

1. - 8. sorularda, cümlede boş bırakılan yerlere uygun düşen sözcük veya ifadeyi bulunuz.

1. **Protecting your skin from the sun's harmful rays shouldn't come at the --- of underwater ecosystems, so everyone should use reef-safe sunscreen.**

- A) absence B) expense
C) casualty D) deficiency
E) irony

2. **While there are plenty of habits restaurant staffers dislike, sending food back is ----, as long as you know the correct way to do it.**

- A) fabulous B) rude
C) intense D) acceptable
E) impressive

3. **While luck is a mysterious roll of the dice that may or may not lead to big winnings in your life, some experts believe luck is not --- a matter of chance.**

- A) honestly B) ideally
C) notably D) potentially
E) merely

4. **Most research suggests you would have to eat more than 3 grams of added monosodium glutamate, popularly known as MSG, in a sitting to ---- adverse effects.**

- A) render B) experience
C) betray D) maximize
E) contend

5. **Since the beginning of time, food lovers have ---- unique flavours and perfected ways to introduce them to others, which is why we have a variety of cuisines around the world.**

- A) got off B) gone around
C) done without D) sought out
E) pulled off

6. **A new study has revealed that climate scientists ---- wrong in their calculations on how much our planet has warmed since the dawn of the industrial age as the temperature data from those times ---- imprecise.**

- A) can be proven / will have been
B) have to be proven / had to be
C) might be proven / could have been
D) are supposed to be proven / should have been
E) must be proven / would have been

7. **Scientists believe that fingerprints ---- to play an important role in our sense of touch because our fingerprint ridges ---- very useful for determining the texture of things, like the difference between velvet and sandpaper.**

- A) may have evolved / can be
B) could have evolved / have to be
C) managed to evolve / could be
D) used to evolve / would be
E) were supposed to evolve / had to be

8. **In less than 300 years, the Vikings raided and explored land in at least four continents, ---- out in every direction from Scandinavia --- civilizations across Europe and beyond.**

- A) to spread / invading
B) having spread / having invaded
C) to have spread / to have invaded
D) spread / having been invaded
E) spreading / to invade

9. - 15. sorularda, cümlede boş bırakılan yerlere uygun düşen sözcük veya ifadeyi bulunuz.

9. According to a new study, activity in the brain's "ventromedial prefrontal cortex" differs ---- people who assume the worst ---- social situations and those who don't.

- A) amid / over B) among / through
C) into / on D) between / in
E) from / to

10. While it is best to get vaccinated prior ---- the flu season, it is still beneficial to get one --- the end of the season.

- A) to / toward B) on / throughout
C) of / above D) by / onto
E) for / at

11. The idea of major cities gradually sinking into the earth sounds like the plot of a science fiction movie, ---- research shows that some of the most densely populated urban areas in the United States, like New York City and Miami, are descending into the ground at an alarming pace.

- A) so B) if
C) as though D) as
E) but

12. ---- humans have been making glass for 4,000 years, scientists are now developing techniques that will impact everything from medicine to the way we see the universe.

- A) Since B) As if
C) Only if D) Though
E) Now that

13. While Mardi Gras is celebrated in many places --- the world, certain places are more synonymous ---- the holiday than New Orleans.

- A) across / toward B) around / with
C) throughout / above D) in / onto
E) for / among

14. Amethyst, clear quartz, and citrine crystal are often marketed as stones with healing properties, but the mines that produces crystals like these may --- harm the environment ---- operate inhumane working conditions.

- A) the more / the more B) whether / or
C) neither / nor D) just as / so
E) not only / but also

15. Few of us really understand the workings of our own mind; we often behave irrationally, and do unpredictable things for reasons that are not ---- even to ourselves.

- A) dire B) vague
C) obvious D) innocent
E) proper

16. Some believe that mathematical problem-solving ability is encapsulated in a 'math gene' that endows some people with the ability to solve mathematical problems, while those who lack that gene are --- mathematical illiteracy.

- A) despite B) doomed to
C) owing to D) similar to
E) on behalf of

16. - 20. sorularda, aşağıdaki parçada numaralanmış yerlere uygun düşen sözcük veya ifadeyi bulunuz.

Simply put, polar night refers to a period of time when the Sun does not rise above the horizon for more than 24 hours. It occurs in winter north of the Arctic Circle and south of the Antarctic Circle, which are circumpolar lines **(16)** ---- latitude 66.6 degrees North and South respectively. The closer to the poles, the longer polar night lasts: at the North Pole, **(17)** ---, the Sun sets a few days after the autumnal equinox in mid-September and does not rise again until mid-March, giving the top of the world a polar night of 179 days. Farther from the poles, polar night **(18)** ---- for just 24 hours or so over the course of the winter solstice. **(19)** ---- what its name suggests, polar night is not one continuous block of pure nighttime. Sunlight is refracted over the horizon even when the sun has set, and so at many latitudes, most days may in fact be dominated by different phases of "polar twilight." As with anywhere else on Earth, the middle of the day can be lighter than other times as the Sun ascends toward and falls away from the horizon without ever rising above it: "civil twilight" may provide enough light for people to **(20)** ---- with their outdoor activities.

16.

- | | |
|--------|---------|
| A) at | B) in |
| C) for | D) over |
| E) by | |

17.

- | | |
|--------------|----------------|
| A) thus | B) however |
| C) similarly | D) for example |
| E) moreover | |

18.

- | | |
|-----------------------|-------------------------|
| A) will have occurred | B) has to occur |
| C) can occur | D) is supposed to occur |
| E) must occur | |

19.

- | | |
|----------------|-------------------|
| A) In view of | B) Unlike |
| C) Contrary to | D) In addition to |
| E) Owing to | |

20.

- | | |
|-------------|-------------|
| A) rely on | B) carry on |
| C) go off | D) make out |
| E) work out | |

21. - 28. sorularda, verilen cümleyi uygun şekilde tamamlayan ifadeyi bulunuz.

