





MATURITA 2024

EXTERNÁ ČASŤ

ANGLICKÝ JAZYK úroveň C1

**NEOTVÁRAJTE, POČKAJTE NA POKYN!
PREČÍTAJTE SI NAJPRV POKYNY K TESTU!**

- Test obsahuje **90 úloh**.
- Na vypracovanie testu budete mať **150 minút**.
- Na začiatku každej úlohy sa z inštrukcií dozviete, ktorý odpoveďový hárok máte použiť.
- V teste sa stretnete s dvoma typmi úloh:
 - Pri úlohách s výberom odpovede vyberte správnu odpoveď spomedzi niekoľkých ponúkaných možností, z ktorých je vždy správna iba jedna. Správnu odpoveď vyznačte krížikom do príslušného políčka odpoveďového hárka označeného piktogramom .
 - Pri úlohách s krátkou odpoveďou, ktorých odpoveď tvorí jedno slovo (prípadne zložený slovesný tvar) alebo niekoľko slov, píšete do príslušného políčka odpoveďového hárka označeného piktogramom .
- Pri práci smiete používať iba pero s čiernou alebo modrou náplňou. Nesmiete používať zošity, slovníky, učebnice ani inú literatúru.
- **Podrobnejšie pokyny na vyplňovanie odpoveďového hárka sú na poslednej strane testu. Prečítajte si ich.**

Želáme vám veľa úspechov!

Začnite pracovať, až keď dostanete pokyn!

SECTION I
LISTENING
30 points

This section of the test has three parts. You will hear four recordings which you will listen to twice. While listening, answer the questions in the appropriate part of the test.

Part 1: Two Interviews (10 points)

*In this part, you will hear two different extracts. In the first extract, you will hear an interview with Dr Julie Smith, a clinical psychologist. In the second extract, you will hear an interview with David Gray, a singer and ecologist. For the following statements 01–10, choose the correct answer (A), (B), (C) or (D). There is always only **one** correct answer.*

Mark your answers on the answer sheet labelled with a .

Now you have 2 minutes to read the tasks.

Extract 1: An Interview with Dr Julie Smith (5 points)

01 Julie Smith started her therapies in the garden because .

- (A) her clients preferred such an environment
- (B) her clients were less stressed there
- (C) she had conducted research about that
- (D) she wanted to balance things in her life

02 Julie Smith's TikTok videos were .

- (A) produced on her clients' demand
- (B) inspired by her husband
- (C) successful on YouTube as well
- (D) difficult to create at first

03 According to Julie, every video should .

- (A) be funny and entertaining
- (B) contain an individual story
- (C) bring innovative solutions
- (D) convey some meaning

04 The response of other professionals to Julie's videos has been .

- (A) critical
- (B) supportive
- (C) hesitant
- (D) controversial

05 For Julie, featuring on videos and becoming popular meant .

- (A) getting used to her new status
- (B) following her planned professional career
- (C) developing her creative skills
- (D) fulfilling her professional ambitions

Extract 2: An Interview with David Gray (5 points)

06 David Gray decided to buy a cottage in Norfolk because .

- (A) it had a studio and some other facilities as part of its interior
- (B) it was the best financial deal he had ever negotiated
- (C) it represented the kind of environment he identified with
- (D) its location was suitable for composing his songs there

07 The reason David Gray cooperates with the *Norfolk Wildlife Trust*, is that .

- (A) it can take measures to protect his beloved birds
- (B) it has initiated different wildlife programmes
- (C) its employees are doing research on Norfolk birds
- (D) its active volunteers have a similar outlook on life

08 In his album *Skellig*, .

- (A) each song is named after one island
- (B) each song is inspired by a different species
- (C) one song includes a real animal sound
- (D) one song's lyrics contain Irish dialect words

09 While touring, David Gray insists on .

- (A) coming up with some practical ecological ideas
- (B) reducing carbon footprint by not flying so much
- (C) sorting out waste and saving electricity
- (D) supporting his ecological approach on the stage

10 David Gray believes that artists should .

- (A) campaign more actively for ecological issues
- (B) lead discussions with their fans about nature
- (C) spend more money on saving animals and plants
- (D) influence people through meaningful messages



Part 2: Getting Rid of Bad Habits Leads to Self-Improvement (10 points)

In this part, you will hear a radio programme in which a psychologist explains how you can get rid of old habits and change your personal and professional life. The expert will mention five bad habits and five solutions how to change them. There are two blocks of five matching questions. You will have to match all ten questions while you are listening to this recording. Read the questions carefully before you listen.

