

1. - 20. sorularda, boş bırakılan yerlere uygun düşen sözcük ya da ifadeyi bulunuz.

**1. DNA carries genetic instructions about how our bodies are built, and it controls the way a baby is going to grow up - its height, hair colour, and ---- to certain diseases.**

- A) adherence
- B) susceptibility
- C) acceptability
- D) proximity
- E) familiarity

**2. A number of serious ---- had an effect on agriculture in the latter half of the 20th century: rapid population increases, environmental deterioration, and energy price destabilisation.**

- A) resolutions
- B) perceptions
- C) benefits
- D) concerns
- E) innovators

**3. As lots of information on insects has been lacking and endangered species documentation is ----, the number of at-risk insect species is certainly underestimated.**

- A) irrelevant
- B) inevitable
- C) undeniable
- D) irreversible
- E) unreliable

**4. Agriculturalists manipulated plant and animal species so ---- that they began to alter the genetic makeup of prey species in a process commonly referred to as domestication.**

- A) equally
- B) instinctively
- C) respectively
- D) intensely
- E) initially

**5. In the future, medical prescriptions could be distributed to patients by ATM-like robot, remotely controlled by an algorithm to ---- the right doses at the right times.**

- A) reverse
- B) overcome
- C) exclude
- D) ensure
- E) admit

**6. All modern research recognises that the cell is the fundamental unit, housing the genetic material and the biochemical organisation that -- the existence of life.**

- A) break into
- B) get through
- C) account for
- D) set back
- E) take in

**7. When a supersonic plane flies faster than the speed of sound, the pressure waves in front do not have time ---- around the aircraft and the air becomes compressed, eventually ---- a shock wave.**

- A) to be flowing / to be producing
- B) flowing / to produce
- C) to flow / producing
- D) having flowed / having produced
- E) being flowed / to have produced

**8. Since the earliest days of the Mercury program, NASA ---- medical data from its astronauts by studying their physiological responses to spaceflight, and in 2014, it ---- a large report compiled from decades of data.**

- A) was gathering / may have released
- B) had been gathering / has released
- C) would be gathering / had to release
- D) has been gathering / released
- E) gathered / had released

**9. Heat and light from the Sun result in seasonal change ---- the planet Neptune, ---- each season lasting roughly 40 years.**

- A) to / from
- B) on / with
- C) in / under
- D) over / at
- E) by / through

**10. Arithmetic, which is a branch of mathematics, developed slowly ---- the course of human history, primarily evolving ---- the operation of counting.**

- A) in / on
- B) at / by
- C) over / from
- D) with / about
- E) towards / under

**11. After crude oil is removed ---- the ground, it is sent to a refinery by pipeline, ship or barge, and at the refinery, different parts of the crude oil are separated ---- usable petroleum products.**

- A) through / to
- B) with / about
- C) from / into
- D) at / over
- E) on / for

**12. ---- the earliest efforts to develop electric vehicles were made in France and Britain, the honour of the first truly successful electric car goes to Scottish-born William Morrison in the United States.**

- A) Because
- B) While
- C) If
- D) Once
- E) In order that

**13. ---- steel was the dominant engineering material in the 20th century, a number of other alloys developed later found widespread use in particular applications.**

- A) In case
- B) Although
- C) Since
- D) As soon as
- E) Given that

**14. The big boom in renewable energy has not reduced our use of fossil fuels ---- we keep demanding more and more energy.**

- A) as if
- B) because
- C) before
- D) although
- E) whereas

**15. Global temperatures will probably rise much faster over approaching decades ---- we lower greenhouse gas emissions.**

- A) so that
- B) once
- C) because
- D) just as
- E) unless

**16. ---- astronauts are exposed to space radiation during space travel, it can lead to the build-up of fats and cholesterol in blood vessels, which can cause strokes or heart attacks.**

- A) Unless
- B) Even though
- C) When
- D) As if
- E) Until

**17. ---- the capacity for long-term memory, which is considered to be virtually unlimited, the capacity for working memory is limited to a few items.**

- A) In terms of
- B) In case of
- C) Thanks to
- D) Unlike
- E) As a result of

**18. A thunderstorm is a violent storm that causes thunder and lightning ---- heavy precipitation and strong winds.**

- A) such as
- B) in favour of
- C) as well as
- D) contrary to
- E) in terms of

**19. A bridge has to be able to withstand ---- the forces of normal, everyday traffic ---- unusual forces of unexpected magnitude.**

- A) neither / nor
- B) such / that
- C) both / and
- D) as / as
- E) the more / the more

**20. The biggest volcanic eruption of the past 20,000 years spewed out around 140 billion tons of ash and rock, ---- is equivalent to the mass of 1.5 million aircraft carriers.**

- A) which
- B) where
- C) when
- D) what
- E) how

**21. - 25. sorularda, boş bırakılan yerlere uygun düşen sözcük ya da ifadeyi bulunuz.**

Drones are increasingly used for aerial photography, fuelled by improvements in technology. (21)---- the photographs taken by drones, a wide range of challenging tasks can now be performed with ease, such as monitoring volcanic eruptions and controlling wildfires. (22)---, in recent years, there have been growing safety fears over drones. To give an example, in 2015, a drone enthusiast who flew his device over Buckingham Palace, the Houses of Parliament and football stadiums was banned in the first court trial of its kind in the UK. And last summer, the Civil Aviation Authority, the pilots' union BALPA and air traffic control company NATS (23)---- a drone safety campaign. The SkyWall 100 is the first of a series of anti-drone devices designed (24)---- the 'civil drone threat'. Built by a UK engineering firm (25)---- use by authorities such as the police, it first uses a laser rangefinder and on-board computer to calculate the speed and position of a drone.