21. Although social media might feel like a specific and often new way of interacting for older generations, ----.

- A) teens are often expected to be aware of nuances to interaction social media
- B) harms inflicted by social media on teenagers should be investigated more
- C) parents might think their teen is being secretive by using closed channels on social media
- D) social media can also present teens with opportunities for experimentation and discovery
- E) it is part of an interconnected social landscape for most teenagers

22. Despite the notion that second-hand cigarette smoke only affects humans, ----.

- A) cancer is commonly diagnosed in dogs and is a significant cause of death
- B) pets that we share our dwellings with are also under great risk, such as bladder cancer
- C) more than 50% of bladder cancer cases in humans are attributed to cigarette smoking
- D) children's oral health and development are also negatively affected by second-hand smoke
- E) smoking is well understood to come with negative health outcomes for people

23. While many countries in the Tropical zone have been struggling hard to eliminate malaria transmission, ----.

- A) attaining certification is important, and Cape Verde's success will drive development there
- B) the infrastructure established for malaria elimination has bolstered the countries' health systems
- C) extreme climate events and cross-border movement may have an impact on transmission or recurrence
- D) achieving malaria-free status highlights a nation's determination and commitment
- E) the African region accounted for 94% of all cases and 96% of all deaths

24. Though it might be enjoyable and relaxing to share resting time with your pet, ----.

- A) it could come with risks to pet and human health, not to mention impacts on sleep hygiene
- B) owners now spend much more time in close contact with their pets
- C) pets increasingly have new roles and expectations in society in developed countries
- D) 45% of dogs and 60% of cats are allowed on the bed in the European continent alone
- E) encouraging your pet to sleep elsewhere, but within the bedroom could also be beneficial

25. ----, the rubble from the mass bombings was used to make 135 football pitches in east London.

- A) Despite the fact that almost 30,000 people were killed during the bombing of London
- B) Whereas there was a huge amount of rubble resulting from the heavy bombardment of London during WW2
- C) While the heavy bombing of London by Germans in WW2 caused a lot of damage to built environment
- D) Since German forces dropped 28,000 bombs and almost 3,000 V1 flying bombs and V2 rockets on London
- E) Due to the severe damage the buildings in London took during the bombardment by Germans

27. ----, the reasons behind it really boil down to the survival benefits of being liked.

- A) While there are many theories as to when and exactly how blushing evolved
- B) Because blushing may communicate a sincere apology better than other mannerism
- C) Even when the blushing is combined with more negative or off-putting facial expressions, like anger
- D) Since blushing is a physiological response, similar to why we yawn
- E) Whereas some people seem more prone to blushing than others

26. Some scientists in the research community think the Neanderthal is another us ----.

- A) because others claim the Neanderthal is not a brother or a cousin: It is an object of study
- B) whereas others think it is an archaic form of humanity, with vastly inferior intellectual capabilities
- C) although the Neanderthal has been portrayed wearing necklaces of shells and eagle claws
- D) unless the artist Neanderthal is set against its equally powerful opposite number, the pre-human of the woods
- E) as the Neanderthal can't in any case be compared with anything that is familiar to us

28. Around 717 million years ago, Earth's humid landscapes and roiling blue waters transformed into a frigid, barren world, also called Snowball Earth; ----.

- A) on the other hand, a reduction in volcanic gas emissions has been proposed as an explanation for Snowball Earth before
- B) therefore, a team of scientists thinks the planet may have been thrust into its longest ice age because less gas leaked out of volcanoes
- C) meanwhile, rusty rocks left over from some of our planet's most extreme ice ages hint at oases for survival beneath the freeze
- D) however, what exactly froze the planet nearly solid has been a mystery, as has how it remained that way for 56 million years
- E) similarly, within just a few thousand years or so, ice stretched over both land and sea, from the poles to the tropics

29. - 31. soruları aşağıdaki parçaya göre cevaplayınız.

In 1959, a Swedish engineer who was complaining about the destruction of forests to produce paper bags invented a product he thought would save the planet: plastic bags. They were stronger and cheaper than paper, and included convenient handles. Creator Sten Gustaf Thulin always carried one folded up in his back pocket to reuse as needed. He expected everyone else would do the same. But his creation was far more popular than he ever dreamed. By 1979, single-use plastic accounted for 80% of bags in Europe. By 1982, two major U.S. supermarket chains, Safeway and Kroger, had switched over, and from there, plastic bags quickly spread around the globe. Worldwide, we now use around 500 billion plastic bags a year. Ironically, Thulin's invention – meant to save the environment – has contributed to marine plastic pollution that is expected to outweigh all the fish in the ocean by 2050. Thus, today plastic pollution has become one of the most pressing environmental issues, as rapidly increasing production of disposable plastic products overwhelms the world's ability to deal with them.

29. According to the passage, which of the following is true about the intention of Sten Gustaf Thulin in creating the plastic bag?

- A) It was as evil as it turned out to be a huge environmental problem for the planet.
- B) It wasn't good since he made a lot of money out of it in later years.
- C) It was well-meaning since he wanted to do something good for the planet.
- D) It was naive as he believed that people would use the bags as disposable items.
- E) It was deliberate because he definitely wanted to harm the environment.

30. It is stated in the passage that Sten Gustaf Thulin's invention ----.

- A) caught up in a short time in Europe and then in the rest of the world
- B) took a lot of years to reverse the damage the paper bags inflicted on the environment
- C) replaced paper and cloth bags in supermarkets in Europe in 1982
- D) eventually succeeded in saving the trees together with the planet
- E) accounted for 80% of bags used in supermarkets all around the world in 1979

31. We learn from the passage that, currently, the world ----.

- A) is in debt to Sten Gustaf Thulin since his invention saved a lot of trees
- B) is at a point where there is more plastic in its oceans than fish
- C) has only one environmental problem: disposable plastic pollution
- D) is totally dependent on Sten Gustaf Thulin's company for disposable plastic bags
- E) cannot cope with the problem of disposable plastic products

32. - 34. soruları aşağıdaki parçaya göre cevaplayınız.

Wildlife tourism thrives on our fascination with animals and primates are particularly attractive animals to tourists. With their human-like faces, complex family dynamics and acrobatic antics, they are a joy to behold. But recent stories have emerged that portray monkeys in a more sinister light. Reports of "monkey attacks," "devil monkeys," or even "face-ripping, bone-biting monkeys" have become common in the media. Regardless of species or location, a major factor in monkey bites and attacks is "over-habituation." Habituation is a process used by animal researchers to gain animals' trust so they can follow and record their behaviour, with limited impact of the researchers' presence. When animals lose their fear of humans and become a nuisance, they are over-habituated. In nearly all cases of over-habituation, the main factor is human food. What people eat is irresistible to wildlife. It is nutrient-dense, easy to digest and is available in rubbish bins, unattended backpacks, or even directly from people. While over-habituation due to associating tourists with food is certainly the main driver for the reported monkey attacks, that does not mean that every person bitten or threatened by a monkey is guilty of feeding or teasing them.