*For questions 11–15, choose from the first list marked (A)–(H) the bad habit which is being described. For questions 16–20, choose from the second list marked (A)–(H) the practical solution to stop this habit. Be careful, there are **three** extra possibilities which you do not need to use. There is always only **one** correct answer.*

Mark your answers on the answer sheet labelled with a .

Now you have 2 minutes to read the tasks.

1 st LIST	
Questions 11–15	Options (A)–(H): BAD HABITS
<p><input type="checkbox"/> 11 Bad habit No 1: <input type="text"/></p>	<p>(A) Shouldering responsibility for everything.</p> <p>(B) Constantly checking your phone.</p> <p>(C) Becoming angry because of acts of unfairness.</p> <p>(D) Comparing yourself with people around you.</p> <p>(E) Having unrealistic expectations.</p> <p>(F) Becoming pessimistic after focusing on negative experiences.</p> <p>(G) Analysing things too much or too long.</p> <p>(H) Getting upset very quickly.</p>
<p><input type="checkbox"/> 12 Bad habit No 2: <input type="text"/></p>	
<p><input type="checkbox"/> 13 Bad habit No 3: <input type="text"/></p>	
<p><input type="checkbox"/> 14 Bad habit No 4: <input type="text"/></p>	
<p><input type="checkbox"/> 15 Bad habit No 5: <input type="text"/></p>	

2nd LIST

Questions 16–20

Options (A)–(H): SOLUTIONS

16 Solution No 1:

17 Solution No 2:

18 Solution No 3:

19 Solution No 4:

20 Solution No 5:

(A) Respond to emails regularly.

(B) Notice people with a positive approach.

(C) Focus on things you can influence.

(D) Be open in communication.

(E) Assess the circumstances of other's behaviour.

(F) Think about what makes you special.

(G) Avoid conflict situations.

(H) Divide your responsibilities.



Part 3: Falu Shah and Her New Business Brand (10 points)

You will hear Falu Shah, an entrepreneur, talking about her new business brand Howdah. Complete the sentences 21–30, which summarize the information from the text. Use from **one** word to **three** words in your answers (the number of words is indicated in brackets).

Write your answers on the answer sheet labelled with a .

Now you have 2 minutes to read the sentences.

<p>21 Falu Shah realized that there was a lack of <input type="text"/> <input type="text"/> <input type="text"/> in the UK supermarkets.</p>	<p>(3 words)</p>
<p>22 The <i>Howdah</i> brand intends to provide a combination of the vivid <input type="text"/> of India with Ayurvedic <input type="text"/>.</p>	<p>(2 words)</p>
<p>23 One of the things Falu Shah didn't have any previous experience with, was improving the <input type="text"/> <input type="text"/>.</p>	<p>(2 words)</p>
<p>24 Due to <i>Harvey Nichols</i>, <i>Howdah</i> products were brought to the <input type="text"/>.</p>	<p>(1 word)</p>
<p>25 <i>Ocado</i> was one of the <input type="text"/> <input type="text"/> that cooperated with <i>Howdah</i>.</p>	<p>(2 words)</p>
<p>26 After achieving rapid sales with customers, <i>Howdah</i> was given a/an <input type="text"/> <input type="text"/> by <i>Sainsbury's</i>.</p>	<p>(2 words)</p>
<p>27 <i>Howdah</i> and <i>The Akshaya Patra</i> foundation share a common goal of stopping <input type="text"/> <input type="text"/>.</p>	<p>(2 words)</p>
<p>28 The meal provided by <i>Howdah</i> for Indian schools, is very often the only <input type="text"/> dish in children's daily consumption.</p>	<p>(1 word)</p>

29 For *Howdah*, giving back and sharing equals being answerable (2 words)
and .

30 *Howdah's* refreshments use only natural ingredients and are . (1 word)



SECTION II
LANGUAGE IN USE
30 points

This section of the test has two parts. To complete this section of the test, you will need approximately 40 minutes.

Part 1: From Bath to Shaftesbury (20 points)

*Read the following text and decide which word or phrase (A), (B), (C) or (D) best fits into each space numbered 31–50. There is always only **one** correct answer. There is an example at the beginning (00).*

Example: (00) – (C)

Mark your answers on the answer sheet labelled with a .

Spa culture, rivers, caves, cliffs, cathedrals, cheese and cider are a **00** for the senses, and all in a day's drive! That's what brings tourists to Somerset and Dorset in the south-west of England.

