

I. LEXICO-GRAMMAR (3.0 points)

For questions 1-13, choose the letter (A, B, C or D) to indicate the word or phrase which best completes each blank.

1. Jennifer was _____ moved by the sad story that her grandmother told her.
A. soundly B. heavily C. widely D. deeply
2. They _____ out for five years before they decided to get married.
A. have been going B. have gone C. are going D. had been going
3. Steve's parents give him a weekly _____, which he can use any way he likes.
A. allowance B. income C. wage D. donation
4. Tina screamed her _____ off when she saw a rat under the table.
A. thumb B. finger C. hand D. head
5. I'd rather my parents _____ me go to piano lessons when I was 6 years old.
A. didn't make B. wouldn't have made
C. hadn't made D. haven't made
6. I am sure that my friendship with Louisa will _____ the test of time.
A. stand B. pass C. sit D. lose
7. Although Sheila still had some petrol left, she _____ the first petrol station she saw, because she knew it was a long way to the next one.
A. saw off B. stood down C. left out D. pulled into
8. I wish you'd stop _____ with that watch. It needs to be repaired by a professional.
A. dabbling B. striving C. tinkering D. persevering
9. Daniel was the most suitable candidate _____ for the job.
A. to be applied B. to apply C. to applying D. applied
10. You always know exactly what she's thinking – she's so _____.
A. opaque B. transparent C. crystal D. overt
11. The Youth Club was going to close, but a local bank _____ with a generous donation.
A. stepped in B. took up C. pulled up D. stood out
12. The more interesting the book is, _____ I am to try and finish it in one evening!
A. the more likely B. the likely C. the least likely D. the most likely
13. I can't stand seeing people _____ advantage of at work; it's very unfair.
A. taking B. to take C. being taken D. to be taken

For questions 14-15, choose the correct letter (A-F) to complete the conversation.

- A. I hope they don't block views of the bay.
B. The dolphin fountain?
C. One of my favorite cities.
D. Did you just get in from Austin?
E. Did you have a chance to see downtown?
F. Yeah, I was really impressed.

Eric: (14) _____

Kevin: Not much. I was visiting my grandmother and she's pretty sick at the moment, but I did have a coffee near the dolphin fountain.

Eric: (15) _____ That's near the waterfront, right?

Kevin: That's right, they redeveloped that area. They tore down the old office buildings and built a new plaza.

Eric: Sounds great!

For questions 16-20, choose the letter (A, B, C or D) to indicate the underlined part that needs correction in each of the following sentences. You do NOT need to fix the error.

16. The shark which pushed silently through the seaweed and attacked the unsuspecting swimmers.

- A. which B. silently C. the D. unsuspecting

17. Rabies, a fatal disease of the nervous system of dogs and other animals, can also cause mad and death in humans bitten by a diseased animal.

- A. nervous system B. other C. mad D. bitten

18. By far the duller job I've ever had was when I worked like a security guard in a high street clothes shop in Macclesfield.

- A. By far B. ever C. like D. clothes

19. Jo's application was rejected for the grounds that she lacked the necessary qualifications.

- A. was B. for C. that D. necessary

20. You can go either way at the fork in the road: they all lead to the beach.

- A. either B. the C. all D. to

For questions 21-30, fill in each blank with the correct form of the word in brackets.

21. _____ are concerned over the effect of commercial exploitation of forests. (CONSERVE)

22. The school's football pitch has been _____ over the summer to conform to new national standards. (LONG)

23. If the air in a room is too dry, you can put a bowl of water near the radiator to _____ it. (HUMID)

24. Visibility was down to a metre due to the thick fog, so we had to drive very _____. (CAUTION)

25. Parents want to make this a truly _____ day for their children. (MEMORY)

26. If we had acted earlier and more _____, it might not have come to this. (DECIDE)

27. The local newspapers write about the boy's _____ courage. After all, he was the only one who hurried to the rescue. (PRAISE)

28. Uncle Dave's supply of jokes and funny stories always seemed _____. He could tell them all day and night without stopping. (EXHAUST)

29. It's Ryan's _____ that drives his parents crazy. They can't even persuade him to brush his teeth in the morning. (OBSTINATE)

30. Organizers blamed the bad weather for the low _____; fewer than 2,000 people attended this year's festival. (TURN)

II. READING AND USE OF ENGLISH (4.0 points)

For questions 31-40, read the passage and fill each of the following numbered blanks with ONE suitable word.

ON THE OTHER HAND?