32. According to the passage, wildlife tourists find primates charming because ----.

- A) they feel close to them due to their family structures
- B) these animals can do pull acrobatic tricks that are impossible for humans
- C) they find it interesting to see animals in their wild habitats
- D) these animals have similar traits to those of humans and they can perform interesting stunts
- E) this kind of tourism allows tourists to interact with different animals in the wild

33. The underlined word 'sinister' is closest in meaning to ----.

- A) various
- B) bright
- C) evil
- D) angelic
- E) dim

34. It is clearly pointed out in the passage that human food ----.

- A) is packed with all the nutrients essential for primates to survive
- B) is responsible for animals' losing their fear of humans and bothering them
- C) tastes rather bland for monkeys, so they attack tourists who offer them food
- D) is the direct consequence of over-habituation, which is the cause of monkey attacks
- E) is tempting for most primate species while other animals find it unattractive

35. - 37. soruları aşağıdaki parçaya göre cevaplayınız.

Bedbugs have been plaguing the British for at least 1,900 years, new research reveals. Archaeologists discovered the earliest evidence of the bloodsucking parasites in the U.K. at Vindolanda, a Roman auxiliary fort just south of Hadrian's Wall in England. Katie Wyse Jackson, a graduate student of archaeology at University College Dublin, made the discovery while investigating ancient insect remains at the fort. She found two thoraxes, the insects' midsections, at the lowest layers of Vindolanda, which was initially built in the late first century and was remodelled over the years. The finding supports the idea that the Romans brought bedbugs (*Cimex lectularius*) to Britain after they invaded the isle in A.D. 43. Despite the empire's fondness for frequent bathing, evidence of bedbugs has been found at other sites in England – including a Roman settlement in Warwickshire dating to the middle to late second century – and ancient Roman sites throughout Europe. In fact, a 2016 study in the journal *Parasitology* found just as many bedbugs at Roman archaeological sites as in Viking and medieval ones. Considering the Romans bathed much more frequently, the finding highlights how hard it was to eliminate these pests.

35. We learn from the passage that bedbugs ----.

- A) still pose a problem for people in the U.K.
- B) entered Britain during Viking invasions
- C) first infested Hadrian's Wall in England
- D) were a nuisance for only Vikings and Romans
- E) can still be found alive in ancient ruins

36. It can be concluded from the passage that ----.

- A) Romans deliberately brought bedbugs to Britain
- B) not every bloodsucking parasite is as harmful as bedbugs
- C) Hadrian's Wall in England is the place where bedbugs were introduced to the country
- D) Britain was most probably free of bedbugs before the Romans invaded the territory
- E) the journal *Parasitology* has a definitive role in the scientific realm

37. What is the passage is mainly about?

- A) Vikings and their co-conquests with Romans
- B) The history of how bedbugs came to the U.K.
- C) Scientific studies on the history of bedbugs
- D) The importance of Vindolanda for Romans
- E) The importance of archaeology in Britain

38. - 40. soruları aşağıdaki parçaya göre cevaplayınız.

Hundreds of chemicals stream from our bodies into the air every second. These chemicals release into the air easily as they have high vapour pressures, meaning they boil and turn into gases at room temperature. They give clues about who we are, and how healthy we are. Since ancient Greek times, we have known that we smell differently when we are unwell. While we rely on blood analysis today, ancient Greek physicians used smell to diagnose maladies. If they took a whiff of your breath and described it as *fetor hepaticus* (meaning bad liver), it meant you could be headed for liver failure. If a person's whiff was sweet or fruity, physicians thought this meant that sugars in the digestive system were not being broken down, and that person had probably diabetes. Science has since shown the ancient Greeks were right – liver failure and diabetes and many other diseases including infectious diseases give your breath a distinctive smell. In 1971, Nobel Laureate chemist Linus Pauling counted 250 different gaseous chemicals in breath. These gaseous chemicals are called volatile organic compounds or VOCs. Since Pauling's discovery, other scientists have discovered hundreds more VOCs in our breath. We have learned that many of these VOCs have distinctive odours, but some have no odour that our noses can perceive.

38. According to the passage, the chemicals in our body find their ways out easily because ----.

- A) people sweat a lot in warm climates, where room temperatures are high
- B) they are impatient to hint at our health conditions
- C) room temperature applies a lot of vapour pressure on our bodies
- D) it is a necessity for our bodies to get rid of toxic chemicals
- E) room temperature is enough to turn them into gases

39. What can be inferred from the passage?

- A) Ancient Greeks were the ones who first came up with volatile organic compounds.
- B) Liver failure and diabetes are among the hundreds of diseases ancient Greeks could spot via breath.
- C) Linus Pauling won a Nobel Prize in 1971 after he was inspired by Greek medicine.
- D) Modern medicine and the techniques used by ancient Greeks differ in diagnosing diseases.
- E) In ancient times *fetor hepaticus* meant that the victim would soon die.

40. Which could be the best title for this passage?

- A) Silent Signals: The Hidden Language of Breath and Health
- B) Breath Analysis: Decoding the Invisible VOC Symphony of Life
- C) The Aromatic Language of Breath: Unveiling Health through Odorous Clues
- D) From Odourless Vapour to Diagnostic Clues: Deciphering Breath's Secrets
- E) The Invisible Scent: Unravelling the Mysteries of Breath and Wellness

41. - 43. soruları aşağıdaki parçaya göre cevaplayınız.

The Salt March became focused on the protest of one man, Mohandas Gandhi, but it was a campaign of non-violent disobedience designed to offer thousands the chance to defy British rule in India. On March 12, 1930, just weeks after he had been part of a group declaring self-rule in India, Gandhi began a march from his home at Sabarmati Ashram to Dandi, on the coast of the Arabian Sea. He intended to arrive on April 6th and make salt, an activity that was illegal for Indians under British rule. The British monopoly on salt brought it a lot of revenue but had a major impact on the poor. Gandhi began his march with 78 others but the numbers soon increased. By the time they reached Dandi, at least 50,000 were present as Gandhi boiled soil in seawater to produce salt. His actions were copied and although official numbers weren't kept, most estimates put the number joining the disobedience by making salt well into the millions. At least 60,000 had been arrested by the end of April. By then, authorities were using violence to suppress protests. Gandhi was detained on May 5 ahead of a planned raid on a salt works. He would remain in prison until January 1931. By then, his campaign had gained global prominence. On his release, he was invited to talks with the British as an equal and the long road to independence had begun.