The Roman and Georgian architectural wonders of the UNESCO World Heritage Centre of Bath **31** in the valley of the River Avon. Millions of people come every year to visit the thermal springs that fill the baths which were a **32** place for the Celts long before the Romans arrived.

As tourists leave the city on the A39 towards Wells, the landscape opens into farmland **33** by stone walls. Sheep and cows **34** the green fields, with the purple shadows of the Mendip Hills behind. On the B3135, the land starts to look less cultivated, wilder. Giant pieces of layered limestone look like **35** of fossilized bread. And then there's a sign: "Welcome to Cheddar Gorge – Please drive carefully". It's good advice, for there are already groups of **36** along the side of the road.

One side of the road is in shadow while the opposite side **37** in sunlight. It's impossible not to feel small next to the **38** cliffs standing on both sides. You can't come to Cheddar without tasting its world-famous cheese, **39** is still matured in caves in the gorge. Quiet and rather serious, Wells, England's smallest city is not a place **40**. Its cathedral is a piece of 13th century architecture. At the east end are three unusual 'scissor' arches built around 1338 to **41** the weight of a new tower. The engineering skill of medieval craftspeople is impressive.

The sense of a mystical and spiritual past continues as tourists take the A39 towards Glastonbury. To this day, the ruins of Glastonbury Abbey are said **42** the final resting place of King Arthur and Queen Guinevere, while some say that Chalice Hall is home **43** the mythical Holy Grail.

The High Street is lined with alternative bookshops and shop windows filled with crystals and candles. Bare feet, piercings, tattoos, brightly coloured clothing – Glastonbury is a celebration of **44**. A short walk from the abbey ruins, pilgrims climb the hill of Glastonbury Tor **45** a line of dark insects silhouetted against the sky.

The final part of tourists' journey leads eastwards along the A361, then south on the B3081

as they **46** the county of Dorset. Famous for its Jurassic Coast, Dorset **47** little of its charm since the author Thomas Hardy lived here. He referred to the region in many of his novels as 'Wessex'. **48** was the name of one of the ancient kingdoms of England.

The town of Shaftesbury has a fascination and **49** all its own. The shops may be closing for the night, but history never sleeps. As the sun is setting **50** the scenic south-west, there's time for a pint of refreshing local cider at the nearby Mitre pub.

00	(A) festivity	(B) celebration	(C) feast	(D) party
31	(A) have been set	(B) were set	(C) are set	(D) had been set
32	(A) devoted	(B) holy	(C) godless	(D) faithful
33	(A) edged	(B) preserved	(C) folded	(D) maintained
34	(A) graze	(B) feed	(C) grab	(D) flesh
35	(A) rounds	(B) slices	(C) cutters	(D) chunks
36	(A) watchers	(B) spectators	(C) viewers	(D) sightseers
37	(A) raises	(B) rises	(C) arises	(D) uprisers
38	(A) sharp	(B) scarped	(C) straight	(D) steep
39	(A) what	(B) which	(C) that	(D) when
40	(A) to have hurried	(B) to be hurried	(C) being hurried	(D) having been hurried
41	(A) fix	(B) keep	(C) hold	(D) lift
42	(A) to be	(B) being	(C) being been	(D) to have been
43	(A) with	(B) below	(C) in	(D) to
44	(A) difference	(B) discrepancy	(C) distinction	(D) disagreement
45	(A) as	(B) so	(C) such as	(D) like
46	(A) come	(B) arrive	(C) enter	(D) step
47	(A) has lost	(B) had lost	(C) lost	(D) is losing
48	(A) This	(B) There	(C) His	(D) Thus
49	(A) speed	(B) pace	(C) velocity	(D) fastness
50	(A) through	(B) along	(C) over	(D) by



Part 2: Embrace the Blue (10 points)

In the following text, there are some missing words numbered 51–60. Use the word given in brackets to form a new word that fits into the space in the same line. There is an example at the beginning (00).

Example: **00** – seaside

Write your answers on the answer sheet labelled with a .

It's no wonder the ancient Greeks soaked in mineral-rich thermal springs to help them feel better and **00** (sea) trips were often prescribed by doctors during Victorian times. And it seems they were on to something because now there's a body of science-led evidence to prove that water can indeed heal.

The positive effects of being in and around water can have a huge impact on our health and **51** (being). The term 'blue space' is used to refer to our oceans, seas, rivers, lakes, ponds, streams and **52** (water) – but it can include all kinds of water. The idea is that both **53** (coast) and natural water environments can be used specifically to increase physical activity, reduce stress, and play an important role in helping to build stronger communities. The concept was introduced more than a decade ago in the UK as an **54** (initiate) launched by the Department of Health and Peninsula Medical School in Plymouth.

