

Progress Test 1


Listening skills

Questions 1–5

Complete the form below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

Red Dragon Reservations Form	
Day:	E.g. Saturday
Date:	1 _____ 25
No. of people:	2 _____
Time:	3 _____
Name:	4 Jenny
Phone:	5 _____



Questions 6–10

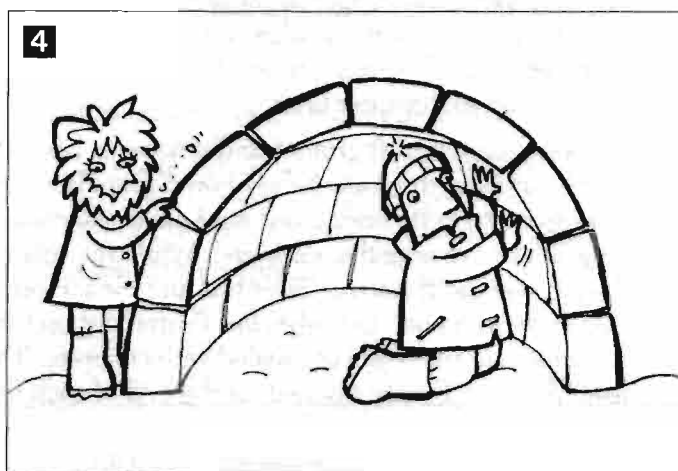
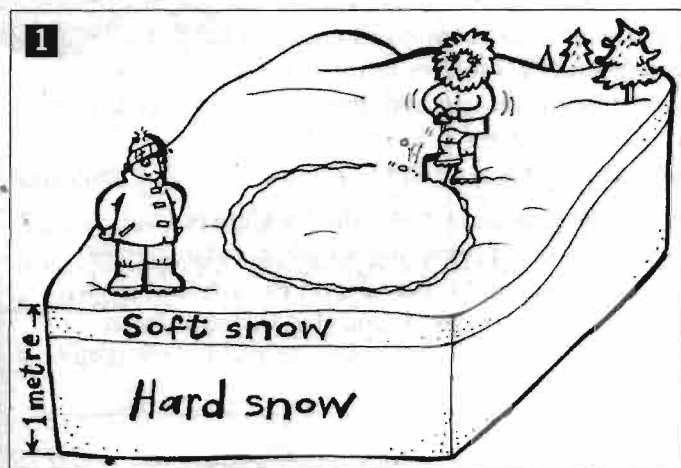
Complete the notes below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

APPOINTMENTS DIARY	
Sue's surprise party - menu choices	
Golden Banquet 6 _____	per person
Includes:	
Seafood buffet with 7 _____	or _____
Red Dragon Special £18.00 per person	
Includes:	
5 dishes - speciality is 8 _____	
Price agreed 9 _____	
Address 10 _____	

Writing skills

The diagram below shows how to make an igloo in 3–6 hours.



Complete the description below using the correct form of the verb in brackets.

First of all, you need to find a suitable spot. An igloo must 1 built up (build) on a hard field of snow that is at least 1 metre deep. Although the snow is probably soft on top, hard snow can usually 2 be found (find) underneath.

Next you draw a circle in the snow and then the snow blocks 3 are cut (cut) using a saw and an axe. These blocks can 4 be made (make) stronger by leaving them to harden in the wind.

To construct the igloo, larger blocks 5 are used (use) at the base and 6 are placed (place) at an angle. You need to leave an entrance at the base, too, before the smaller blocks 7 are added (add) on top. The last few blocks 8 are moved (move) into the igloo through the entrance and then 9 are lifted (lift) up.

When the building work 10 is done (do), any cracks can 11 be filled in (fill in) with snow and the inside of the igloo 12 is smoothed (smooth) to make a comfortable room for the night.

Reading skills

The Channel Tunnel

The Channel Tunnel carries rail passengers and vehicles under the sea between France and England – a distance of almost 50 kilometres. There are two main tunnels, each 7.3 metres in diameter, with a service tunnel between them. On average, the tunnel runs 45 metres below the sea bed, but in some places it is 75 metres under the ground. The British terminal, just outside Folkstone in Kent, and the French terminal at Calais are each nearly 10 kilometres from the coast and the start of the tunnel.