41. Which of the following could be understood from the passage?

- A) British rule banned Indian locals from making salt for fear of losing income.
- B) The Arabian Sea was the only place available to produce salt in India.
- C) The Salt March started as a small scale protest, with 50,000 people at first.
- D) The Salt March started as a non-violent protest, but soon protesters resorted to violence.
- E) Gandhi and his followers arrived in Dandi on April 6th.

42. It is clear from the passage that The Salt March ----.

- A) started in 1930 and continued until January 1931, when Gandhi was released from prison
- B) aimed at boiling soil in Sabarmati Ashram, the hometown of Gandhi
- C) took its name from the activity that took place at the end of Gandhi's march
- D) ended when 60,000 protesters were arrested in Dandi
- E) soon took down the British monopoly on salt production

43. The author's primary purpose is to ----.

- A) emphasize the financial impact of the British monopoly on salt
- B) chronicle the events and impact of the Salt March led by Gandhi
- C) highlight the violent suppression of protests by British authorities
- D) describe the global prominence gained by Gandhi's campaign
- E) analyse the economic reasons behind the illegal salt-making activity

44. - 48. sorularda, karşılıklı konuşmanın boş bırakılan kısmını tamamlayabilecek ifadeyi bulunuz.

44. Patient:

— I have a panic attack problem, but it hits me mostly at night, while I am asleep.

Psychologist:

— That is what we call nocturnal panic attack. Sufferers wake up with their heart racing and nauseous, wondering if they are dying or having a heart attack.

Patient:

— ----

Psychologist:

— There are many ways. What we feel before sleep often affects how we feel during sleep. As you are drifting to sleep or in the hours prior try to access something relaxing like soothing music or time with a pet. You can start doing this.

Patient:

— **Alright. I will try that. Thanks a lot.**

- A) I didn't even know the name of the condition. Please tell me more about it.
- B) That's it! An hour later, the episode passes, but falling back to sleep might be rough.
- C) I experience exactly what you've just said, but I don't know how to stop it.
- D) Some say physical conditions such as sleep apnea can sometimes mimic nocturnal panic attacks.
- E) I guess I am not alone in this; some friends of mine have also mentioned similar episodes.

45. Dave:

— You know the giant crater in the Yucatan Peninsula, don't you?

Josh:

— Of course I do. It was caused by the giant asteroid strike that wiped out dinosaurs and helped birds evolve into many species we know today.

Dave:

— ----

Josh:

— What? If it is proven, this will ruffle a few feathers, won't it?

Dave:

— Tell me about it. This might well mean this catastrophe didn't have much impact on modern birds and their evolution.

- A) Then, brace yourself: a new study claims that birds began diversifying tens of millions of years before the fateful collision.
- B) Well, based on the fossil record, palaeontologists have long argued that the asteroid's impact was followed by a big pulse of bird evolution.
- C) Yes. The mass extinction of other animals may have eliminated a lot of competition for the birds, giving them the chance to evolve.
- D) But the devastation of the asteroid's impact might have led to the deaths of bigger birds, while smaller birds survived.
- E) You know what? Most birds didn't evolve from dinosaurs as far as I am concerned. This is just my opinion, though.

46. Dave:

— You are glued to the screen you know that, don't you?

Mat:

— I only spend time scrolling my smartphone when I am at home, so I am not really addicted to it as you suggest.

Dave:

— ----

Mat:

— What has my screen-time got to do with that? You are exaggerating as always.

Dave:

— Sorry, but it is directly related to your mental well-being. Life doesn't flow as fast and enjoyable as you scroll those short videos on the screen.

- A) You will eventually have tennis elbow as a result of holding that device for hours on end.
- B) You know extended smartphone use causes symptoms such as blurred vision and difficulty focusing.
- C) The blue light emitted by smartphone screens can interfere with the production of melatonin, a hormone that regulates sleep.
- D) You will end up in a situation where you will not get any enjoyment from real-life events.
- E) Constant scrolling, typing, and tapping on smartphones can lead to repetitive strain injuries.

47. Aylin:

— I can't understand why the British overreacted to the American professor who suggested adding salt to tea to improve its taste. We Turks are also avid tea drinkers and no one got offended as far as I know.

May:

— ----

Aylin:

— What do politics and history have to do with tea-drinking? I don't follow.

May:

— Then, you don't know an incident called Boston Tea Party, during which the colonists' decision to boycott British tea and their act of throwing the tea into Boston Harbor became powerful symbols of defiance. This served as a catalyst for increased revolutionary sentiment in the American colonies against the British rule.

Aylin:

— Oh! That's where "the salt" becomes a bitter taste for the British. I now understand it, thank you.

- A) I think it has a lot to do with history: They started drinking tea long before you did.
- B) You Turks started the tea production only in the 20th century, didn't you?
- C) Tea has been important for the British, both politically and historically since they brought it from India.
- D) Tea drinking in Britain has a rich and longstanding cultural history, making it an integral part of British social traditions.
- E) That's because the drink refers to a political and historical event between the two countries.

48. Daniel:

- **I prefer watching films in movie theaters rather than watching them on a small screen like computer or tablet.**

Craig:

— ----

Daniel:

- **There's that, but I put up with it for the sake of watching a good movie on a giant screen and professional sound system.**

Craig:

- **I can't concentrate on the film in the presence of such inconsiderate people.**

- A) People who go to the movies to chomp popcorn drive me crazy, so it is a big pass for me.
- B) The use of smartphones with their bright screens in a dark theater by people is a big put off for me.
- C) I can't stand people making different noises during the film, which makes me prefer watching movies at home.
- D) I have a too busy schedule to go all the way to the movies, so I watch them on my phone.
- E) Watching movies at home allows for greater flexibility in terms of pausing, rewinding, or fast-forwarding scenes.

49. - 53. sorularda, verilen cümleye anlamca en yakın cümleyi bulunuz.

49. In addition to being able to grow food without soil and in small spaces, hydroponic gardening can contribute to solving social and environmental issues by being a sustainable source of food.

- A) Besides offering the chance to grow food without soil and in cramped spaces, hydroponic gardening has the ability to help us solve environmental problems as it is also a sustainable food source.
- B) Beyond its capacity to cultivate food without soil and in limited spaces, hydroponic gardening has the potential to address social and environmental challenges as a sustainable food source.
- C) Hydroponic gardening helps people grow food in places where there is no soil and it also helps solve social and environmental problems by being a sustainable food source.
- D) One upside of hydroponic gardening is that it enables you to cultivate food in small, soilless places, while another is the fact that, as a sustainable food source, it can help solve social and environmental matters.
- E) Assisting in cultivating food in soil-deprived areas, hydroponic gardening also addresses social and environmental issues by serving as a sustainable food source.