**21.**

- A) Regardless of
- B) Thanks to
- C) Rather than
- D) Contrary to
- E) Instead of

**22.**

- A) At first
- B) To summarise
- C) However
- D) Similarly
- E) Therefore

**23.**

- A) devastated
- B) questioned
- C) penetrated
- D) abandoned
- E) launched

**24.**

- A) being addressed
- B) to address
- C) having been addressed
- D) to be addressed
- E) to have addressed

**25.**

- A) for
- B) over
- C) in
- D) at
- E) with

**26. - 30. sorularda, boş bırakılan yerlere uygun düşen sözcük ya da ifadeyi bulunuz.**

It is only in the last 100 years or so that the dog has so cleverly and successfully moved into our homes and hearts. The genetic potential to adapt to a range of new environments was always within the dog, and by moving into our homes, that ability to adapt was accelerated. Only a few generations ago, dogs were bred to have certain characteristics that were appropriate (26)---- specific jobs, such as guarding and hunting. Dogs have inherited their flexible brains from their wolf ancestors. Wolves, then as now, used the 'learning centres' in their brains to (27)---- problems encountered in the wild. Dogs have turned this ability to the demands of domesticity. (28)---- their original jobs like providing help in search-and-rescue operations or protecting their owners against burglars or strangers, dogs have increasingly been bred for companionship. (29)----, their integration with members of the human family has made them our close friends. With their loyalty and strong desire to play, they can boost our mood and energy, (30)---- our psychological well-being. Who would not prefer to return home to a wagging tail than a cold, empty house?

**26.**

- A) over
- B) for
- C) about
- D) from
- E) into

**27.**

- A) back up
- B) turn down
- C) give in
- D) deal with
- E) call for

**28.**

- A) In addition to
- B) On behalf of
- C) In fear of
- D) In case of
- E) With the goal of

**29.**

- A) Otherwise
- B) By comparison
- C) On the contrary
- D) As a result
- E) Instead

**30.**

- A) to be enhanced
- B) being enhanced
- C) to enhance
- D) enhanced
- E) enhancing

**31. - 41. sorularda verilen cümleyi tamamlayabilecek seçeneği bulunuz.**

**31. Provided that scientifically supported forest management practices are employed ----.**

- A) deforestation in large areas has been hardly solved by local and national administrators around the world
- B) deforestation has been a minor but persistent problem in most countries since the earliest periods of history
- C) ethical forest management policies and practices lie at the centre of businesses that rely on forests
- D) the best-known problem area including deforestation, a particularly difficult issue, is the Amazon rainforest
- E) sustainable management of tree cutting is possible, even in the most sensitive areas, such as tropical rainforests.

**32. Although only a tiny percentage of everything that has ever lived is fossilised, ----.**

- A) the oldest life forms in the old world probably did not resemble anything alive today
- B) fossils are our most reliable indicator of the organisms and environments of the past
- C) candidates for the title of first fossil are inevitably controversial with sceptics
- D) the oldest fossils around the whole world have been found to have regular cellular structures
- E) fossilisation involves the consolidation of sediments of sand or mud under pressure

**33. While more than 300 plant viruses have been identified, ----.**

- A) infected plants have to be disposed in order to control the spread of diseases
- B) many plant diseases can easily be spread by hand and by contact with infected tools
- C) new strains appear as these organisms are capable of mutating
- D) trees infected with these viruses produce poor fruit and a small yield
- E) the symptoms of viral infection include yellowing and reduced growth in some part of the plant

**34. Although it is often viewed as a typically American genre, ----.**

- A) commentators have noted a difference between 'soft' science fiction and 'hard' science fiction
- B) science fiction is at its best when portraying the scientific method as a way to knowledge
- C) science fiction has found practitioners in many countries, and the genre has international appeal
- D) science fiction has excited many young people to pursue science or engineering as a career
- E) many of the possibilities that arise from space exploration have been examined by science fiction

**35. Unless China shifts its development in a climate-friendly direction, ----.**

- A) its greenhouse gas emissions are bound to increase
- B) air pollution has also been growing at an alarming rate in different parts of the world
- C) the growth rate of industrial production in China has been on the rise
- D) it is taking steps to improve its environmental health
- E) it continues to use coal and gasoline as its primary fuel sources

**36. ----, so sightings of falcons are considered to be exciting events for bird watchers.**

- A) Falcons must be well trained or they may not return to the falconer's hand
- B) Some species of falcons are known to suffer considerable damage from insecticides
- C) Falcons fascinate many people, largely because of their fierce, predatory behaviour
- D) Expensive management of the habitat of falcons is necessary to protect them
- E) Young falcons are still taken from wild nests, often illegally, for use in falconry

**37. For billions of years, Earth's lithium reserves remained unnoticed; ----.**

- A) however, for the past 30 years, we have seriously become aware of this rare metal
- B) for instance, many electronic products were powered by nickel cadmium batteries
- C) therefore, lithium is a soft, very light and silver-white metal used in batteries
- D) similarly, Bolivia has almost 25% of the world's total known lithium resources
- E) in other words, the extraction of lithium from the oceans has been costly

**38. We all know of many different tasks that computers perform with ease, ----.**

- A) but there are a lot of problems that are beyond the ability of computers
- B) although computer technology is now inextricably woven into our everyday lives
- C) yet computers have greatly extended our knowledge of the world around us
- D) so power loss can wreck your computer and destroy your data
- E) while the use of computers and Internet in education has become widespread

**39. Leaves are plant organs primarily adapted for photosynthesis, ----.**

- A) after they take up toxic metals through their roots and store them in their stems and leaves
- B) because, apart from plants, photosynthesis also occurs in algae and some bacteria
- C) although plants use the energy of light during photosynthesis to produce molecular oxygen from carbon dioxide and water
- D) but many species have modified leaves that serve a variety of functions besides photosynthesis, such as attracting insects
- E) given that leaves can be used for food and beverages dyes and fibre, and medicinal or industrial purposes