One study has even found that living close to blue spaces, visiting them, or just enjoying a nice waterscape view, is associated with a reduced risk of depression, **55** (anxious) and other mental health disorders.

There's a biological reason why respite and reflection become possible in blue spaces. Levels of stress hormones adrenaline and cortisol in the body can drop, breathing regulates and the heart rate slows, so, in **56** (essential), we feel calmer and our mood improves. In this blue-mind state, it's easier to practise **57** (mindful).

Urbanites can still seek refuge in blue space. In towns and cities, we can walk by a river or canal on the way to work, or find an **58** (door) fountain to sit by as you eat lunch. Noticing the sight and sounds of moving water, we learn to tune out other stimuli.

Research reveals that spending time by water also encourages us to be more active, whether it's surfing the waves or having a **59** (river) stroll. We then can get all the physical benefits associated with exercise. Swimming in natural water may also help with depression, **60** (digestion) issues, etc.



**SECTION III
READING
30 points**

This section of the test has four parts. To complete this section of the test, you will need approximately 70 minutes.

Part 1: European Classical Music Festivals (9 points)

*In this part, there are three themed texts. For the statements 61–69, choose the answer (A)–(D) according to the texts. There is always only **one** correct answer.*

Mark your answers on the answer sheet labelled with a .

Passage 1: Birmingham (3 points)

Over three days in September 1768, the first music festival was to help raise funds to complete the new General Hospital on Summer Lane. It proved very popular and successful, but it took another event in 1778 to achieve the required funds. The hospital opened in September 1779.

From September 1784, the performances became a permanent feature and ran every three years, becoming the Birmingham Triennial Musical Festival to raise funds for the hospital.

Originally hosted in St. Philip's Church (later to become the Cathedral) or the Theatre Royal on New Street, the available venues became too small for the festival. As a result, Birmingham Town Hall was built and opened in 1834 to house it. The festival for 1832 was delayed for two years during its erection.

In 1837 Felix Mendelssohn conducted a performance of his *St. Paul* oratorio, played the organ, and played the piano part in the premiere of his second *Piano Concerto*, specially commissioned by the festival. He also appeared at the following festival, playing his first *Piano Concerto*.

For the 1846 festival, he composed and conducted the premiere of his oratorio *Elijah*, another new work commissioned by the festival. He was paid 200 guineas. *Elijah* was played at every successive festival. Mendelssohn died a year later.

The Birmingham Festival Choral Society, which was founded in 1845 to provide the chorus for the festivals and sang at the premiere of *Elijah*, is still in operation.

61 The passage states that .

- (A) the first music festival raised sufficient funds to complete a new hospital
- (B) the first music festival was held in the Town Hall
- (C) the institution providing the chorus, founded in the 19th century, still exists
- (D) the festival was transferred to St. Philip's Church on occasion

62 Felix Mendelssohn .

- (A) was asked to help other musicians with some festival compositions
- (B) composed music for several festivals
- (C) played three musical instruments at festivals
- (D) played his oratorio four times

63 We can infer that .

- (A) the organizers had to put off one of the festivals
- (B) Felix Mendelssohn wrote all the music for the festival for free
- (C) the organizer had to renovate St. Phillip's Church
- (D) *Elijah* was played at three festivals only



Passage 2: Zagreb (3 points)

Throughout its history, the Biennale has given equal weight to classical 20th-century repertoire and experimental music, encompassing various musical forms, including symphonic and chamber concerts, opera, ballet, music theatre and multimedia performances. Accompanying lectures, workshops and symposiums have also gained prominence in recent years. The Biennale has collaborated with some of the biggest international names in contemporary music, including Luciano Berio and Igor Stravinsky.

The festival gained international prominence in the 1960s and the 1970s due in large part to the ambivalent position of Yugoslavia in the political and ideological divisions of the Cold War, making it a unique gathering place for artists from both East and West. Just as its founder had hoped, it has boosted Croatian composers and musicians by accelerating their integration into world trends in contemporary music, especially through co-productions and partnerships with their foreign colleagues. It has also proved popular with the concert-going public, as almost ten thousand people see its events. The festival's popularity is partly due to symbolic ticket prices: in 2011, the entrance fee for most events was 20 HRK (€3), while the festival pass was available for 150 HRK (€20).

