

Name:

Class:

Date:

PROGRESS TEST 2

LISTENING

PART 1

Questions 1 - 10

Complete the form below.

Write **ONE WORD AND/OR A NUMBER** for each answer.

Customer Satisfaction Survey

Customer details

Name: Sophie Bird
Occupation: 1
Reasons for travel today: 2

Journey information

Name of station returning to: 3
Type of ticket purchased: standard 4 ticket
Cost of ticket: 5 £
When ticket was purchased: yesterday
Where ticket was bought: 6

Satisfaction with journey

Most satisfied with: the wifi
Least satisfied with: the 7 this morning

Satisfaction with station facilities

Most satisfied with: how much 8 was provided
Least satisfied with: lack of seats, particularly on the 9
Neither satisfied nor dissatisfied with: the 10 available

PART 2

Questions 11 - 20

Questions 11-15

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

11 Dartfield House school used to be

- A** a tourist information centre.
- B** a private home.
- C** a local council building.

12 What is planned with regard to the lower school?

- A** All buildings on the main site will be improved.
- B** The lower school site will be used for new homes.
- C** Additional school buildings will be constructed on the lower school site.

13 The catering has been changed because of?

- A** long queuing times.
- B** changes to the school timetable.
- C** dissatisfaction with the menus.

14 Parents are asked to

- A** help their children to decide in advance which serving point to use.
- B** make sure their children have enough money for food.
- C** advise their children on healthy food to eat.

15 What does the speaker say about the existing canteen?

- A** Food will still be served there.
- B** Only staff will have access to it.
- C** Pupils can take their food into it.

Questions 16 - 18

What comment does the speaker make about each of the following serving points in the Food Hall?

Choose **THREE** answers from the box and write the correct letter, A-D, next to Questions 16-18.

Comments
A pupils help to plan menus
B only vegetarian food
C different food every week
D daily change in menu

Food available at serving points in Food Hall

- 16 World Adventures
- 17 Street Life
- 18 Speedy Italian

Questions 19 and 20

Choose **TWO** letters, A-E.

Which **TWO** optional after-school lessons are new?

- A swimming
- B piano
- C acting
- D cycling
- E theatre sound and lighting

PART 3

Questions 21 - 30

Questions 21 – 25

Choose the correct letter, A, B or C.

Planning a presentation on nanotechnology

- 21** Russ says that his difficulty in planning the presentation is due to
- A** his lack of knowledge about the topic.
 - B** his uncertainty about what he should try to achieve.
 - C** the short time that he has for preparation.
- 22** Russ and his tutor agree that his approach in the presentation will be
- A** to concentrate on how nanotechnology is used in one field.
 - B** to follow the chronological development of nanotechnology.
 - C** to show the range of applications of nanotechnology.
- 23** In connection with slides, the tutor advises Russ to
- A** talk about things that he can find slides to illustrate.
 - B** look for slides to illustrate the points he makes.
 - C** consider omitting slides altogether.
- 24** They both agree that the best way for Russ to start his presentation is
- A** to encourage the audience to talk.
 - B** to explain what Russ intends to do.
 - C** to provide an example.
- 25** What does the tutor advise Russ to do next while preparing his presentation?
- A** summarise the main point he wants to make
 - B** read the notes he has already made
 - C** list the topics he wants to cover

Questions 26 – 30

What comments do the speakers make about each of the following aspects of Russ's previous presentation?

Choose **FIVE** answers from the box and write the correct letter, **A-G**, next to Questions 26-30.

Comments

- A lacked a conclusion
- B useful in the future
- C not enough
- D sometimes distracting
- E showed originality
- F covered a wide range
- G not too technical

Aspects of Russ's previous presentation

- 26 structure
- 27 eye contact
- 28 body language
- 29 choice of words
- 30 handouts

PART 4

Questions 31 - 40

Questions 31 – 40

Complete the notes below.

Write **ONE WORD ONLY** for each answer.

The effects of environmental change on birds

Mercury (Hg)

- Highly toxic
- Released into the atmosphere from coal
- In water it may be consumed by fish
- It has also recently been found to affect birds which feed on **31**.....