We left-handed people tend to lack pride, which means that we rarely complain (31) _____ having to live in a 'right-handed' world. We make (32) _____ demands and we avoid a fuss. I used to say whenever someone watched me sign my name and remarked that he or she was also left-handed: 'You and me and Leonardo da Vinci!' That was a weak joke, but it contained my often unconscious desire to belong to Left Pride, a social movement that (33) _____ far doesn't exist but I hope may one day come. There are many false stories about left-handed people (34) _____ circulation: for example, a few decades ago someone wrote that Picasso was left-handed, and others kept repeating it, but the proof is all (35) _____ the contrary. The great genius Einstein is often still claimed as one of ours, also without proof. And sadly there is also no truth in the myth that the

left-handed tend to be smarter and more creative. (36) _____ the great amount of research that has been carried out, researchers in the field still find it hard to decide precisely what we mean (37) _____ left-handed. Apparently a third of those (38) _____ write with their left hand throw a ball with their right. However, those using their right hand for writing rarely throw with their left. The skill of writing is one that becomes crucial at a most impressionable age, and defines (39) _____ you will call yourself. I have never used scissors, baseball bat, hockey stick or computer mouse with anything but my right; even so, I still regard myself as left-handed, as (40) _____ everyone else.

For questions 41-52, read the passage and choose the letter (A, B, C or D) to indicate the correct word that best fits each of the numbered blanks.

GADGETS FOR THE FUTURE

This year's Future Product of the Year Award has attracted a number of unusual entries, including the Inculpable Mousetrap and an alarm-clock duvet and pillow. Stuart Penny and Gianni Tozzi, both 29, conceived the Inculpable Mousetrap as an 'exercise in morality' and accept it is unlikely to (41) _____ commercial success. You (42) _____ the trap, wander off to the pub and wait to see what happens. If a mouse approaches the trap, a transmitter (43) _____ to it sends a signal to your mobile phone. You are then (44) _____ to decide whether to activate the trap or not. You send back your answer as a text message and the trap's metal bar slams down or (45) _____ open accordingly.

Rachel Wingfield's alarm-clock duvet and pillow could (46) _____ the end for alarm clocks. They use pulsating light beams to wake sleepers and can be used individually or together. The sleeper (47) _____ programmes the alarm clock on their mobile phone, plugs it into a socket on the duvet or pillow and is woken at the correct time – with light. The whole effect is (48) _____ to replicate the break of (49) _____. The duvet and pillow are woven through with electro-luminescent cords. At the (50) _____ time the mobile phone sends a tiny electric current through them and they begin to glow. Rachel, 24, says: 'Alarm clocks needlessly wake (51) _____ households. I wanted to design something (52) _____ at the individual sleeper.'

- | | | | |
|------------------|---------------|--------------|--------------|
| 41. A. enjoy | B. appreciate | C. support | D. favour |
| 42. A. shut | B. set | C. put | D. fix |
| 43. A. collated | B. united | C. attached | D. enclosed |
| 44. A. asked | B. offered | C. let | D. urged |
| 45. A. lasts | B. rests | C. stays | D. holds |
| 46. A. write | B. speak | C. spell | D. say |
| 47. A. uniquely | B. plainly | C. purely | D. simply |
| 48. A. supposed | B. assumed | C. pretended | D. suggested |
| 49. A. fast | B. sunrise | C. light | D. dawn |
| 50. A. announced | B. specified | C. said | D. stated |
| 51. A. full | B. whole | C. total | D. high |
| 52. A. planned | B. thought | C. intended | D. targeted |

For questions 53-58, choose which of the paragraphs A-G fit into the gaps in the article about an unusual school. There is ONE extra paragraph which you do not need to use.

LEARNING TO PLAY OR PLAYING TO LEARN?

In an old school building, a lively group of sixth graders is taking a class in "Sports for the Mind"
In a classroom, a teacher is playing a computer game on his laptop, which is linked to a large interactive whiteboard. His students are riveted to the screen. While he tries to avoid enemy robots to make it home safely, his sixth graders are tracking the robots' movements. They shout out instructions and warnings. "That extra movement cost you precious time," one student observes. "Look behind you!" shout others. "Go! Go!"

53. _____

This is no ordinary classroom. At the Quest to Learn school in New York City, a radical experiment is underway. Who knows where it will lead? This public school is being reinvented with the latest

technology and quest-based learning as the underlying principle of teaching. Quest to Learn is the creation of game designer Katie Salen, who has long been concerned about the fact that the curriculum taught in schools often has little relevance to the students' world outside.

54. _____

This “gamification” of education is underpinned by the belief that learning which is fun leads to greater acquisition and retention of knowledge. Therefore, lessons are designed like quests – including online activities that teach subjects like maths through games. The grading system reflects levels of gaming competence such as novice, apprentice and master. Final exams are named boss level, referring to the last stage of video games where players face the ultimate test.