Approximately 70 % of the festival's funding is provided today by the Ministry of Culture and the City of Zagreb, while the rest comes through donations and the festival's income.

In 2005, the Biennale hosted the ISCM World Music Days. It hosted the World Music Days again in 2011, with the occurrence of the Biennale's 50th anniversary.

64 We can infer that .

- (A) at times, the Biennale emphasizes the 20th-century music
- (B) each festival sees at least one prominent contemporary composer
- (C) Biennale's 50th birthday was celebrated with World Music Days
- (D) the festival is fully subsidized by the Croatian Ministry of Culture

65 From the passage, we can learn that .

- (A) festivals' incomes usually constitute a major part of their budgets
- (B) workshops and symposiums have recently become more and more valued
- (C) using multimedia in festivals prevails
- (D) a Croat was the founder of the festival

66 The passage states that .

- (A) the festival has had a significant impact on Croatian composers and musicians
- (B) the festival had its high point during the Cold War
- (C) the tickets were expensive at the beginning
- (D) the 1960s and 1970s saw the festivals have little East-West contact

Passage 3: Nordic Music Days (3 points)

From the mid-19th century, at regular intervals, song festivals were arranged where choirs from all over the North met. The repertoire was decidedly 'national' – one could say that when the Nordic countries were gathered, there was a need to express national distinctiveness. But joint activities were arranged too. For example, in 1929, a choir of 1000 sang the Nordic cantata *Song of the North*, composed jointly by five composers – one from each Nordic country. The song festivals continued well into the first half of the 20th century.

The first of the true "Nordic Music Days" was held in Copenhagen in 1888, primarily emphasising instrumental and orchestral music. This was to be a forum where Nordic composers could have their works performed, and the first Festival presented works from Denmark, Norway and Sweden – among other ways in seven large-scale choral and orchestral concerts.

The following festivals were held in Stockholm in 1897 and in 1919 – again in Copenhagen, where works by Carl Nielsen, Jean Sibelius, Wilhelm Stenhammer and Johan Halvorsen were conducted. The first time the festival was held in Finnish Helsinki was in 1921. The Copenhagen 1938 festival was the last one before the outbreak of WWII.

After the war, the Nordic composers' societies joined forces to form the Nordic Council of Composers (NCC), which, immediately after its establishment in 1946, assumed the main responsibility for the Nordic Music Days. Since 1948, the festival has been held in Nordic capitals every other year. Until the 1970s, the repertoire profile was purely Nordic, but from 1974 to 1982, composers and works from a 'guest country' were invited: Poland in 1974, Canada in 1976, the GDR in 1978, the UK in 1980, and 1982 France. After this, it became a festival exclusively for new Nordic music.

- 67** At the very beginning, .
- (A) the first three festivals were held in Copenhagen
 - (B) only choirs met at festivals
 - (C) each song was composed by five composers
 - (D) each country sang one song

- 68** From the passage, we can infer that .
- (A) orchestral and instrumental music were first heard in Stockholm
 - (B) in the first true music festival, there was only music of Danish composers
 - (C) Finland first hosted the festival in the 20th century
 - (D) song festivals were held only in the 19th century

- 69** From the passage, we can learn that .
- (A) after WWII, an organization responsible for the following festivals was established
 - (B) the NCC has an equal number of members from each Nordic country
 - (C) after WWII, Nordic Music Days have been held every year with one exception
 - (D) shortly after WWII, other than Nordic repertoire was allowed to be performed



Part 2: Lyrical Landscapes (6 points)

Read the following extract. Six paragraphs have been removed from the text. Complete the missing paragraphs (A)–(G) into the gaps 70–75. There is **one** extra paragraph which you do not need to use.

Mark your answers on the answer sheet labelled with a .

The national park of Exmoor, which carpets 267 square miles of Devon and Somerset, is a microcosm of England's most iconic landscapes: moors covered with heather plants; rolling green hills dotted with sheep; fast-running rivers in deep wooded valleys; and dramatic cliffs plunging to the shoreline.

70

Many visitors' first stop is the medieval village of Dunster, pretty as a picture with its stony streets, straw-roofed cottages and fairy-tale castle located high on the hill above. This Saxon castle was the home of the aristocratic Luttrell family from 1376, who transformed it into a luxurious country home in the Victorian era.

71

Exmoor's wild beauty has drawn many romantic souls here over the years, most famously the poet Samuel Taylor Coleridge (1772–1834). Coleridge was fond of walking from his cottage in Nether Stowey across the moors to the sea.

