills gained from these subjects come in useful in almost any area you care to name, from the creative industries to architecture, as well as the more obvious technical and scientific professions. I don't think it's an exaggeration to say that doing arts at university is a decision that will hold students back when it comes to seeking employment nowadays. It is pure indulgence to select a higher education course based simply on what you enjoy. Students need to acquire the skills and knowledge that will allow them to be competitive in the jobs market.
- D Arts subjects train students to perform well in a world of subjectivity and ambiguity, a vital skill, since commercial decisions rarely involve a right or wrong answer. We've all heard stories about people who invest thousands in their arts-based education and then end up in a dead-end job, but when it comes to deciding on what to do at university, remember that those who are passionate about what they do are better placed to succeed in life. While it's true that a maths graduate may well take home extra over their working life compared to an English graduate, it's only about a thousand a year – little compensation if you're doing a job you loathe. In any case, it's becoming increasingly obvious that companies are looking for ways to avoid paying STEM professionals so much. An oversupply of such workers would be to their advantage, as it would push wages down, hence their constant call for more students with STEM degrees.

Which professor

- has the same opinion as B on which degrees can lead to higher earnings?
- has a different opinion from the others on whether having studied for an arts degree is an advantage in the workplace?
- has a different opinion from D on how a student should choose a degree subject?
- has the same opinion as D on who or what is responsible for the current emphasis on STEM subjects?

37	
38	
39	
40	

Part 7

You are going to read a newspaper article about a holiday in Costa Rica. Six paragraphs have been removed from the article. Choose from the paragraphs **A–G** the one which fits each gap (41–46). There is one extra paragraph which you do not need to use. Mark your answers on the separate answer sheet.

Costa Rican holiday

Not again. It's the third morning in succession we've been woken by howler monkeys. The noise invades your consciousness like some distant wind and builds into a sustained roar until you fling off the sheets and sit up, cursing. Awake, you can hear the throaty rasp. The volume is astonishing: this is reputedly the loudest voice on the planet yet it comes from an animal no larger than a cat.

41

Later on that morning, strapped into harness and helmet and slightly regretting my immense breakfast, I find myself standing on a narrow platform overlooking the forested gorge. A steel cable arcs down through the trees to some invisible point on the other side. This seems the last chance to voice my fears, were it not for the fact that my nine-year-old daughter is already clipped on ahead of me. The last thing I see as she launches into the void is her grin.

42

As I zigzag down from platform to platform I can relax enough to appreciate the gurgle of the river and the chorus of birdsong. There is even time to spot a troop of howler monkeys in the crown of a fig tree. By the time we swing off the final platform, fun has definitely conquered fear.

43

'They control our climate,' our guide Daniel Monge had told us on day one. He had showed us on our map how Costa Rica's peaks line up to form a barrier down the spine of the country. The eastern slopes, which fall away to the Caribbean,

get most of the rainfall and are carpeted in lush tropical rainforest. The western Pacific slopes lie in the rain shadow, so their forests are more arid.

44

By afternoon, the skies had cleared, giving us picture-book views of Turrialba, the next volcano on our route. An ominous plume of smoke rose from the summit, and the Lodge, our stop for the night, was directly below. 'Don't worry,' said Daniel, 'it's been doing that for three years.'

45

From that experience to watching how sugar was made seemed a natural leap. We joined a group to watch as the estate's two oxen turned a huge mill wheel that crushed fresh cane to a sticky pulp. The children's eyes widened as the first fresh juice was boiled up into a slow-bubbling gloop of golden molasses, then the raw sugar was spread, chopped and sifted.

46

For our last two days, we descended from Rincón de la Vieja to our hotel in Playa Panama. It turns out to be perfect: the lush grounds, the huge pool, the lavish breakfast and the warm ocean just beyond. How better to wind down before the flight home? There's only one problem, and it comes at 5.03 am on our final morning: a thunderous wake-up call courtesy of the planet's noisiest primates. I pull my pillow over my ears.

- A** Our next stop was on neither of these, however, but in the misty highlands that divide them. We drove up a hairpin ascent to Costa Rica's highest active volcano. On a good day, you can see both coasts from here. We had no such luck, but the swirling mist allowed glimpses into the flooded crater.
- B** Still, an early start is no bad thing. So far, we've needed every minute of daylight to get through our breathless itinerary, and our time at this guest house promises to be the most action-packed yet.
- C** That evening, inspired by what we'd seen, we cooked our own Costa Rican meal. Our hosts provided ingredients and instructions, and then kept a discreet distance as we sliced, mashed, drizzled and seasoned to produce our best shot at a traditional supper.
- D** But you don't need a guide to find Costa Rica's wildlife. In fact, you don't even need to go looking for it. So exuberant is nature in this part of the world that wild creatures form an unavoidable backdrop to whatever else you might get up to.
- E** The next morning, with these anxieties having proved unfounded, we wound further down through the coffee plantations in the sunshine to the estate of Tayutic. Here, my daughter helped to sort good macadamia nuts from bad as they rattled down the chute, then attempted to crush dried coffee beans in a stone mill.
- F** Admittedly, this would feel even more daunting if we hadn't done this already a few days ago, on the slopes of Arenal Volcano. Then, I found it terrifying, hurtling at unnatural speeds high above the canopy. Now I'm a little more confident.
- G** But before I can glory in my success, we're making our way to a hot springs resort, the penultimate stop on our two-week Costa Rican adventure tour. Like the other volcanoes we've seen in the country, the one near here belches sulphurous smoke.