50. Just as the microbiome itself is an ever-changing landscape, so too is this field of research as investigations continue to be carried out.

- A) Similar to the ever-changing landscape of the microbiome, the field of research is in continual flux as investigations are continually being conducted.
- B) As the microbiome undergoes constant changes, the field of research remains dynamic, evolving with ongoing investigations.
- C) Much like the microbiome's dynamic nature, the field of research is also in constant flux as ongoing investigations persist.
- D) Just like the microbiome, which is a continuously shifting landscape, the field of research is also in constant evolution because investigations are unlimited.
- E) In tandem with the ever-changing nature of the microbiome, the research field also experiences constant evolution as ongoing investigations prove.

51. While they make up just 3% of the global land surface, peatlands store twice as much carbon as all the world's forests.

- A) In spite of covering 3% of the Earth's land surface, peatlands store twice the amount of carbon as all the world's forests combined.
- B) Constituting a mere 3% of the Earth's land surface, peatlands store twice the amount of carbon as the entire global forest area.
- C) While accounting for 3% of the Earth's land surface, peatlands store almost double the amount of carbon compared to the total area covered by the world's forests.
- D) Peatlands comprise a mere 3% of the Earth's land surface, but they can store as much as double the amount of carbon stored by most of the world's forests.
- E) Despite comprising only 3% of the Earth's land surface, peatlands store double the amount of carbon compared to the entire global forest area.

52. As we navigate through the relativity of time, we may find ourselves confused by its constant fluctuations; however, these fluctuations also provide opportunities for improvement.

- A) In our exploration of the relativity of time, the constant fluctuations may cause confusion, but they occasionally offer opportunities for improvement.
- B) Time is relative and while exploring it, we may get confused by the constant fluctuations in its flow, which may sometimes offer opportunities for improvement.
- C) Time, being relative, can lead to confusion during exploration due to its consistent flow of fluctuations, yet these fluctuations occasionally present opportunities for improvement.
- D) While journeying through the concept of time's relativity, its continuous fluctuations might lead to confusion for us, yet they also present opportunities for improvement.
- E) In the exploration of the relativity of time, its constant flow fluctuations can be confusing, but these variations occasionally create opportunities for improvement.

53. A three-dimensional scan of a 1,700-year-old egg discovered at a Roman site in England reveals that, extraordinarily, it still has the remains of a yolk and egg white inside.

- A) Utilizing a three-dimensional scan, researchers examined a 1,700-year-old egg found at a Roman site in England, revealing the extraordinary presence of yolk and egg white remnants within.
- B) By employing a three-dimensional scan, scientists scrutinized a 1,700-year-old egg unearthed at a Roman site in England, uncovering the remarkable presence of remnants of both yolk and egg white.
- C) A 1,700-year-old egg found at a Roman site in England, examined through a three-dimensional scan, surprisingly displays the presence of both yolk and egg white remnants.
- D) Examined using a three-dimensional scan, a 1,700-year-old egg discovered in England surprisingly exhibits the presence of remnants from both yolk and egg white.
- E) Through the utilization of a three-dimensional scan, researchers scrutinized a 1,700-year-old egg unearthed at a Roman site in England, revealing the presence of remnants from both yolk and egg white.

59. - 63. sorularda, boş bırakılan yere parçada anlam bütünlüğünü sağlamak için getirilebilecek cümleyi bulunuz.

59. After skating, skiing or shoveling snow, nothing warms you up better than a cup of hot cocoa. Today's typical toppings – whipped cream, marshmallows, crushed peppermint candy – may be modern marvels. ---- Later, it was even enjoyed by the Aztec emperor Montezuma, and the Aztec word for it (*xocolatl*, pronounced shoh-kwah-tl or shoh-kwah-lah-tl) evolved into the English word chocolate.

- A) But the Aztecs didn't serve their cocoa hot, and since sugar had not yet arrived from Europe, the drink was often flavored with peppers and spices.
- B) However, chocolate was first consumed in liquid form by the Olmec people of northwestern Central America around 1500 B.C.
- C) After the Spanish arrived in the Americas in the 1500s, liquid chocolate crossed the ocean, where wealthy Europeans added sugar and drank it warm.
- D) Soon enough, though, hot chocolate caught on with the masses. Chocolate houses started popping up around 17th-century Europe.
- E) Marshmallows first came into the picture in 1917, when a company published a recipe for hot cocoa topped with their product.

60. People often have multiple motives for engaging in any one behaviour. Motivation might be extrinsic, whereby a person is inspired by outside forces – other people or rewards. ---- On the other hand, motivation can also be intrinsic, whereby the inspiration comes from within – the desire to improve at a certain activity. Intrinsic motivation tends to push people more forcefully, and the accomplishments are more fulfilling.

- A) People may be motivated by external incentives, such as the motivation to work for compensation.
- B) Intrinsic motivation is a drive that comes purely from within; it's not due to any anticipated reward.
- C) People who are intrinsically motivated to run do so because they love the feeling of running itself.
- D) Other sources of motivation include curiosity, autonomy, and validation of one's identity.
- E) Motivation targets the "why" of change, but momentum targets the "how."

61. When people talk about dangerous snakes like black mambas and cobras, at least one person in the conversation will ask whether the snake is poisonous. Bolstered by medical references and haphazard mentions on television and elsewhere in the mass media, the phrase "poisonous snake" has been drilled into our collective consciousness. ---- According to biologists, the term venomous is applied to organisms that bite (or sting) to inject their toxins, whereas the term poisonous applies to organisms that unload toxins when you eat them.

- A) Yet poisonous animals include amphibians, which carry around some amount of toxins on their skin.
- B) But this phrase is not technically correct – strictly speaking, most dangerous snakes are venomous.
- C) And these chemicals are strong enough that they can be deadly to humans.
- D) So, along with snakes, dangerous spiders and some bright-coloured lizards are also generally venomous.
- E) Thus, other animals (such as bees, ants, and wasps) are venomous even though they do not contain fangs per se.

62. While the oldest evidence for using artificial means to mummify bodies dates back around 4,300 B.C., Egyptians underwent natural mummification in even earlier times. ---- The Egyptians didn't start this process at any point in time in terms of a conscious act. Salima Ikram, an Egyptology professor at the American University in Cairo, points out that the earliest examples of naturally mummified mummies date from 5000 B.C. if not earlier. She also adds that whomever was put into a sandy grave, far from water, and not enclosed with a reed mat/coffin or in a skin, would have been naturally mummified.