Research on effects of mercury on birds

- Claire Varian-Ramos is investigating:
 - the effects on birds' **32**..... or mental processes, e.g. memory
 - the effects on bird song (usually learned from a bird's **33**.....)
- Findings:
 - songs learned by birds exposed to mercury are less **34**.....
 - this may have a negative effect on birds' **35**.....
- Lab-based studies
 - allow more **36**..... for the experimenter

Implications for humans

- Migrating birds such as **37**..... containing mercury may be eaten by humans
- Mercury also causes problems in learning **38**.....
- Mercury in a mother's body from **39**..... may affect the unborn child
- New regulations for mercury emissions will affect everyone's energy **40**.....

READING

READING PASSAGE 1

You should spend about 20 minutes on **Questions 1 - 13**, which are based on Reading Passage 1 below.

Could urban engineers learn from dance?

- A** The way we travel around cities has a major impact on whether they are sustainable. Transportation is estimated to account for 30% of energy consumption in most of the world's most developed nations, so lowering the need for energy-using vehicles is essential for decreasing the environmental impact of mobility. But as more and more people move to cities, it is important to think about other kinds of sustainable travel too. The ways we travel affect our physical and mental health, our social lives, our access to work and culture, and the air we breathe. Engineers are tasked with changing how we travel round cities through urban design, but the engineering industry still works on the assumptions that led to the creation of the energy-consuming transport systems we have now: the emphasis placed solely on efficiency, speed, and quantitative data. We need radical changes, to make it healthier, more enjoyable, and less environmentally damaging to travel around cities.
- B** Dance might hold some of the answers. That is not to suggest everyone should dance their way to work, however healthy and happy it might make us, but rather that the techniques used by choreographers to experiment with and design movement in dance could provide engineers with tools to stimulate new ideas in city-making. Richard Sennett, an influential urbanist and sociologist who has transformed ideas about the way cities are made, argues that urban design has suffered from a separation between mind and body since the introduction of the architectural blueprint.
- C** Whereas medieval builders improvised and adapted construction through their intimate knowledge of materials and personal experience of the conditions on a site, building designs are now conceived and stored in media technologies that detach the designer from the physical and social realities they are creating. While the design practices created

by these new technologies are essential for managing the technical complexity of the modern city, they have the drawback of simplifying reality in the process.

- D** To illustrate, Sennett discusses the Peachtree Center in Atlanta, USA, a development typical of the modernist approach to urban planning prevalent in the 1970s. Peachtree created a grid of streets and towers intended as a new pedestrian-friendly downtown for Atlanta. According to Sennett, this failed because its designers had invested too much faith in computer-aided design to tell them how it would operate. They failed to take into account that purpose-built street cafés could not operate in the hot sun without the protective awnings common in older buildings, and would need energy-consuming air conditioning instead, or that its giant car park would feel so unwelcoming that it would put people off getting out of their cars. What seems entirely predictable and controllable on screen has unexpected results when translated into reality.
- E** The same is true in transport engineering, which uses models to predict and shape the way people move through the city. Again, these models are necessary, but they are built on specific world views in which certain forms of efficiency and safety are considered and other experiences of the city ignored. Designs that seem logical in models appear counter-intuitive in the actual experience of their users. The guard rails that will be familiar to anyone who has attempted to cross a British road, for example, were an engineering solution to pedestrian safety based on models that prioritise the smooth flow of traffic. On wide major roads, they often guide pedestrians to specific crossing points and slow down their progress across the road by using staggered access points that divide the crossing into two – one for each carriageway. In doing so they make crossings feel longer, introducing psychological barriers greatly impacting those that are the least mobile, and encouraging others to make dangerous crossings to get around the guard rails. These barriers don't just make it harder to cross the road: they divide communities and decrease opportunities for healthy transport. As a result, many are now being removed, causing disruption, cost, and waste.
- F** If their designers had had the tools to think with their bodies – like dancers – and imagine how these barriers would feel, there might have been a better solution. In order to bring about fundamental changes to the ways we use our cities, engineering will need to

develop a richer understanding of why people move in certain ways, and how this movement affects them. Choreography may not seem an obvious choice for tackling this problem. Yet it shares with engineering the aim of designing patterns of movement within limitations of space. It is an art form developed almost entirely by trying out ideas with the body, and gaining instant feedback on how the results feel. Choreographers have deep understanding of the psychological, aesthetic, and physical implications of different ways of moving.