72

The Coleridge Way allows modern-day romantics to follow in the poet's footsteps. Signposts marked with a quill pen lead the way to the bustling village of Porlock and, further down, Porlock Weir, an ancient port that's now a tiny picturesque village, sheltered beneath towering cliffs.

73

In 1797, after walking to Culbone, Coleridge stayed in a nearby farmhouse where he fell into an opium-induced trance that inspired his strange, hallucinatory poem *Kubla Khan*. The arrival of a visitor from Porlock interrupted his concentration and caused him to leave the poem unfinished, hence the phrase 'a person from Porlock' to mean the unwelcome interruption of one's creative flow.

74

The grand house, demolished in the 1970s, had an Italian-style terraced garden with tunnels built into the cliff so that tradesmen could approach the house without spoiling the view. A woodland walk and steps led down to the beach where a bath-house was built into the cliff to enable Ada to bathe in privacy.

75

Visitors to Lorna Doone Country, as it's now known, can peek into 15th-century Oare Church, scene of the novel's climactic wedding-day shooting, and seek out the Lorna Doone Farm in the picture-postcard village of Malmsmead, with its ancient bridge and ford.

(A) He was often accompanied by his friend and fellow poet, William Wordsworth. The Romantic poetry movement, rooted in reverence for the natural world and the notion that nature can set the imagination free, was born on these long countryside strolls.

(B) For a change of pace, it's a short journey (though something of a rollercoaster ride) to Lynton and Lynmouth on the coast. The dramatic, almost alpine feel of these twin towns was beloved of the Victorians, who nicknamed them 'Little Switzerland'.

(C) You can walk from here along the coast path to the hamlet of Culbone. The church here, which is the smallest in England, has a 'leper window'. It was created so those in a 16th-century leper colony could peer in during services.

(D) It's thrilling to travel between these varied terrains via the winding lanes that criss-cross Exmoor, which reveal stunning views at every turn. And it's not all about the landscape: enfolded within the hills are historic towns and villages with houses constructed from the local stone, and centuries of traditions and stories to discover.

(E) On the path to Culbone, two tunnels are all that remains of Ashley Combe House, the summer retreat of Ada Lovelace, daughter of another Romantic poet, Lord Byron. Obsessed with mathematics rather than poetry – her father called her his 'Princess of Parallelograms' – she is now considered the world's first computer programmer.

(F) Dotted with family mementos, the castle has a warm, lived-in feel that gives you the lingering sense that the Luttrells have only just left the room. Among many treasures, the jewel of the collection is a set of rare 17th-century leather wall hangings telling the love story of Antony and Cleopatra.

(G) Another writer inspired by Exmoor's wildly romantic landscapes was R. D. Blackmore (1825–1900). One of the most famous novelists of his generation, Blackmore set Lorna Doone in the mystical Badgeworthy Valley. His tale of nobles turned outlaws was based on stories of the Dounes, a family of outlaws that once roamed these hills.



Part 3: New Evidence Points to a Catastrophic Die-Off of Life on Earth 2 Billion Years Ago (6 points)

Read the following text and complete the statements 76–81 with **one** or **two** words, based on the information given in the text. The statements do not follow in the same order as the information appears in the text.

Write your answers on the answer sheet labelled with a .

You've probably heard before that Earth has witnessed five mass extinctions. It's a number taken straight from the fossil record, but that's not the whole picture, not even close.

Evidence from ancient rocks reveals the oldest die-off in our planet's history most likely occurred among single-celled organisms more than 2 billion years ago. A recent analysis now suggests that the deadly event was far more significant than any known loss of life that came after, even the dinosaur extinction. "This shows that even when biology on Earth is comprised entirely of microbes, you can still have what could be considered an enormous die-off event that otherwise is not recorded in the fossil record," says geologist Malcolm Hodgskiss from Stanford University.

Researchers describe this time as a tale of 'feast and famine', long before the rise of complex life and far beyond the fossil record. Starting 2.4 billion years ago, oxygen in Earth's atmosphere was scarce, primarily trapped in minerals or locked up in the water. Then, cyanobacteria arrived on the scene, and these tiny marine microorganisms could photosynthesise, using sunlight to 'breathe' oxygen into the air.

The Great Oxidation Event (GOE) was a feasting time as life flourished, diversified, and spread. And then, for some reason, it all came to an abrupt and catastrophic end. To figure out why, scientists at Stanford turned to a mineral called barite, found on the Belcher Islands of subarctic Canada. The landscape here has survived for billions of years, which means it holds a long record of oxygen in our planet's atmosphere.