Although a tunnel was first suggested by the French Emperor Napoleon in 1802, the building of the tunnel did not begin until 1987 and was completed in 1994. It involved removing 8 million cubic metres of earth and lining the tunnel with 1.8 million tonnes of steel and concrete. British and French tunnelers worked from each end, building the service tunnel first. When they met they found that they had been working accurately to within a few centimetres.

Building tunnels

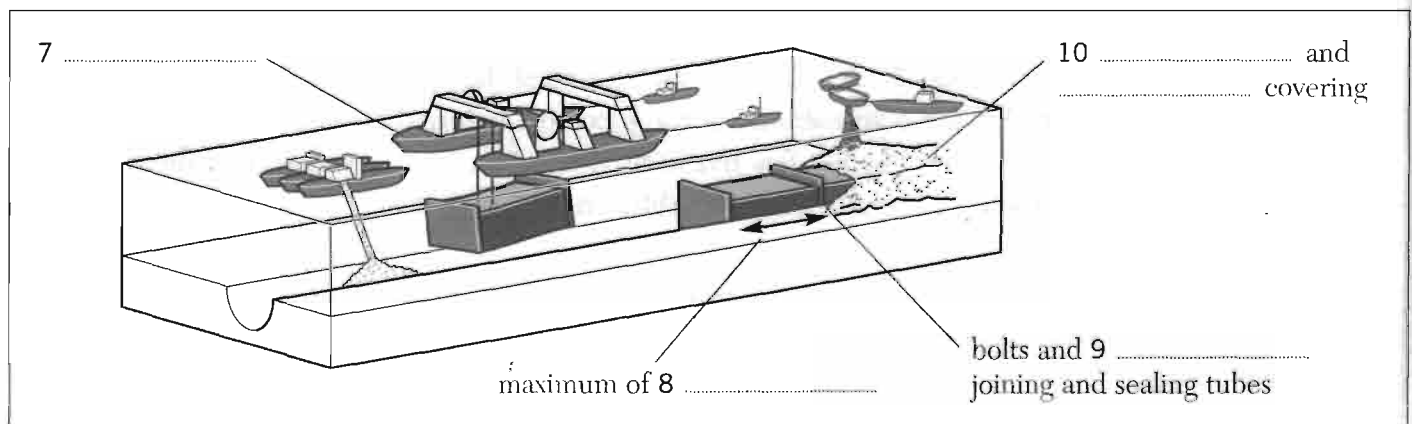
Tunnels built underwater are among the greatest achievements of modern engineering because their construction presents special problems. The sea bed contains soft sand, mud and other sediments, which must be kept out of the workings. Water seeping through from above is another hazard. The tunnel entrances, called portals, are sited some distance away from the water so that there is a gradual slope down to the underwater level.

For long tunnels, soft ground under water is fairly easy to drill through using tunnel-boring machines which cut away the rock. Newly bored tunnels are then lined with steel and concrete. Short underwater tunnels can also be built using steel tubes. They consist of sections of steel tube, each up to 100 metres long, which are sealed at each end. While the tubes are being made, special boats called dredgers cut a deep trench on the sea or river bed and then a foundation of sand and gravel is added. To complete a sunken tube tunnel, the tubes are floated out on barges and lowered into place. Divers bolt the sections together, and the joints are sealed with concrete. The tunnel is covered with sand and mud to protect it from damage. Finally the seals at the end of each tube are cut away and the tubes are welded together.

Take 5 minutes to answer the following questions.

- 1 How long is the Channel Tunnel?
- 2 How deep is the deepest part of the tunnel?
- 3 In which place does the French part of the tunnel begin?
- 4 Who first mentioned the idea of a Channel Tunnel?
- 5 When did work on the tunnel first start?
- 6 What materials were used to complete the tunnels?

Take 5 minutes to complete the labels on the diagram.



Progress Test 2

Listening skills

Questions 1–5

Answer the questions below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

- 1 Which animal first provided humans with milk?
.....
- 2 When were cows first milked?
.....
- 3 What has been found in Egyptian tombs?
.....
- 4 Before 1800, who was responsible for making cheese?
.....
- 5 When were milking machines invented?
.....