**40. Although lesser flamingos are the most abundant flamingo in the world, with a population in the millions, ----.**

- A) they are colonial breeders and gather around Lake Natron in Tanzania to mate
- B) they have adapted to fluctuating water levels and resources with a nomadic lifestyle
- C) they are all exposed to extinction as their ecosystems are being threatened
- D) they love harsh wetlands since the caustic water keeps most other animals away
- E) their signature pink colouring comes from the cyanobacteria they eat

**41. Hunting is perhaps the most geographically widespread form of human disturbance in tropical forests, ----.**

- A) although many parts of west Africa and Southeast Asia are becoming chronically overhunted
- B) yet the exploitation of wild meat by tropical forest-dwellers has also increased
- C) but its total extent cannot be easily mapped using conventional techniques
- D) while hunting for profit poses a serious threat to endangered animals
- E) even if overhunting of wildlife for meat consumption has reached an unprecedented scale

**42. - 47. sorularda, verilen İngilizce cümleye anlamca en yakın Türkçe**

**42. Parasitic plants, such as mistletoe, cannot get their nutrients from the soil, and thus they must attach themselves to other plants and use the nutrients of the host plant to survive.**

- A) Ökse otu gibi asalak bitkiler topraktan besinlerini alamazlar da kendilerini başka bitkilere iliştiirerek ve konak bitkinin besinlerini kullanarak hayatta katırlar.
- B) Ökse otu gibi asalak bitkiler besinlerini topraktan alamazlar ve bu yüzden hayatta kalmak için kendilerini başka bitkilere iliştiirmeli ve konak bitkinin besinlerini kullanmalıdırlar.
- C) Toprakten besinlerini alamayan ökse otu gibi asalak bitkiler hayatta kalmak için kendilerini başka bitkilere iliştiirmeli ve konak bitkinin besinlerini kullanmalıdırlar.
- D) Toprakten besinlerini alamayan ama kendilerini başka bitkilere kararı ökse otu gibi asalak bitkiler hayatta kalabilmek için konak bitkinin besinlerini kullanmalıdırlar.
- E) Hayata kalmak için başka bitkilere kendini iliştiirmek ve konak bitkinin besinlerini kullanmak zorunda olan ökse otu gibi asalak bitkiler topraktan besinlerini alamazlar.

**43. The nature of the dark spots on the Sun was first investigated by the American astronomer George Ellery Hale, who devoted his life to studying the Sun from the observatory he founded near Los Angeles.**

- A) Amerikalı gök bilimci, George Ellery Hale hayatını Los Angeles yakınlarında kurduđu gözlemevinden Güneş'i incelemeye adanmasının sonucunda Güneş üzerindeki koyu lekelerin doğasını ilk kez araştıran kişi oldu.
- B) Hayatını Güneş'i incelemeye adayan Amerikalı gök bilimci George Ellery Hale tarafından Los Angeles yakınlarında kurulan gözlemevi sayesinde, Güneş üzerindeki koyu lekelerin doğası ilk kez araştıırılmış oldu.
- C) Güneş üzerindeki koyu lekelerin doğası, ilk kez, hayatını Los Angeles yakınlarında kurduđu gözlemevinden Güneşli incelemeye adayan Amerikalı gök bilimci George Ellery Hale tarafından araştıırıldı.
- D) Güneş üzerindeki koyu lekelerin doğasını ilk kez araştıran kişi olan Amerikalı gök bilimci George Ellery Hale, Güneş'i incelemek için Los Angeles yakınlarında bir gözlemevi kurmuştu ve hayatını buna adanmıştı.
- E) Hayatını Los Angeles yakınlarında kurduđu gözlemevinden Güneş'i incelemeye adayan Amerikalı gök bilimi George Ellery Hale tarafından ilk kez araştıırılan şey, Güneş üzerindeki koyu lekelerin doğasıydı.

**44. Speculations about the existence of a ninth planet arose soon after astronomers found out that the planet Neptune did not move in its orbit as predicted.**

- A) Gök bilimciler, dokuzuncu bir gezegenin var olduğuna dair varsayımlarını Neptün gezegeninin yörüngesinde beklenildiđi gibi hareket etmediđini öğrendikten hemen sonra ortaya koymuşlardır.
- B) Dokuzuncu bir gezegenin var olduğuna dair varsayımlar, gök bilimcilerin Neptün gezegeninin yörüngesinde beklenildiđi gibi hareket etmediđini öğrenmelerinden hemen sonra ortaya konulmuştur.
- C) Dokuzuncu bir gezegenin varlığına yönelik varsayımlar, gök bilimcilerin Neptün gezegeninin yörüngesinde beklenildiđi gibi hareket etmediđini öğrenmelerinin hemen ardından ortaya çıkmıştır.
- D) Neptün gezegeninin yörüngesinde beklenildiđi gibi hareket etmediđini öğrenmelerinin hemen üzerine, gök bilimciler dokuzuncu bir gezegenin varlığına yönelik varsayımlarda bulunmuşlardır.
- E) Gök bilimciler Neptün gezegeninin yörüngesinde beklenildiđi gibi hareket etmediđini öğrenmelerinin hemen ardından dokuzuncu bir gezegenin varlığına yönelik varsayımlar ortaya koymuşlardır.