55. _____

As to homework, students still do traditional reading assignments, but also record podcasts or make their own video clips. These videos can provide a means of assessing student learning. “You have to understand something in order to explain it to someone else,” curriculum designer Daniel O’Keefe points out. In the future, games could even replace examinations. If a student succeeds in moving through ever more sophisticated levels of a game teaching physics, for example, he or she has clearly demonstrated the knowledge required.

56. _____

Another area that gaming develops is the ability to persevere. Gamers always “level up” and aim to win, but the road to winning involves failure. Will Wright, designer of The Sims game, calls it failure-based learning, in which failure is short-lived, non-threatening and motivational for children. “They play for five minutes and lose,” he says. But inevitably they will play again and again until they win. Children who persist after constant failures develop emotional resilience and intellectual stamina.

57. _____

In another lesson, the teacher presents the students with the survival game The Last of Us. With its complex plot and engaging characters, students learn nearly as much about literature as they would have done by reading a book. They play eight hours at home and complete the game in class.

58. _____

Gaming may be the catalyst for a fundamental change in education, for as games make the transition from commercial to educational use, they are proving to be very versatile. And since many games can be written to be intuitive or adaptive, maybe the day will dawn when the content of learning is customized to each individual’s needs. This is one experiment that could pave the way towards a revolution in our education system. It’s a goal worth pursuing. The question is whether other schools will follow suit.

A. Other regular subjects like history and science are not neglected. Rather, they are embedded inside such quests, where students use a blend of academic subjects to solve problems. For example, in Creepytown, students pretend they are travel agents and use maths to convert currencies and English to write a travel blog. When the city has an economic crisis, students must improvise – they design a theme park to bring in revenue.

B. The game evokes the full spectrum of emotions – from elation to being visibly moved and then stunned into utter silence in the game’s final scene. Their teacher says he couldn’t imagine this having happened if they had simply watched a film or read a novel together.

C. National policy makers and parents alike are concerned about life skills, thus the recurrent debate centres around which skills students need for success in a rapidly evolving world. One point of consensus is the need for innovation in the nation’s schools.

D. Quest to Learn aims to bridge this gap with gaming. “Kids love to play games and they will commit to games for hours and hours, when their attention span is quite short for other things,” says Arana Shapiro, director of curriculum at the school. Digital games are an integral part of children’s lives and through play and exploration, we construct new ideas. Thus, games are a powerful tool for learning and could stimulate a quantum shift in teaching.

E. The benefits of gaming are not restricted to schools in the USA. In Norway, for example, students watch a video game called The Walking Dead. They debate the ethical dilemma of dividing food between 10 survivors when they have provisions for only four. Who should be fed first? Having reached an ethical solution, students justify it with concepts of moral philosophy they have studied.

F. As he cheats death and reaches home safely with less than two seconds to spare, the room erupts in cheers of relief, admiration and delight. There is no denying the level of engagement in learning in this classroom. It is absolute.

G. Students are sometimes asked to design their own computer games as well, which demands expertise in maths, art, coding and deductive reasoning. Richard Arum, a professor at New York University, says this teaches children “to collaborate, think critically and master 21st-century competencies,” skills required for tomorrow’s job market.

For questions 59-70, read the passage and do the tasks that follow.

AUTUMN LEAVES

Canadian writer Jay Ingram investigates the mystery of why leaves turn red in the fall

A. One of the most captivating natural events of the year in many areas throughout North America is the turning of the leaves in the fall. The colours are magnificent, but the question of exactly why some trees turn yellow or orange, and others red or purple, is something which has long puzzled scientists.

B. Summer leaves are green because they are full of chlorophyll, the molecule that captures sunlight and converts that energy into new building materials for the tree. As fall approaches in the northern hemisphere, the amount of solar energy available declines considerably. For many trees – evergreen conifers being an exception – the best strategy is to abandon photosynthesis until the spring. So rather than maintaining the now redundant leaves throughout the winter, the tree saves its precious resources and discards them. But before letting its leaves go, the tree dismantles their chlorophyll molecules and ships their valuable nitrogen back into the twigs. As chlorophyll is depleted, other colours that have been dominated by it throughout the summer begin to be revealed. This unmasking explains the autumn colours of yellow and orange, but not the brilliant reds and purples of trees such as the maple or sumac.

C. The source of the red is widely known: it is created by anthocyanins, water-soluble plant pigments reflecting the red to blue range of the visible spectrum. They belong to a class of sugar-based chemical compounds also known as flavonoids. What’s puzzling is that anthocyanins are actually newly minted, made in the leaves at the same time as the tree is preparing to drop them. But it is hard to make sense of the manufacture of anthocyanins – why should a tree bother making new chemicals in its leaves when it’s already scrambling to withdraw and preserve the ones already there?