- A) To put the 4,300 B.C. date into context, this is about a millennium before the Egyptians developed hieroglyphs.
- B) Natural mummification is an accidental process caused by favourable burial conditions, such as being buried in hot, dry sand.
- C) Even after artificial mummification was developed, many Egyptians were still naturally mummified as they were unable to afford artificial mummification.
- D) The majority of ancient Egyptians were simply put in a hole in the ground, with no preparation.
- E) As Christianity spread in Egypt between the second and fifth centuries A.D., the use of artificial mummification declined.

63. In 2006, the world lost a lot of stars – actress Shelley Winters, soul icon James Brown, naturalist Steve Irwin – but only one planet: Pluto. Declared the ninth planet in our solar system after its discovery in 1930 by American astronomer Clyde Tombaugh, Pluto is small, marble-coloured, and became quickly beloved thanks to its association with Mickey Mouse’s pet dog (who was originally named Rover but renamed after the planet in 1931). ---- Ever since, the worlds of science and pop culture have debated Pluto’s fate.

- A) Some scientists said that it has to be large enough to pull itself into a round shape by its own gravity, what they call “gravitational rounding.”
- B) In the early 2000s, digital cameras started to get much, much better, and we could finally take pictures of the whole sky at once.
- C) Then, in 2006, Mike Brown, CalTech professor of astronomy, crashed the party and took away Pluto’s planetary classification.
- D) There are mountains as tall as the Rocky Mountains that are actively building, and there are glaciers that are flowing on the surface of Pluto.
- E) Not only is Pluto a planet, but it is also more of another Earth than any other: It is the most planet-like planet.

64. - 69. sorularda, verilen İngilizce cümleye anlamca en yakın Türkçe cümleyi bulunuz.

64. Some farmers are betting that consumers would pay more for eggs if they knew the chickens that made them were healthy and well-treated.

- A) Bazı çiftçilerin iddiasına göre tüketiciler, yumurtaları üreten tavukların sağlıklı olduğunu ve iyi muamele gördüğünü bilirlerse yumurtalara daha fazla para ödeyecektir.
- B) Bazı çiftçiler, tüketicilerin yumurtadan sorumlu tavukların sağlıklı olduğunu ve iyi bakıldığını bilmeleri halinde yumurtaya daha yüksek bir fiyat ödemeye istekli olabileceklerini iddia ediyor.
- C) Bazı çiftçilerin iddia ettiği şey, tüketicilerin yumurtaları üreten tavukların sağlıklı olduğunu ve iyi muamele gördüğünü bilmeleri halinde yumurtalara daha fazla para ödeyecekleridir.
- D) Tüketicilerin, üretimde yer alan tavukların sağlıklı olduğu ve iyi muamele gördükleri konusunda bilgilendirilmeleri halinde yumurtalar için prim ödemeye istekli olacaklarına inanan çiftçiler vardır.
- E) Bazı çiftçiler, tüketicilerin yumurtaları üreten tavukların sağlıklı olduğunu ve iyi muamele gördüğünü bilmeleri halinde yumurtalara daha fazla para ödeyeceklerini iddia ediyor.

65. For many people with long COVID, a major symptom is difficulty with exercising, because when these patients push past their limit it can lead to a devastating cycle of fatigue.

- A) Egzersiz yapmakta zorluk çekmek, uzun COVID geçiren birçok kişi için önemli bir semptomdur ve bunun nedeni, bu hastalar sınırlarını zorladıklarında yıkıcı bir yorgunluk döngüsüne yol açabilmesidir.
- B) Uzun COVID ile boğuşan bireyler genellikle egzersiz yaparken önemli bir semptom-zorlukla karşılaşır ve sınırlarını zorlamak bu hastalar için zayıflatıcı bir yorgunluk döngüsünü tetikleyebilir.
- C) Egzersiz yapmakta güçlük çekmenin uzun COVID geçiren birçok kişi için önemli bir semptom olmasının nedeni, bu hastalar sınırlarını zorladıklarında yıkıcı bir yorgunluk döngüsüne yol açabilmesidir.
- D) Uzun COVID geçiren birçok kişi için önemli bir semptom, egzersiz yapmakta zorluk çekmektir çünkü bu hastalar sınırlarını zorladıklarında yıkıcı bir yorgunluk döngüsüne yol açabilir.
- E) Uzun COVID geçiren birçok hastanın ortak şikâyeti, egzersiz yapmakta zorluk çekmektir çünkü bu hastalar sınırlarını zorladıklarında yıkıcı bir yorgunluk döngüsüne yol açabilir.

66. Roman sources suggest that the Gauls were less developed as a society than the inhabitants of Italy and coveted their farmland, in particular their wine.

- A) Roma kaynakları, Galyalıların toplum olarak İtalya sakinlerinden daha az gelişmiş olduklarını ve onların tarım arazilerine, özellikle de şaraplarına göz diktiklerini öne sürmektedir.
- B) Roma kaynaklarında öne sürülen iddialara göre Galyalılar, İtalya sakinlerinden daha az gelişmiştiler ve onların tarım arazilerine, özellikle de şaraplarına göz dikmişlerdi.
- C) Roma kaynakları, Galyalıların toplum olarak İtalya sakinlerinden daha az gelişmiş oldukları için onların tarım arazilerine, özellikle de şaraplarına göz diktiklerini öne sürmektedir.
- D) Roma kaynaklarına göre, Galyalılar İtalya'da yaşayanlara kıyasla daha az gelişmiş bir toplum olarak algılanıyordu ve İtalyan tarım arazilerine, özellikle de şarap üretimi için üzüm bağlarına göz diktikleri iddia ediliyordu.
- E) Roma kaynaklarının iddialarına bakılırsa Galyalılar, İtalya sakinlerinden daha az gelişmiştiler ve onların tarım arazilerine, özellikle de şaraplarına göz dikmişlerdi.

67. Climate change encompasses not only rising average temperatures but also natural disasters, shifting wildlife habitats, rising seas, and a range of other impacts.