**45. Nuclear plants use a certain kind of uranium, called U-235, as fuel because its atoms can be easily split apart, but it makes up only 0.72% of the total uranium found on earth.**

- A) Nükleer santraller tarafından yakıt olarak kullanılan uranyum türü atomları kolay parçalanabilen U-235 adındaki uranyumdur, ancak bu tür, yeryüzünde bulunan toplam uranyumun sadece %0,72'sini oluşturmaktadır.
- B) Nükleer santrallerin atomları kolay parçalanabildiđi için yakıt olarak kullandıkları U-235 adındaki uranyum, yeryüzünde bulunan toplam uranyumun sadece %0,72'sini oluşturan bir türdür.
- C) Nükleer santraller atomları kolay parçalanabildiđi için yakıt olarak U-235 adında belirli bir uranyum türünü kullanmaktadır, ancak bu tür, yeryüzünde bulunan toplam uranyumun sadece %0,72'sini oluşturmaktadır.
- D) U-235 olarak adlandırılan uranyum türü yeryüzünde bulunan toplam uranyumun sadece %0,72'sini oluştursa da atomları kolay parçalanabildiđi için nükleer santraller yakıt olarak bu uranyum türünü kullanmaktadır.
- E) Nükleer santrallerin yakıt olarak U-235 adında belirli bir uranyum türünü kullanmalarının sebebi, bu türün atomlarının kolay parçalanabilmesidir, ancak bu tür, yeryüzünde bulunan toplam uranyumun sadece %0.72'sini oluşturmaktadır.

**46. Because it involved experiments with matter, alchemy contributed knowledge and techniques to the development of modern scientific research.**

- A) Simya, madde ile ilgili deneyim kapsamı sonucunda modern bilimsel araştırmanın gelişimine bilgi ve teknikler açısından katkıda bulunmuştur.  
B) Simya, madde ile ilgili deneyleri kapsamakla kalmayıp aynı zamanda modern bilimsel araştırmanın gelişimine bilgi ve teknikler açısından katkı sağlamıştır.  
C) Madde ile ilgili deneyleri kapsayan simya, modern bilimsel araştırmanın gelişimine bilgi ve teknikler açısından katkı sağlamıştır.  
D) Madde ile ilgili deneyleri kapsadığı için simya, modern bilimsel araştırmanın gelişimine bilgi ve teknikler açısından katkı sağlamıştır.  
E) Modern bilimsel araştırmanın gelişimine bilgi ve teknikler açısından katkıda bulunan simya, madde ile ilgili deneyleri kapsar.

**47. Agriculture increases the likelihood of erosion by exposing soil to wind and rain; however, land use is not the only factor that increases the likelihood of erosion.**

- A) Tarım, toprağı rüzgâra ve yağmura maruz bıraktıkça erozyon ihtimali artar, fakat bu ihtimalin artmasında arazi kullanımı tek etken değildir.  
B) Tarım, toprağı rüzgâra ve yağmura maruz bırakır ki bu da erozyon ihtimalini artırır, ancak arazi kullanımı erozyon ihtimalini tek başına artırmaz.  
C) Erozyon ihtimali tarımın toprağı rüzgâra ve yağmura maruz bırakmasıyla artar, ama erozyon ihtimalini artıran tek etken arazi kullanımı değildir.  
D) Tarımın toprağı rüzgâra ve yağmura maruz bırakması erozyon ihtimalini adımı da tek basına arazi kullanımı erozyon ihtimalini artıran bir etken değildir.  
E) Tarım, toprağı rüzgâra ve yağmura maruz bırakarak erozyon ihtimalini artırır, ancak arazi kullanımı erozyon ihtimalini artıran tek etken değildir.

**48. - 53. sorularda, verilen Türkçe cümleye anlamca en yakın İngilizce**

**48. Birçok bülbül türü, ufak meyveler yer ama özellikle yavrularını yetiştirirken böceklerle de beslenebilir.**

- A) Although most species of bulbuls eat small fruits, they may also feed on insects, particularly when they are raising their babies.  
B) Most species of bulbuls eat small fruits, but they may also feed on insects, particularly when they are raising their babies.  
C) Most species of bulbuls eat small fruits particularly when they are raising their babies, but they may also feed on insects.  
D) Most species of bulbuls which eat small fruits may also feed on insects, particularly when they are raising their babies.  
E) While raising their babies, most species of bulbuls particularly eat small fruits and are likely to feed on insects.

**49. Uzay tıbbı, uzay yolculuğu değişkenlerine maruz kalmaları bütün fizyolojik sonuçlarını tahmin etmeyi ve çeşitli sistemlerin işleyişindeki olası bozulmaları engellemeyi amaçlamaktadır.**

- A) Space medicine intends not only to predict all of the physiological consequences of exposure to spaceflight factors but also to prevent the possible disruptions in the functioning of various systems.  
B) The aim of space medicine is to predict all of the physiological consequences of exposure to spaceflight factors as well as preventing the likely disruptions in the functioning of various systems.  
C) Predicting all of the physiological consequences of exposure to spaceflight factors and preventing the likely disruptions in the functioning of various systems are what space medicine aims for.  
D) Space medicine aims to predict all of the physiological consequences of exposure to spaceflight factors and prevent the likely disruptions in the functioning of various systems.  
E) The aim of space medicine is known to be the prediction of the physiological consequences of exposure to spaceflight factors and the prevention of the likely disruptions in the functioning of various systems.

**50. Yoksul ve kırsal bölgelerde yaşayan bir milyardan fazla insan gündüz elektrik üretmek için güneş pilleri kullansa da gece hala elektrikten yoksundur.**

- A) There are over a billion people who live in poor and rural areas by using solar cells to produce electricity during the day, but they still lack electricity in the evening.  
B) Although lacking electricity in the evening, over a billion people living in poor and rural areas use solar cells to produce electricity during the day.  
C) Even though over a billion people living in poor and rural areas use solar cells to produce electricity during the day, they still lack it in the evening.  
D) While there are still over a billion people living in poor and rural areas who lack electricity in the evening, they use solar cells to produce electricity during the day.  
E) Over a billion people living in poor and rural areas produce electricity during the day by using solar cells; however, they still lack electricity in the evening.