- G** Observing the choreographer Wayne McGregor, cognitive scientist David Kirsh described how he ‘thinks with the body’, Kirsh argues that by using the body to simulate outcomes, McGregor is able to imagine solutions that would not be possible using purely abstract thought. This kind of physical knowledge is valued in many areas of expertise, but currently has no place in formal engineering design processes. A suggested method for transport engineers is to improvise design solutions and instant feedback about how they would work from their own experience of them, or model designs at full scale in the way choreographers experiment with groups of dancers. Above all, perhaps, they might learn to design for emotional as well as functional effects

Questions 1 - 6

Reading Passage 1 has seven paragraphs, A-G.

Which paragraph contains the following information?

Write the correct letter A-G in boxes 1-6 on your answer sheet.

- 1 reference to an appealing way of using dance that the writer is not proposing
- 2 an example of a contrast between past and present approaches to building
- 3 mention of an objective of both dance and engineering
- 4 reference to an unforeseen problem arising from ignoring the climate
- 5 why some measures intended to help people are being reversed
- 6 reference to how transport has an impact on human lives

Questions 7 - 13

Complete the summary below.

Choose **ONE WORD ONLY** from the passage for each answer.

Write your answers in boxes **7-13** on your answer sheet.

Guard rails

Guard rails were introduced on British roads to improve the **7**..... of pedestrians, while ensuring that the movement of **8**..... is not disrupted. Pedestrians are led to access points, and encouraged to cross one **9**..... at a time.

An unintended effect is to create psychological difficulties in crossing the road, particularly for less **10**..... people. Another result is that some people cross the road in a **11**..... way. The guard rails separate **12**....., and make it more difficult to introduce forms of transport that are **13**.....

READING PASSAGE 2

You should spend about 20 minutes on **Questions 14-26** which are based on Reading Passage 2 below.

Driverless cars

A The automotive sector is well used to adapting to automation in manufacturing. The implementation of robotic car manufacture from the 1970s onwards led to significant cost savings and improvements in the reliability and flexibility of vehicle mass production. A new challenge to vehicle production is now on the horizon and, again, it comes from automation. However, this time it is not to do with the manufacturing process, but with the vehicles themselves.

Research projects on vehicle automation are not new. Vehicles with limited self-driving capabilities have been around for more than 50 years, resulting in significant contributions towards driver assistance systems. But since Google announced in 2010 that it had been trialling self-driving cars on the streets of California, progress in this field has quickly gathered pace.

B There are many reasons why technology is advancing so fast. One frequently cited motive is safety; indeed, research at the UK's Transport Research Laboratory has demonstrated that more than 90 percent of road collisions involve human error as a contributory factor, and it is the primary cause in the vast majority. Automation may help to reduce the incidence of this.

Another aim is to free the time people spend driving for other purposes. If the vehicle can do some or all of the driving, it may be possible to be productive, to socialise or simply to relax while automation systems have responsibility for safe control of the vehicle. If the vehicle can do the driving, those who are challenged by existing mobility models – such as older or disabled travellers – may be able to enjoy significantly greater travel autonomy.

C Beyond these direct benefits, we can consider the wider implications for transport and society, and how manufacturing processes might need to respond as a result. At present, the average car spends more than 90 percent of its life parked. Automation means that initiatives for car-sharing become much more viable, particularly in urban

areas with significant travel demand. If a significant proportion of the population choose to use shared automated vehicles, mobility demand can be met by far fewer vehicles.