Measuring oxygen, sulfur and barium isotopes found in these rocks, the authors found harmful oxygen isotopes occurring shortly after the GOE, some 2.05 billion years ago. This would have required a rapid reduction in the primary production of bacteria, dropping by more than fivefold and potentially by as much as 200 fold. Such a massive collapse, the authors argue, was probably triggered by a lack of critical nutrients, such as phosphorus, which is an essential factor in determining the distribution and development of cyanobacteria.

"A large decrease in nutrients likely brought about this drop supplied to the biosphere that, in turn, marked the conclusion of the GOE and led to the subsequent 1-billion-year interval characterised by markedly low and stable gross primary production compared with the modern Earth," the authors write.

The findings support the 'oxygen overshoot' theory, which suggests that when oxygen-releasing microorganisms first began to flourish in the ocean, they hit a critical peak. Their supply of nutrients could no longer sustain them, leading to a decrease in atmospheric oxygen.

The new data strengthen the idea that a nutrient famine is closely tied to atmospheric oxygen levels. “Some of these oxygen estimates likely require too many microorganisms living in the ocean in Earth’s past,” says geologist Peter Crockford from the Weizmann Institute of Science and Princeton University. “So we can now start to narrow in on what the composition of the atmosphere could have been through this biological angle.”

If the team has it right, the deadly event that struck these microorganisms so long ago would have to be one of the most pronounced biotic changes across all of Earth’s history, even more so than the instances where as many as two-thirds of all plant and animal life disappeared.

<p>76 The researchers think that the almost complete absence of <input type="text"/> was the main cause of the immense die-off.</p>	<p>(1 word)</p>
<p>77 The named scientists in this research are specialist <input type="text"/>.</p>	<p>(1 word)</p>
<p>78 The scientists have obtained lots of information from the mineral <input type="text"/> from Canada.</p>	<p>(1 word)</p>
<p>79 One of the tasks for the scientists is to find out the <input type="text"/> of the atmosphere.</p>	<p>(1 word)</p>
<p>80 Recent research indicates that there was a more noteworthy die-off on Earth than that of the <input type="text"/> <input type="text"/>.</p>	<p>(2 words)</p>
<p>81 At first, there was an acute shortage of atmospheric oxygen because it had been contained in <input type="text"/>.</p>	<p>(1 word)</p>



Part 4: Architects (9 points)

Read the following extracts and choose the paragraph (A)–(D) in which you found the information from the statements 82–90. You can use the paragraphs more than once.

Mark your answers on the answer sheet labelled with a .

(A)	<p>Although known today more for his painting and sculpture, Michelangelo was also a master architect. In fact, he was among the first to depart from the classical style and challenge traditional expectations.</p> <p>In 1523, Pope Clement VII commissioned Michelangelo to design a two-story library on top of an existing convent. Michelangelo employed radical principles in his design of the Laurentian Library in Florence, breaking rules of the classical style. For instance, he took practical elements, like brackets traditionally used as supportive structures, and used them merely for ornamentation.</p> <p>Michelangelo's most famous contribution to architecture is probably the dome of St. Peter's Basilica in Vatican City. It stands as one of the most recognizable landmarks in the world and inspired many imitators, such as the U.S. Capitol in Washington, D.C. However, the dome itself was not completed before Michelangelo died. Scholars still debate how the ultimate construction deviates from Michelangelo's plans.</p>
Michelangelo	
(B)	<p>Imhotep lived sometime between 2667 B.C.E. and 2648 B.C.E. Although he was born a commoner, Imhotep rose to become chief architect to Pharaoh Djoser of the Third Dynasty of Egypt and is known as the first architect, among other distinctions. Imhotep is credited with designing the Step Pyramid at Saqqara, a pharaoh's tomb. According to <i>Discovering Egypt</i>, this, the world's first pyramid, consisted of multiple mastabas (flat-roofed structures with sloping sides that had been the traditional pharaoh burial structures), one stacked atop the next becoming smaller each time. The result is a 62-meter-tall step structure surrounded by a massive complex that overlooked Memphis, the ancient capital. The tomb lies below the pyramid.</p> <p>To create the Step Pyramid, Imhotep invented new tools and equipment. While earlier mastabas had been made of clay brick, Imhotep used stone blocks, and the exterior was covered in limestone. Imhotep's design influenced subsequent burial structures, culminating in the later pyramids like the Great Pyramid of Giza. Thanks to his ingenuity, Imhotep, who was also recognized as a healer, was later declared a god.</p>
Imhotep	
(C)	<p>Under normal circumstances, Sir Christopher Wren would probably be known as a great architect, but he might not have gone down in history as among the most famous architects who have ever lived. However, as it happened, Wren was in the right place at the right time and possessed the right talent.</p> <p>Wren was a professor of astronomy at Oxford who came to architecture through his interest in physics and engineering. In the 1660s, he was commissioned to design the Sheldonian Theatre at Oxford and visited Paris to study French and Italian baroque styles. In 1666, Wren completed a design for the dome of St. Paul's Cathedral in London. However, one week after it was accepted, the Great Fire of London raged through the city, destroying most of it – including the cathedral.</p> <p>The Great Fire created an unexpected opportunity for Wren, who was soon at work on reconstruction. Although plans for a comprehensive reconstruction of the city soon proved too difficult, by 1669, Wren was appointed surveyor of royal works, which put him in charge of government building projects. Ultimately, he had his hand in designing 51 churches as well as St. Paul's Cathedral.</p>
Sir Christopher Wren	