**51. 1909 yılında Danimarkalı biyokimyager Soren Sorensen tarafından icat edilen pH skalası, 0'dan 14'e kadar uzanır ve bir çözeltide kaç tane hidrojen iyonu olduğunu gösterir.**

- A) The pH scale, which stretches from 0 to 14 and shows how many hydrogen ions are present in a solution, was invented by the Danish biochemist Soren Sorensen in 1909.  
B) The pH scale, invented in 1909 by the Danish biochemist Soren Sorensen, stretches from 0 to 14, and it shows how many hydrogen ions are present in a solution.  
C) Invented by the Danish biochemist Soren Sorensen in 1909 to show how many hydrogen ions are present in a solution, the pH scale stretches from 0 to 14.  
D) Stretching from 0 to 14, the pH scale shows how many hydrogen ions are present in a solution, and it was invented by the Danish biochemist Soren Sorensen in 1909.  
E) Invented by the Danish biochemist Soren Sorensen in 1909, the pH scale, stretching from 0 to 14, shows how many hydrogen ions are present in a solution.



**52. Dünya, Güneşin etrafında dönerken kendi ekseninde eğik durduğundan her iki kutup bölgesi uzun yaz günleri ve uzun kış geceleri yaşar.**

- A) Because the Earth tilts on its axis as it rotates around the Sun, both polar regions experience long summer days and long winter nights.  
B) The Earth tilts on its axis while it rotates around the Sun, which causes both polar regions experience long summer days and long winter nights.  
C) Given that the Earth tilts on its axis as it rotates around the Sun, long summer days and long winter nights are experienced in both polar regions.  
D) The reason why both polar regions experience long summer days and long winter nights is that the Earth tilts on its axis while it rotates around the Sun.  
E) While it rotates around the Sun, the Earth tilts on its axis and this is why both polar regions experience long summer days and long winter nights.

**53. Egzersiz esnasında kan basıncını ölçmek için geliştirilmiş birçok otomatik cihaz olmasına rağmen, çoğu insanın izlenimi bunların elle yapılan ölçümden daha iyi olmadığıdır.**

- A) A great number of automated devices have been developed to measure blood pressure during exercise; however, many people have the impression that they are not better than manual testing.  
B) Although a lot of automated blood pressure measurement devices have been developed to be used during exercise, many people have the impression that these devices are not much better than manual testing.  
C) There are a number of automated devices developed to measure blood pressure during exercise, but the impression of most people is that they are not as good as manual testing.  
D) Although there are a number of automated devices developed to measure blood pressure during exercise, the impression of most people is that they are not better than manual testing.  
E) Most people have the impression that many of the automated devices developed to measure blood pressure during exercise are not better than manual testing.

54. - 59. sorularda paragrafta verilen boşluğa anlam bütünlüğünü sağlamak için getirilebilecek cümleyi bulunuz.

**54. In spite of its delicate nature, a cobweb — a fine net of threads made by a spider — is very strong, but not stronger than materials such as steel and Kevlar. A cobweb has a tensile strength of 1 gigapascal, whereas steel and Kevlar have strengths of 1.6 and 3.6 gigapascals respectively. ---- If they are successful, they hope to replace everything from car bumpers to bullet-proof vests with the artificial spider silk, as the combination of flexibility and strength makes it perfect for absorbing energy and halting objects.**

- A) Thanks to different glands, a spider is able to produce up to seven different silk threads for different purposes.  
B) Silk glands on the hind part of the spider produce the fiber threads that make up the strong web.  
C) On the other hand, they are more flexible, and that is one of the reasons why scientists are struggling to copy the strong fiber threads in the lab.  
D) The proteins of the silk fibers are made up of small coils and plates, which is part of the secret behind the flexibility.  
E) The spider's silk gland is a sophisticated chemical factory that converts water-soluble protein into strong thread.

**55. In the past, measurements of sea water salinity were taken simply by going out onto the ocean, filling a bucket with sea water, and testing the salt levels by measuring electrical conductivity—the more salts, the quicker electricity flows through the water because there are more ions, present. ---- Low-frequency radiometers mounted on an aircraft can scan the ocean during flights, covering over 100 square kilometers every hour. And in 2009, the European Space Agency launched its Soil Moisture and Ocean Salinity satellite to take readings from space using a two-dimensional interferometric radiometer.**

- A) The amount of salts in sea water is important because it affects ocean currents, which, in turn, affect the world's climate.  
B) Sea water contains a variety of dissolved elements, including chlorine, sodium, calcium, magnesium, and potassium.  
C) The deep ocean currents are driven by thermohaline circulation, which is a movement caused by differences in the temperature and salinity content of the water.  
D) More recently, however, sophisticated equipment has become available for measuring ocean salts remotely.  
E) Salinity or the quantity of dissolved salts in ocean water is derived from measurements of the seawater's conductivity.

**56. Artificial Intelligence (AI) has been around since the birth of computers in the 1950s. The original pioneers dreamed of making 'computer brains' that could perform the same kinds of tasks as our brains do, such as playing chess or translating languages. ---- Over the following decades, though, technology improved at an exponential rate. Computers got faster, the Internet was invented, and researchers made new advances in AI algorithms.**

- A) Most people think of 'deep learning' when AI is mentioned, as this is inspired by the way in which our brains work.  
B) However, hopes that AI would quickly reach human-level intelligence did not come to fruition, and AI soon fell out of favour.  
C) In fact, enormous amounts of data are required to help AI learn more effectively, for example, understanding speech.  
D) The way that intelligence is measured could be a determinant as to whether AI will be more clever than we are in the future.  
E) Thus, many people thought that AI could do a whole host of things ranging from face recognition to making vehicles more autonomous.

**57. Handwashing is a catch-all preventative measure which rids the skin of foodborne germs, chemicals, and other undesirable substances. Small bubbles of soap, for the most part, are unable to eliminate pathogens. Soap is a *surfactant*, which means it makes it easier to clear away oils and dirt. Water accordingly rinses off the contaminants, and in so doing removes the microbes as well. ---- In fact, such action can clean off anything from *E. coli* to a virus.**

- A) Rubbing the hands hard together creates the necessary friction to remove infections.  
B) Experts state that gastrointestinal illnesses might be caused by the microbes on our hands.  
C) Yet the amount of time we are supposed to spend while handwashing is another concern for scientists.  
D) Therefore, children will not easily acquire the habit of handwashing unless they are guided by their parents.  
E) However, after handwashing, wet skin is also said to pick up considerably more bacteria.