- D** The Massachusetts Institute of Technology investigated automated mobility in Singapore, finding that fewer than 30 percent of the vehicles currently used would be required if fully automated car sharing could be implemented. If this is the case, it might mean that we need to manufacture far fewer vehicles to meet demand. However, the number of trips being taken would probably increase, partly because empty vehicles would have to be moved from one customer to the next. Modelling work by the University of Michigan Transportation Research Institute suggests automated vehicles might reduce vehicle ownership by 43 percent, but that vehicles' average annual mileage double as a result. As a consequence, each vehicle would be used more intensively, and might need replacing sooner. This faster rate of turnover may mean that vehicle production will not necessarily decrease.
- E** Automation may prompt other changes in vehicle manufacture. If we move to a model where consumers are tending not to own a single vehicle but to purchase access to a range of vehicle through a mobility provider, drivers will have the freedom to select one that best suits their needs for a particular journey, rather than making a compromise across all their requirements. Since, for most of the time, most of the seats in most cars are unoccupied, this may boost production of a smaller, more efficient range of vehicles that suit the needs of individuals. Specialised vehicles may then be available for exceptional journeys, such as going on a family camping trip or helping a son or daughter move to university.
- F** There are a number of hurdles to overcome in delivering automated vehicles to our roads. These include the technical difficulties in ensuring that the vehicle works reliably in the infinite range of traffic, weather and road situations it might encounter; the regulatory challenges in understanding how liability and enforcement might change when drivers are no longer essential for vehicle operation; and the societal changes that may be required for communities to trust and accept automated vehicles as being a valuable part of the mobility landscape.

G It's clear that there are many challenges that need to be addressed but, through robust and targeted research, these can most probably be conquered within the next 10 years. Mobility will change in such potentially significant ways and in association with so many other technological developments, such as telepresence and virtual reality, that it is hard to make concrete predictions about the future. However, one thing is certain: change is coming, and the need to be flexible in response to this will be vital for those involved in manufacturing the vehicles that will deliver future mobility.

Questions 14-18

Reading Passage 2 has seven paragraphs A-G.

Which section contains the following information?

Write the correct letter A-G in boxes 14-18 on your answer sheet.

- 14** reference to the amount of time when a car is not in use
- 15** mention of several advantages of driverless vehicles for individual road-users
- 16** reference to the opportunity of choosing the most appropriate vehicle for each trip
- 17** an estimate of how long it will take to overcome a number of problems
- 18** a suggestion that the use of driverless cars may have no effect on the number of vehicles manufactured

Questions 19-22

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes **19-22** on your answer sheet.

The impact of driverless cars figures from the Transport Research Laboratory indicate that most motor accidents are partly due to **19**....., so the introduction of driverless vehicles will result in greater safety. In addition to the direct benefits of automation, it may bring other advantages. For example, schemes for **20**..... will be more workable, especially in towns and cities, resulting in fewer cars on the road. According to the University of Michigan Transportation Research Institute, there could be a 43 percent drop in **21**..... of cars. However, this would mean that the yearly **22**..... of each car would, on average, be twice as high as it currently is. this would lead to a higher turnover of vehicles, and therefore no reduction in automotive manufacturing

Questions 23-24

Choose **TWO** letters, **A-E**.

Write the correct letters in boxes **23** and **24** on your answer sheet.

Which **TWO** benefits of automated vehicles does the writer mention?

- A Car travellers could enjoy considerable cost savings.
- B It would be easier to find parking spaces in urban areas.
- C Travellers could spend journeys doing something other than driving.
- D People who find driving physically difficult could travel independently.
- E A reduction in the number of cars would mean a reduction in pollution.

Questions 25 and 26

Choose **TWO** letters, **A-E**.

Write the correct letters in boxes 25 and 26 on your answer sheet.

Which **TWO** challenges to automated vehicle development does the writer mention?

- A** making sure the general public has confidence in automated vehicles
- B** managing the pace of transition from conventional to automated vehicles
- C** deciding how to compensate professional drivers who become redundant
- D** setting up the infrastructure to make roads suitable for automated vehicles
- E** getting automated vehicles to adapt to various different driving conditions