Questions 6–10

Complete the sentences below.

Write a **NO MORE THAN THREE WORDS** for each answer.

- 6 The first yoghurt was made in the continent of
- 7 The flavour of yoghurt is improved by the addition of and
- 8 Children need of milk a day.
- 9 Most milk flavouring contains a lot of
- 10 is sometimes used instead of milk from animals.

Writing skills

General Training Task 1

You should spend about 20 minutes on this task.

You play a team sport with some friends. Last week a member of the team had an accident and wasn't able to play with you at the weekend. You decide to write to him in hospital, telling him about the match.

Write a letter to your friend. In your letter

- tell him which team won
- describe the conditions on the day
- say how you felt about the match

You should write at least 150 words.

You do NOT need to write your own address.

Reading skills

Forgery

As paper is worth nothing in itself, turning it into a form of exchange can be extremely rewarding

- 1 The counterfeiting of money, known as forgery, is as old as paper money itself. One way of foiling forgers is through the use of design and colour. For years, green was the hardest colour to copy, which is why the Americans used it – hence the term ‘greenback’. Some designs can be hard to copy too – although the most attractive notes are not always the hardest to reproduce. Plastic notes, as used in
- 5 Australia and now in Brazil, are another way forward, but experts say they too can be forged, and many users dislike them. A third way of defeating the forgers is to change your notes frequently. Many central banks have speeded up the rate at which they introduce new notes. Typically banknotes used to remain in circulation for 15 to 20 years, and designs might change even less often. Now notes usually stay in circulation for less than ten years, and design changes are made more often still.
- 10 The greatest forger of all time was Leon Warnerke who was a respectable photographer and businessman in south-east London. He was a highly successful forger of various East European banknotes, especially Russian roubles. He was never caught and had countless identities. However, the hardest part of forgery is often not the reproduction of the notes but their distribution, and for this
- 15 reason, the most effective forgeries have often been undertaken by governments themselves. For example, forging the other side’s currency has always been a standard war tactic.

The European Central Bank is well aware of the problems of forgery. Indeed, the threat from forgers is one reason why it kept the detailed design of its new notes under wraps for so long. It also explains why it was anxious not to allow any notes to reach the public before January 1st and it is part of the response to those who have complained about the dull design of the notes: for all banknote issuers,

20 security comes before aesthetics.

For the euro, there are four layers of security. First are a few simple features – such as watermarks and security threads – that are generally easy for the public to spot. A further seven or eight more elusive points are only known by Europe’s five million or so professional cash handlers. Third come features to help automated machines to tell real notes from false ones. And lastly, there are some

25 aspects of the design that only experts from central banks will be able to detect. All except this last category were publicised before January 1st 2000.

Vocabulary

Scan the text for these words and then work out their meaning.

- a foiling (line 1)
- b reproduce (line 4)
- c Typically (line 7)
- d countless (line 12)
- e kept ...under wraps (line 17)
- f aesthetics (line 20)
- g tell (x from y) (line 24)
- h detect (line 25)

IELTS Task

Complete the notes below.

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

- Methods used to make forgery difficult:
- Selecting a particular 1 or
 - Using 2 as a material
 - Limiting 3 time
- Currency most frequently forged by Warnerke: 4
- Most difficult aspect of forgery: 5
- How forged euros may be detected:
- by members of 6
 - by people who deal with 7
 - by 8
 - by people who work in 9

Progress Test 3

Listening skills

Questions 1–3

Choose **THREE** letters **A–F**.

Which **THREE** of the following items does the woman recycle?