**58. The largest desert on Earth, the Sahara extends nearly 3,700 miles from east to west and 1,250 miles from north to south across the borders of eleven countries. However, the borders of the Sahara cannot be clearly defined for this is a desert on the move. Climate change and the effect of intensive agricultural exploitation have led to the desert's expansion. - --- Lands that were once fertile farmland and semi-arid pasture are now barren and desiccated, useless to human life.**

- A) The Sahara Desert has also served as the setting for athletic events and famous television productions.
- B) As a result of this process, which is called 'desertification', the Sahara has grown over an area as large as the country of Somalia in just the last 50 years.
- C) Trade across the Sahara Desert reached its highest level between the 13th and 16th centuries.
- D) Despite the adverse conditions, a lucrative trans-Saharan trade in essential and luxury products was established by 1000 BCE.
- E) Contrary to popular belief, most of the Sahara is stone, rock and gravel; only a very small part is actually sand.

**59. The Atlantic coasts of Africa and South America fit into each other like jigsaw pieces and are also home to many of the same sediments and reptiles. ---- These observations led the German geoscientist Alfred Wegener to propose in 1911 that all the continents were once one big landmass that later split up. He was initially criticized because he could not explain how the continents moved apart. However, fifty years later, his theory was confirmed by the model of plate tectonics.**

- A) Similarly, closely related plants made their homes in India, Australia, and Antarctica 200 million years ago.
- B) Continental drift is the slow movement of continents controlled by the processes associated with plate tectonics.
- C) Plates are bonded portions of the Earth's mantle and crust, averaging 100 kilometers in thickness.
- D) The regular lava flows, however, continue to form islands, including the Hawaiian and Galapagos Islands.
- E) Thanks to more sophisticated procedures, scientists can also measure current changes in position, although these only amount to a few inches per year.

60. - 65. sorularda verilen cümleler sırasıyla okunduğunda anlam bütünlüğünü bozan cümleyi bulunuz.

60. (I) Every year, about 50 volcanoes throughout the world are active above sea level, threatening the lives and property of millions of people. (II) The relationship between people and volcanoes is as old as the humanity—our earliest ancestors evolved in the volcanic region of the East African Rift, where their activities and remains are preserved by volcanic deposit. (III) It has been widely known that a single eruption can claim thousands of lives in an instant. (IV) For example, in the 1902 eruption of Mont Pelee on the Caribbean Island of Martinique, a flow of hot ash and gases overwhelmed the city of St. Pierre, killing most of its 28,000 inhabitants. (V) More recently, a mudflow triggered by the 1985 eruption of the volcano Nevado del Ruiz in Colombia killed nearly all of the 25,000 inhabitants of the town of Armero.

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

61. (I) You might not have heard of it, but you have probably eaten a fruit or vegetable that has been created through radiation breeding. (II) This technique exposes seeds to radiation in order to create mutations in the plant's DNA. (III) Often, the mutated plants are considered useless and are left to decompose. (IV) Today, it is carried out by firing beams of electrons, neutrons or charged particles (ions) at the seeds, or exposing them to radioactive sources like cobalt-60. (V) But occasionally, the genetic mutations give the plants useful new properties, like resistance to drought or disease, or higher yields.

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

62. (I) Forests occur in any place where the climate is suitable in terms of length of the growing season, air and soil temperature, and sufficiency of soil moisture. (II) Recent reductions of forest area are a critical environmental problem in terms of losses of biodiversity. (III) They can be classified into broad types on the basis of their geographic range and dominant types of trees. (IV) The most extensive of these types are boreal coniferous, temperate angiosperm, and tropical angiosperm forests. (V) However, there are regional and local variants of all of these kinds of forests.

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

63. (I) The field of Web application development has seen significant changes over the past several years. (II) In their infancy years, these applications consisted of simplistic static Web pages with text and graphics without any database access. (III) Therefore, they have brought tremendous benefits and cost savings to the organisations. (IV) Over time, they became dynamic in nature and could access traditional databases, which led many organisations to do business on the Internet. (V) These applications utilised databases to perform such tasks as storing and tracking customer information, purchases, and preferences.

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

64. (I) Among humans the most desired of the edible fungi are truffles, which are considered a delicacy and can be rather expensive. (II) The high cost of these fungi is mainly due to the fact that they grow under the soil surface and therefore can be difficult to find. (III) Many fungi are considered useful due to the valuable services their cultivation can provide for human beings, while others may inflict significant harvest losses or cause diseases. (IV) However, animals with sensitive noses can detect the strong odor of truffles. (V) Therefore, truffle collectors use pigs or specially trained sniffer dogs to detect these valuable delicacies hidden in forests.

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

65. (I) Millions of years ago, the remains of plants and animals decayed and built up in thick layers. (II) This decayed matter from plants and animals is called organic material — it was once alive. (III) Over time, the mud and soil changed to rock, covered the organic material and trapped it beneath the rock. (IV) Pressure and heat changed some of this organic material into coal, some into petroleum, and some into natural gas. (V) Being a clean fuel is one reason that the use of natural gas, especially for electricity generation, has grown so much and is expected to grow even more in the future.

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

**66. - 68. soruları aşağıdaki parçaya göre cevaplayınız.**

Animals, collectively speaking, are getting smaller, as humans drive big beasts such as elephants to extinction, with far-reaching consequences for ecosystems. Previous studies have shown that bigger animals are at a greater risk of dying out. Now a model of the next 100 years predicts that habitat destruction, poaching and other pressures will cause an overall decline in body size. Researchers at the University of Southampton modelled the future of 15,500 endangered species. Critically endangered ones such as the black rhinoceros were given a 99 percent likelihood of disappearing, while vulnerable ones had a 10 percent chance. The results showed the loss of big species would see the average body mass of animals drop around 9 percent, to 64.1 grams from today. This matters, and not just because we care about charismatic megafauna, such as tigers and so on. Big species can be vital for ecosystems, such as herbivores keeping grass productive. They also perform roles that help us, like eating dead animals. For example, where vultures have declined in number, disease has risen.