Part 8

You are going to read an article about the difficulties associated with authenticating paintings by the 17th-century Dutch painter, Rembrandt. For questions 47–56, choose from the sections (A–D). The sections may be chosen more than once.
Mark your answers **on the separate answer sheet**.

Which section mentions

a cumulative reaction?

47

a lack of complaints among a particular group?

48

a failed attempt to democratise a process?

49

a common method for settling a debt?

50

a shift in educational policy?

51

a scientific process used to verify an opinion?

52

a belief held where the negative aspects of a painting outweigh the positives on balance?

53

a gesture attributed to a thought process?

54

an opinion expressed to put an end to a trend?

55

a false hypothesis devised with hindsight?

56

How to identify a genuine Rembrandt

Many of the Dutch painter's work are still disputed by art scholars – but why are they so hard to authenticate?

A When, in 1950, the 11th Duke of Devonshire was hit with a massive £7 million inheritance tax bill from the Collector of Taxes in the UK, he did what many stately homeowners do and gazed up at his walls to see what art might be sold. The Duke found that he had three Rembrandts, and suggested one of them in part-payment of the tax. Thus in 1957 a fine, signed Rembrandt, *Old Man in an Armchair*, went on display at the National Gallery in London. Barely a decade later, however, the picture was downgraded to being painted by 'a follower of Rembrandt'. 'Imposing as the mood is,' said the art historian Horst Gerson, 'the overall structure of the picture is very weak, even contradictory with divergences not to be found in Rembrandt's portraits from this great period'. Ever since, the picture has been largely ignored. Yet recently, Ernst van de Wetering, the world's leading authority on the artist, said the picture was, after all, by Rembrandt. 'It is a very important painting', he says, 'a painting about painting' that heralds reinvention in Rembrandt's technique in the 1650s. Van de Wetering believes Gerson made 'a vast mistake'.

B The fact that *Old Man in an Armchair* should not be treated as a portrait commissioned by a patron is crucial here. It's an observation of life, not intended as a likeness to the patron. To help depict this, Rembrandt allowed himself greater freedom with the brush than usual. We don't need to focus on the dress, so it is painted fluidly and rapidly. The right hand is beautifully weighted: we can be sure the sitter is not holding his head but absent-mindedly touching it, as one does in pensive moments. This different opinion, however, was greeted with indifference. What had happened? Put simply, Rembrandt connoisseurship – the ability to tell who painted what by close inspection – had imploded. The Rembrandt Research Project had been established with an admirable objective: namely, to say what was and what was not a genuine Rembrandt. But two key factors spelt doom for this approach. Firstly, it tried to make attributions by relying on a committee, thus allowing for indecision and group-think to reign. Secondly, connoisseurship itself became unfashionable

and was seen as a redundant, elitist practice, no longer taught as a key skill in training art historians and curators.

C As the Project members began to cast doubt on the authenticity of some of Rembrandt's paintings, others joined in too, including major museum curators. Rembrandt experts became gripped with uncertainty – if opinion of picture X was no longer 'right', then surely pictures Y and Z, which were painted in a similar manner, must also be 'wrong'? Sometimes, rejections were made on the flimsiest of grounds: some paintings were downgraded, not because they didn't look like Rembrandt's late work, but because X-rays suggested that underneath the paintings there were signs of an unusual technique. And so it went on, until Van de Wetering saw that the madness had to stop. 'The Project had failed', he said, 'it was no good'. The latest 'official' number of Rembrandts is 340 which is believed by some still to be too few. It is pointed out that Van Dyck, not an especially rapid painter, is credited with about 750 works, and he died aged forty-two. Rembrandt lived until he was sixty-three.

D What then continues to hold back art historians and museum curators? Rembrandt scholars have convinced themselves that Rembrandt added his signature to works painted entirely by his many studio assistants in order to make money as quickly as possible. But there is no clear evidence for this; it is a theory that has been created. Rembrandt was more scrupulous than many scholars believe. It is known that Rembrandt was aware of how sensitive the matter of attribution was for patrons – at least twice Rembrandt was asked to adjudicate on work by other artists where it was suspected that they had added their signatures to work that was not their own. There is not a single case of one of Rembrandt's studio assistants grumbling about their master passing off their work as his own. Finally, it might be asked who were all these mysterious, supremely talented 'followers of Rembrandt' who have left no trace of any independent work: is it possible that they did not exist?