- A) İklim değişikliği hem artan ortalama sıcaklıkları hem de doğal afetleri, değişen yaban hayatı habitatlarını, yükselen denizleri ve bir dizi başka etkiyi kapsamaktadır.
- B) İklim değişikliğinin kapsadığı şey, sadece artan ortalama sıcaklıklar değil, aynı zamanda doğal afetler, değişen yaban hayatı habitatları, yükselen denizler ve bir dizi başka etkidir.
- C) İklim değişikliği, sadece artan ortalama sıcaklıkları değil, aynı zamanda doğal afetleri, değişen yaban hayatı habitatlarını, yükselen denizleri ve bir dizi başka etkiyi de kapsamaktadır.
- D) İklim değişikliği, artan ortalama sıcaklıklarının yanı sıra doğal afetleri, değişen yaban hayatı habitatlarını, yükselen denizleri ve bir dizi başka etkiyi de kapsamaktadır.
- E) İklim değişikliğinin kapsadığı şeyler arasında yalnızca artan ortalama sıcaklıklar yoktur, doğal afetler, değişen yaban hayatı habitatları, yükselen denizler ve bir dizi başka etki de kapsama alanındadır.

68. Melanoma diagnoses increased sharply over the years but overall death rates remained flat, a sign that there really isn't an epidemic of skin cancer.

- A) Melanom teşhislerinin yıllar içinde keskin bir artış gösterip genel ölüm oranlarının sabit kalmış olması, cilt kanseri salgını olmadığını bir işaretidir.
- B) Melanom teşhisleri yıllar içinde keskin bir artış göstermiş ancak genel ölüm oranları sabit kaldığı için bu, cilt kanseri salgını olmadığını bir işaretidir.
- C) Melanom teşhisleri yıllar içinde keskin bir artış göstermiş ancak genel ölüm oranları sabit kalmıştır, ki bu da cilt kanseri salgını olmadığını bir işaretidir.
- D) Melanom teşhisleri yıllar içinde keskin bir şekilde artmış olmasına rağmen genel ölüm oranları sabit kalmıştır ve bu da cilt kanseri salgını olmadığını bir işaretidir.
- E) Melanom teşhisleri yıllar içinde keskin bir artış göstermiş olabilir ancak genel ölüm oranları sabit kalmıştır ve bu da bir cilt kanseri salgını olmadığını göstermektedir.

69. Volcanic activity is currently largely isolated to the Reykjanes Peninsula, so beyond this region, Iceland is safe and its main tourist sites remain open.

- A) Volkanik hareketlilik şu anda büyük ölçüde Reykjanes Yarımadası ile sınırlıdır, bu nedenle bu bölgenin ötesinde İzlanda güvenlidir ve başlıca turistik yerleri açık kalmaya devam etmektedir.
- B) Volkanik hareketlilik şu anda büyük ölçüde Reykjanes Yarımadası ile sınırlı olduğu için bu bölgenin ötesinde İzlanda güvenlidir ve başlıca turistik yerleri açık kalmaya devam etmektedir.
- C) Volkanik hareketliliğin şu anda büyük ölçüde Reykjanes Yarımadası ile sınırlı olması, bu bölgenin ötesinde İzlanda'nın güvenli olduğu ve başlıca turistik yerlerin açık kalmaya devam edeceği anlamına gelmektedir.
- D) Reykjanes Yarımadası ötesinde İzlanda'nın güvenli olmasının ve turistik yerlerin açık kalmaya devam etmesinin nedeni, volkanik hareketliliğin büyük ölçüde bu bölgeyle sınırlı olmasıdır.
- E) Reykjanes Yarımadası ötesinde İzlanda güvenlidir ve turistik yerler açık kalmaya devam etmektedir çünkü volkanik hareketlilik büyük ölçüde bu bölgeyle sınırlıdır.

70. - 75. sorularda, verilen Türkçe cümleye an-lamca en yakın İngilizce cümleyi bulunuz.

70. Şirketler pandemi sonrası çalışma biçimlerine uyum sağlarken birçok firma son birkaç yılını çalışanların değişen önceliklerine yanıt vermek için yan hak paketlerini güncelleyerek geçirdi.

- A) While adapting to post-pandemic work styles, some companies have revisited and modified their benefits packages in the past couple of years to address the priorities of their employees.
- B) In the process of adjusting to post-pandemic work styles, certain companies have re-examined and adjusted their benefits packages over the past few years to meet the priorities of their employees.
- C) Amid the adaptation to post-pandemic work styles, a few companies have re-evaluated and adjusted their benefits packages in the last couple of years to cater to the priorities of their employees.
- D) As companies adapt to post-pandemic work dynamics, a number of them have revisited and updated their benefits packages to align with the shifting priorities of their employees.
- E) As companies adjust to post-pandemic ways of working, many firms have spent the past few years updating their benefits suites to respond to workers' changing priorities.

71. Küçük Buzul Çağı'na neyin sebep olduğuna dair teoriler, azalan güneş aktivitesinden artan volkanik patlamalara kadar çeşitlilik göstermektedir.

- A) Explanations for the causes of The Little Ice Age vary, covering factors such as reduced solar activity and heightened volcanic eruptions.
- B) What caused The Little Ice Age has been explained by theories that range from decreased solar activity to increased volcanic eruptions.
- C) Explanations for the causes of The Little Ice Age include theories ranging from reduced solar activity to heightened volcanic eruptions.
- D) Theories as to what caused The Little Ice Age range from decreased solar activity to increased volcanic eruptions.
- E) Theories explaining the causes of The Little Ice Age span from a dramatic decrease in solar activity to increased volcanic eruptions.

72. Yeni bir çalışma, istilacı Joro örümceklerinin şaşırtıcı derecede "kentsel toleranslı" olduğunu ve bunun onların ABD'nin Doğu Kıyısındaki şehirleri ve diğer kentsel alanları ele geçirmelerini sağlayabileceğini gösteriyor.

- A) According to a new study, invasive Joro spiders are surprisingly "urban tolerant," and this might help them to take over cities and other urban areas across the U.S. East Coast.
- B) A new study shows that invasive Joro spiders are surprisingly "urban tolerant," which could enable them to take over cities and other urban areas across the U.S. East Coast.
- C) What a new study shows is alarming as it claims that invasive Joro spiders are "urban tolerant," which means they might take over cities and other urban areas across the U.S. East Coast.
- D) A recent study reveals that invasive Joro spiders exhibit unexpected "urban tolerance," potentially facilitating their colonization of cities and other urban regions across the U.S. East Coast.
- E) A recent study indicates that invasive Joro spiders possess surprising "urban tolerance," potentially enabling them to establish themselves in cities throughout the U.S. East Coast.