**66. According to the passage, average size of animals is expected to decline ----.**

- A) given that there is now fiercer competition amongst animals with bigger size
- B) despite the efforts of scientists to take precautions against human activities such as poaching
- C) as smaller animals are better at adapting to changing conditions imposed by humans
- D) because humans are exerting various pressures on larger animals
- E) even though a recent model predicts that the situation might change in a century

**67. The black rhinoceros is given as an example of a species that ----.**

- A) is most likely to go extinct in the near future
- B) has been saved thanks to the work of researchers at the University of Southampton
- C) has already declined in size by 9 percent, 64.1 grams
- D) is going to disappear soon after elephants
- E) still has a 10 percent chance to avoid the risk of extinction

**68. Which of the following can be inferred from the passage?**

- A) Loss of grass due to big animals is believed to result in several diseases.
- B) The number of vultures, which help us through eating dead animals, has declined due to big animals.
- C) We are likely to experience more health problems due to the extinction of big animals.
- D) People have long remained unwilling to find solutions to the problem of extinction.
- E) Of the 15,500 endangered species studied, tigers have been found to play the most important role in the ecosystems.

**69. - 71. soruları aşağıdaki parçaya göre cevaplayınız.**

Destruction of the Brazilian Amazon rainforest has reached the highest levels in a decade, but tracking such activity is challenging due to the huge size of the rainforest. However, the size of the rainforest is not the only handicap for researchers trying to determine the rate of destruction. The Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) uses satellite images to monitor forest cover and trigger alerts when changes are suspected – but at a resolution of just 30 meters, it is hard to pinpoint the actual cause. Moreover, sending an anti-deforestation task force to areas falsely flagged as logged is costly. Now a network of universities, tech companies and non-governmental organisations, named MapBiomas, has found a way to track illegal deforestation in near real-time, using satellite data. Its platform collects data from the Brazilian government's existing alert systems and cross-checks the area with much higher resolution images down to 3 meters – captured by miniature satellites from a private company based in San Francisco. To save time and money, the MapBiomas platform zooms in only on areas flagged for potential deforestation, sourcing detailed images taken before and after the incident to produce a report for punishment. As a result, this network will help the Brazilian government to effectively cope with illegal loggers in the Brazilian Amazon rainforest.

**69. It is pointed out in the passage that the size of the Brazilian Amazon rainforest ----.**

- A) could only be measured with the help of high-resolution satellite images
- B) requires more researchers to be engaged in the network of MapBiomas for tracking deforestation in detail
- C) has led IBAMA to establish MapBiomas to track deforestation in all parts of the rainforest
- D) presents the biggest obstacle in determining the actual cause of destruction
- E) is one of the issues that make it difficult for researchers to track deforestation

**70. It can be understood from the passage that the major purpose of MapBiomas is to ----.**

- A) capture satellite images of entire Brazilian Amazon rainforest
- B) prompt the Brazilian government to impose more severe punishment on illegal loggers
- C) reveal how much of the Brazilian Amazon rainforest has vanished over the past years
- D) provide a more accurate and useful way to track illegal deforestation in the Brazilian Amazon rainforest
- E) flag areas for potential deforestation and send an anti-deforestation task force to these areas

**71. What is the main purpose of the author?**

- A) To criticise IBAMA for not taking immediate action against deforestation in the Brazilian Amazon rainforest
- B) To draw attention to the high cost of the fight against deforestation in the Brazilian Amazon rainforest
- C) To explain why the rate of destruction in the Brazilian Amazon rainforest has increased rapidly
- D) To provide detailed information about the efforts to track deforestation in the Brazilian Amazon rainforest
- E) To put emphasis on the efficiency of the Brazilian government's existing alert systems

**72. - 74. soruları aşağıdaki parçaya  
görecevaplınız.**

One of the problems suffered by a species on the brink of extinction is low genetic diversity. Initially this is caused by lack of numbers, but then it is worsened by the inbreeding (breeding between closely-related individuals) which inevitably results. Inbreeding brings with it infertility and vulnerability to disease. This, for instance, is a concern for the kakapo, a nocturnal parrot that lives in New Zealand. Like many other island-dwelling birds, it has become flightless. It is also, at up to 4 kg, the world's heaviest parrot. Both of these things make it an attractive target for predatory mammals, which thankfully were absent for most of the 80 million years during which it and its ancestors have inhabited the islands of New Zealand. The kakapo's downfall began with New Zealand's first wave of human colonisation, some 700 years ago, by Polynesians. These arrivals hunted it, and also brought rats with them, which ate nestling chicks. Second, European wave of immigrants brought cats and stoats to add to the birds' enemies. Humans also destroyed much of their habitat to make way for crops. Conservation efforts are not assisted by the birds' reproductive habits. They feed their chicks on the fruit of the rimu, a tree that produces its nutrient-rich fruits only every two or three years. These trees all fruit simultaneously during what are known as mast years. This means the kakapo can breed only during mast years. With all these strikes against them, it is little surprise that by the early 1970s, the kakapo was thought to be extinct. But then two remnant groups were found in the south of the country. These were relocated and now live on three small predator-free islands.

**72. It is stated in the passage that the weight of the kakapo ----.**

- A) has resulted from uncontrolled inbreeding
- B) makes it an easy prey for predatory mammals
- C) is due to its rich genetic diversity
- D) leads to infertility and vulnerability to disease
- E) is a result of feeding on the rimu fruit

**73. Which of the following is pointed out in the passage about the kakapo?**

- A) It was hunted by predatory mammals for 80 million years.
- B) Rats were introduced by the colonising Europeans to hunt it down.
- C) Agricultural production has negatively impacted its numbers.
- D) Conservation efforts, combined with its altered reproductive habits, have increased its survival rates.
- E) It had experienced complete extinction by the early 1970s.