(D)	<p>Known for the principle of ‘form follows function’, Louis Henry Sullivan was anxious to break free from tradition and became influential in forging distinctly American architecture. Similar to Sir Christopher Wren, Sullivan benefited from a great fire. The Great Fire of 1871 in Chicago resulted in a construction boom and afforded architects like Sullivan with work for the decades to come. As a young man, he worked briefly in the offices of famed architects Frank Furness and then William Le Baron Jenney. He was only 24 years old when he became a partner in Dankmar Adler’s firm in 1881.</p> <p>As other architects like Jenney started implementing steel to allow for taller structures, the skyscraper was born. Sullivan was instrumental in creating a new functional design for these new, tall buildings rather than sticking with old-fashioned traditions. Because of this, some refer to Sullivan as the ‘Father of the Skyscraper’ (though others ascribe this title to Jenney). Sullivan’s designs also incorporated both geometric shapes and organic elements. His most famous work is the 10-story Wainwright Building in St. Louis, built in 1890, and the 16-story Guaranty Building in Buffalo, built in 1894.</p>
Louis Henry Sullivan	

	<i>Which paragraph?</i>
82 Which architect sought ideas abroad?	LETTER: <input type="text"/>
83 Which architect learned from fellow architects?	LETTER: <input type="text"/>
84 Whose architect’s work was copied in a completely different country?	LETTER: <input type="text"/>
85 Which architect started using a new natural material at the time?	LETTER: <input type="text"/>
86 Which architect is reportedly the first to re-design a building for a traditional purpose?	LETTER: <input type="text"/>
87 Which architect designed personally for his sovereign?	LETTER: <input type="text"/>
88 Whose architect’s outstanding work was finished after his death?	LETTER: <input type="text"/>
89 Which architect had scientific interests first?	LETTER: <input type="text"/>
90 Which architect was given a title which some gave to others?	LETTER: <input type="text"/>

THE END

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Pokyny na vyplňovanie odpovedového hárka

Odpovedové hárky budú skenované, nesmú sa kopírovať, krčiť ani prehýbať.
Aby skener vedel prečítať vaše odpovede, musíte dodržať nasledujúce pokyny:

- Píšte perom s čiernou alebo modrou náplňou. Nepoužívajte tradičné plniace perá, veľmi tenko píšuče perá, obyčajné ceruzky ani pentelky.

- Riešenia **úloh s výberom odpovede** zapisujte krížikom .

- Správne zaznačenie odpovede (C)
A B C D

- Nesprávne zaznačenie odpovede (C)
A B C D

A B C D

- V prípade chybného vyplnenia údajov alebo odpovedí postupujte podľa nasledujúcich pokynov.
V žiadnom prípade nepoužívajte nový odpovedový hárak.

- Keď sa pomýlite alebo neskôr zmeníte názor, úplne zaplňte políčko s nesprávnym krížikom a urobte nový krížik.

A B C D

- Ak náhodou znovu zmeníte názor a chcete zaznačiť pôvodnú odpoveď, urobte krížiky do všetkých políčok a zaplnené políčko dajte do krúžku.

A B C D

- Odpovede na **úlohy s krátkou odpoveďou** napíšte do príslušného poľa odpovedového hárka čitateľne písaným alebo tlačným písmom. Pri použití tlačného písma **rozlišujte veľké a malé písmená**.

Neotvárajte test, pokiaľ nedostanete pokyn!