73. Bir zamanlar yorgun gezginler tarafından memnuniyetle karşılanan önemli bir vaha olan – ve acımasız köle ticareti konusundaki ünü nedeniyle aynı derecede korkulan – Hiva, Buhara ve Semerkant tarafından haksız yere gölgede bırakılmıştır.

- A) Once a crucial oasis, both a refuge for tired travellers and notorious for its ruthless history of slave trading, Khiva finds itself eclipsed by the more prominent destinations of Bukhara and Samarkand.
- B) Once a vital oasis, offering respite to weary travellers and simultaneously notorious for its history of brutal slave trading, Khiva is unfairly overshadowed by Bukhara and Samarkand.
- C) Khiva, which once served as a prominent oasis admired by exhausted wanderers, and feared for its reputation for slave trading, is now overshadowed by Bukhara and Samarkand.
- D) Once an important oasis welcomed by weary travellers – and equally feared for its reputation for ruthless slave trading – Khiva is undeservedly overshadowed by Bukhara and Samarkand.
- E) Once a significant oasis, providing relief to weary travellers and notorious for its history of slave trading, Khiva is unfairly overlooked compared to Bukhara and Samarkand.

74. Kurumsal dünyadaki birçok lider, yapay zeka işe alım teknolojisinin işe alım sürecindeki önyargıları sona erdireceğini umsa da, bazı durumlarda tam tersi oluyor.

- A) Many leaders across the corporate world hoped AI recruiting tech would end biases in the hiring process, but the opposite is happening in some cases.
- B) Numerous corporate leaders had aspirations that AI recruiting technology would eliminate biases in the hiring process, but, in certain instances, the opposite outcome is observed.
- C) Despite the expectations of many corporate leaders that AI recruiting technology would eliminate biases in the hiring process, in some instances, the opposite outcome is observed.
- D) Even though some leaders across the corporate world hoped that AI recruiting technology would eradicate biases in the hiring process, in many cases, the opposite is occurring.
- E) Though many leaders across the corporate world hoped AI recruiting tech would end biases in the hiring process, the opposite is happening in some cases.

75. Fosil yakıtlardan yenilenebilir enerji kaynaklarına geçiş acilen gereklidir, ancak düşük karbonlu bir enerji sisteminin kurulması, işletilmesi ve sürdürülmesi büyük enerji yatırımları gerektirmektedir.

- A) A move away from fossil fuels to renewables is urgently required, but building, operating, and maintaining a low-carbon energy system requires big energy investments.
- B) Although it is urgently necessary to move away from fossil fuels to renewables, big energy investments are needed to build, operate, and maintain a low-carbon energy system.
- C) An urgent shift from fossil fuels to renewables is necessary; nevertheless, the construction, operation, and maintenance of a low-carbon energy system demand substantial investments in energy.
- D) A swift transition from fossil fuels to renewables is crucial; however, ushering in, managing, and sustaining a low-carbon energy system comes with substantial energy investment needs.
- E) The pressing need for a shift from fossil fuels to renewables is evident, yet implementing, managing, and sustaining a low-carbon energy system involves considerable energy investments.

76. - 80. sorularda, cümleler sırasıyla okunduğunda parçanın anlam bütünlüğünü bozan cümleyi bulunuz.

76. (I) The very mention of the words bubonic plague tends to provoke both fear and fascination even today. **(II)** But even though it is relatively rare compared to the past, the bubonic plague has left its mark on the human species and can still be found in the genomes of people living today. **(III)** The disease is now vanishingly rare in both the US and Europe, largely thanks to changes in lifestyles that prevent it from spreading to humans from infected fleas as easily. **(IV)** Even when it does occur, it can be relatively easily treated with antibiotics, saving lives, but cases still do occur. **(V)** Most recently, for example, a man in Oregon in the US, caught the bubonic plague from his pet cat.

- A) I B) II C) III D) IV E) V

77. (I) Before the arrival of humans, Española had as many as 8,000 resident tortoises. **(II)** However, in the 1800s, pirates and whalers nearly stripped Española and neighbouring islands of their tortoises for their meat. **(III)** Española's burgeoning tortoise population – made up of the children and grandchildren of Diego, one of the archipelago's most beloved tortoise residents – is helping to restore the island's lost ecosystem. **(IV)** These sailors also left behind goats, which went wild, multiplied, and devoured native vegetation. **(V)** By the 1970s much of the pristine habitat was wrecked, and Española was down to its last 14 tortoises; 12 females, and two males.

- A) I B) II C) III D) IV E) V

78. (I) French veterinarian Gaston Ramon was researching diphtheria vaccines in the 1920s when he noticed something unusual. **(II)** Adding breadcrumbs, tapioca, and other seemingly random ingredients made the vaccines work better. **(III)** Ramon used the word adjuvants to describe these additives, based on the Latin word *adjuver*, which means "to help." **(IV)** Vaccines already work by stimulating the inflammatory processes necessary to fight off infections. **(V)** Today, there are more than half a dozen of them in use for various vaccines, and scientists continue to refine their understanding of how these helpers work to take the reins of the immune system and optimize inflammation.

- A) I B) II C) III D) IV E) V

79. (I) Anyone who has sprained an ankle knows how ice packs can relieve pain and swelling. (II) When you get an injury, your body usually responds by sending specialized cells to the area to halt any bleeding and begin repairing the damage. (III) But a growing number of people are icing their faces, claiming it reduces the appearance of fine lines and wrinkles, as well as under-eye swelling and pores. (IV) Aficionados, those who do it regularly, claim it makes the skin look younger and healthier. (V) But although ice facials and other forms of cryotherapy have surged in popularity, thanks largely to social media influencers, their benefits have yet to be validated in clinical studies.

- A) I B) II C) III D) IV E) V

80. (I) According to a new study, The James Webb Space Telescope (JWST) has found a galaxy in the early universe that is so massive, it shouldn't exist, posing a "significant challenge" to the standard model of cosmology, according to the study authors. (II) The galaxy, called ZF-UDS-7329, contains more stars than the Milky Way, despite having formed only 800 million years into the universe's 13.8 billion-year life span. (III) Light travels at a fixed speed through the vacuum of space, so the deeper we look into the universe, the more remote light we intercept and the further back in time we see. (IV) This means they were somehow born without dark matter seeding their formation, contrary to what the standard model of galaxy formation suggests. (V) How this could have happened is unclear, but much like previous JWST discoveries of other inexplicably massive galaxies in the early universe, it threatens to turn over our understanding of how the first matter in the universe formed, or possibly even the standard model of cosmology itself.

- A) I B) II C) III D) IV E) V