**74. Which could be the best title for this passage?**

- A) Conservation Efforts for an Endangered Bird
- B) The Impact of Colonisation on the Kakapo
- C) How the Kakapo Copes with Its Predators
- D) The Effect of Flora on the Fertility of the Kakapo
- E) Reasons Why the Kakapo Faces Extinction

**75. - 77. soruları aşağıdaki parçaya  
görecevaplınız.**

In 2011, a devastating tsunami engulfed Japan's north-eastern coast, triggering the worst nuclear disaster since Chernobyl. The tsunami waves knocked out electricity at Fukushima Daiichi nuclear power plant, causing cooling systems to fail and half of the facility's uranium cores to overheat and melt through their steel containers. Hydrogen explosions in the next few days damaged three of the reactor buildings, venting radioactive materials into the air. That plume of airborne contamination forced some 160,000 people to evacuate from their homes. Former residents will not likely return any time soon, because levels of radioactivity remain high. Even more troublesome, groundwater now mingles with radioactive materials before heading into the sea. The contaminated water is coned and stored in massive tanks. Lately, the water has been processed to reduce the concentration of radionuclides, but it still retains high concentrations. Disputes over its final resting place remain unresolved. The same goes for the millions of topsoil and other solid waste from the disaster, as well as the uranium fuel itself. Nevertheless, Japan is making plans to recommit to nuclear power plants, and so far two have been brought back to full operation.

**75. Which of the following is true according to the passage?**

- A) The site of the nuclear disaster is still contaminated even today.
- B) People who left their homes are thinking to come back as contamination is about to be eliminated.
- C) The cooling system was directly knocked down by the tsunami waves.
- D) The giant tsunami waves initially led to the hydrogen explosions.
- E) Fukushima explosion had the same results as the ones in Chernobyl.

**76. It can be understood from the passage that the contaminated groundwater around the affected area ----.**

- A) is totally purified before reaching the sea
- B) has been processed so efficiently that the concentration of radionuclides has reached a low level
- C) has been kept in tanks although its final destination has been determined by the former residents
- D) is collected and filtered before the topsoil absorbs it
- E) is a serious issue in terms of reducing the chemicals in it

**77. Which of the following could be inferred from the passage?**

- A) There are no active nuclear power plant in Japan yet.
- B) Japan has not lost its hope to produce energy from nuclear power.
- C) Officials banned former residents to return their homes for a while, but some of them violated the ban.
- D) Decreasing the contamination in air and soil was easier than the process in water.
- E) Storing and processing the nuclear waste has been completely successful.



**78. - 80. soruları aşağıdaki parçaya  
görecevaplaysınız.**

An interesting motivation for artificial intelligence (AI) research is called 'Jungian world theory'. According to this hypothesis, it seems that people cannot learn from history. Humanity, as a collective unit, seems unable to foretell, or care about, the potential consequences of the things they do. Thus, 'history repeats'. People keep fighting wars for the same reasons, but wars rarely solve problems. Human activities become ever more destructive to the Earth's ecosystem. The most pessimistic interpretations of the Jungian world theorists suggest that humanity is doomed to self-extinction. What can humanity do to stop this self-defeating vicious circle? According to researcher Charles Lecht, one answer may lie in the development of AI to the point that machines attain greater intelligence than people. Perhaps a brilliant computer or system of machines can help humanity to control its destiny, so that people need not keep reliving the same old calamities. Many researchers doubt that machines will, or can, become smarter than people, but it has been argued that AI can and should be used to help humanity find solutions to difficult social problems.

**78. According to the passage the Jungian world theorists ----.**

- A) think that people can easily predict the potential consequences of their actions
- B) blame artificial intelligence for the disaster of humanity
- C) mistakenly compare humanity with machines
- D) consider humans to be self-destructive
- E) believe artificial intelligence can cause human extinction

**79. Which of the following can be said about the Jungian world theory and human's fate?**

- A) Artificial intelligence and its harmful effects are the most important things that theory tries to explain
- B) The passionate proponents of the theory reject the idea that humanity disturbs the Earth's ecosystem.
- C) It points out that humanity is better off without artificial intelligence.
- D) The theory needs to be further developed to get rid of its pessimistic interpretations.
- E) It suggests that humanity may not face the same tragedies if artificial intelligence is involved in the solution of problems.

**80. What is the author's primary purpose?**

- A) To discuss whether artificial intelligence could surpass human intelligence
- B) To introduce the Jungian world theory by highlighting its relation to artificial intelligence
- C) To explain why humans have difficulty in finding solutions to social problems
- D) To compare the Jungian world theory with other theories on human's destiny
- E) To exemplify human activities that are threatening the Earth's ecosystem

13 Mart 2022 YÖKDİL Fen Bilimleri sınavı

<b>13 Mart 2022 Fen Yökdil Cevap Anahtarı</b>									
1. B	2. D	3. E	4. D	5. D	6. C	7. C	8. D	9. B	10. C
11. C	12. B	13. B	14. B	15. E	16. C	17. D	18. C	19. C	20. A
21. B	22. C	23. E	24. B	25. A	26. B	27. D	28. A	29. D	30. E
31. E	32. B	33. C	34. C	35. A	36. C	37. A	38. A	39. D	40. C
41. C	42. B	43. C	44. C	45. C	46. D	47. E	48. B	49. D	50. C
51. B	52. A	53. D	54. C	55. D	56. B	57. A	58. B	59. A	60. B
61. D	62. B	63. C	64. C	65. E	66. D	67. A	68. C	69. E	70. D
71. D	72. B	73. C	74. E	75. A	76. E	77. B	78. D	79. E	80. B