D. Some theories about anthocyanins have argued that they might act as a chemical defence against attacks by insects or fungi, or that they might attract fruit-eating birds or increase a leaf’s tolerance to freezing. However there are problems with each of these theories, including the fact that leaves are red for such a relatively short period that the expense of energy needed to manufacture the anthocyanins would outweigh any anti-fungal or anti-herbivore activity achieved.

E. It has also been proposed that trees may produce vivid red colours to convince herbivorous insects that they are healthy and robust and would be easily able to mount chemical defences against infestation. If insects paid attention to such advertisements, they might be prompted to lay their eggs on a duller, and presumably less resistant host. The flaw in this theory lies in the lack of proof to support it. No one has as yet ascertained whether more robust trees sport the brightest leaves, or whether insects make choices according to colour intensity.

F. Perhaps the most plausible suggestion as to why leaves would go to the trouble of making anthocyanins when they’re busy packing up for the winter is the theory known as the ‘light screen’ hypothesis. It sounds paradoxical, because the idea behind this hypothesis is that the red pigment is made in autumn leaves to protect chlorophyll, the light-absorbing chemical, from too much light. Why does chlorophyll need protection when it is the natural world’s supreme light absorber? Why protect chlorophyll at a time when the tree is breaking it down to salvage as much of it as possible?

G. Chlorophyll, although exquisitely evolved to capture the energy of sunlight, can sometimes be overwhelmed by it, especially in situations of drought, low temperatures, or nutrient deficiency. Moreover, the problem of oversensitivity to light is even more acute in the fall, when the leaf is busy preparing for winter by dismantling its internal machinery. The energy absorbed by the chlorophyll molecules of the unstable autumn leaf is not immediately channelled into useful products and processes, as it would be in an intact summer leaf. The weakened fall leaf then becomes vulnerable to the highly destructive effects of the oxygen created by the excited chlorophyll molecules.

H. Even if you had never suspected that this is what was going on when leaves turn red, there are clues out there. One is straightforward: on many trees, the leaves that are the reddest are those on the side of the tree which gets most sun. Not only that, but the red is brighter on the upper side of the leaf. It has also been recognised for decades that the best conditions for intense red colours are dry, sunny days and cool nights, conditions that nicely match those that make leaves susceptible to excess light. And finally, trees such as maples usually get much redder the more north you travel in the northern hemisphere. It's colder there, they're more stressed, their chlorophyll is more sensitive and it needs more sunblock.

I. What is still not fully understood, however, is why some trees resort to producing red pigments while others don't bother, and simply reveal their orange or yellow hues. Do these trees have other means at their disposal to prevent overexposure to light in autumn? Their story, though not as spectacular to the eye, will surely turn out to be as subtle and as complex.

Questions 59-62

Which paragraph contains the following information?

Write the correct letter A-I.

59. a description of the substance responsible for the red colouration of leaves

60. some evidence to confirm a theory about the purpose of the red leaves

61. an explanation of the function of chlorophyll

62. a suggestion that the red colouration in leaves could serve as a warning signal

Questions 63-66

Complete the notes below.

Choose ONE WORD ONLY from the passage for each answer.

Why believe the 'light screen' hypothesis?

The most vividly coloured red leaves are found on the side of the tree facing the **(63)** _____.

The **(64)** _____ surfaces of leaves contain the most red pigment.

Red leaves are most abundant when daytime weather conditions are **(65)** _____ and sunny.

The intensity of the red colour of leaves increases as you go further **(66)** _____.

Questions 67-69

Do the following statements agree with the information given in the reading passage?

Write

TRUE *if the statement agrees with the information*

FALSE *if the statement contradicts the information*

NOT GIVEN *if there is no information on this*

67. It is likely that the red pigments help to protect the leaf from freezing temperatures.

68. The 'light screen' hypothesis would initially seem to contradict what is known about chlorophyll.

69. Leaves which turn colours other than red are more likely to be damaged by sunlight.

Question 70

Choose the correct letter A, B, C or D.

For which of the following questions does the writer offer an explanation?

A. why conifers remain green in winter

B. how leaves turn orange and yellow in autumn

C. how herbivorous insects choose which trees to lay their eggs in

D. why anthocyanins are restricted to certain trees

III. WRITING (3.0 points)

For questions 71-75, rewrite each of the following sentences in such a way that it has a similar meaning to the original sentence, beginning with the given word(s).

71. He only felt entirely relaxed with his close friends and family.

→ Only _____

72. "I wish I had mixed more with local people during my stay in Kenya," she said.

→ She regretted not _____

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.