- A boxes
- B glass
- C paper
- D plastic
- E newspapers
- F books
- G tins
- H clothes

Questions 4–6

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

4 How long has she been recycling goods?

- A one month
- B six months
- C a year

5 How does she recycle her goods?

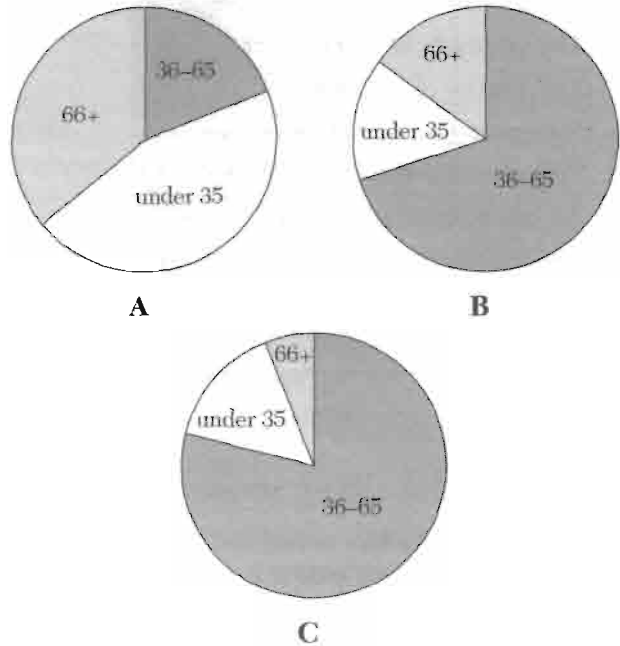
- A They are collected.
- B A neighbour does it for her.
- C She goes to a recycling centre.

6 What does she say about recycling?

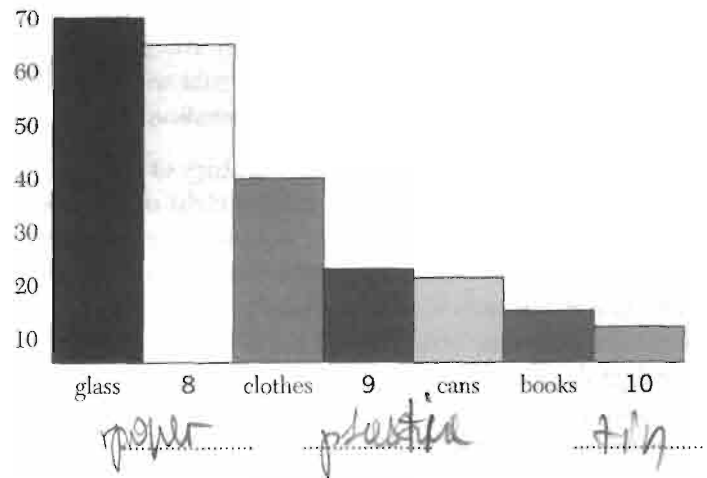
- A She thinks she should recycle more.
- B She thinks everyone should do it.
- C She thinks it is a waste of time.

Questions 7–10

7 Which chart shows the age-range of people who recycle goods?



Complete the labels on the bar chart.



Reading skills

Questions 1–6

The Reading passage below has six paragraphs A–F. Choose the correct heading for each paragraph from the list of headings below. Write the correct number i–ix.

List of Headings

- i Indecision about a name
- ii Current problems with distribution
- iii Uncertainty about financial advantages
- iv The contrasts of cinema today
- v The history of cinema
- vi Integrating other events into cinema
- vii The plans for the future of films
- viii An unexpected advantage
- ix Too true to life?

- 1 Paragraph A 4 Paragraph D
- 2 Paragraph B 5 Paragraph E
- 3 Paragraph C 6 Paragraph F

The end of the silver screen?

Cinema technology has remained much the same for a century, so when will it go digital? Kevin Hilton views the projections.

A Cinema is full of contradictions. It is high-tech and old-fashioned at the same time. Today's films are full of digital sound and computer-generated special effects. Yet they are still stored on celluloid film, the basis of which is more than 100 years old. They are also displayed with projectors and screens that seem to belong to our great grandparents' generation.

B Now that we are in the second century of cinema, there are moves to bring the medium right up to date. This will involve revolutionising not just how films are made but also how they are distributed and presented. The aim is not only to produce and prepare films digitally, but to be able to send them to movie theatres by digital, electronic means. High-resolution digital projectors would then show the film. Supporters say this will make considerable savings at all stages of this chain, particularly for distribution.

C With such a major technological revolution on the horizon, it seems strange that the industry is still not sure what to call itself. This may appear a minor point, but the choices, 'digital' cinema and 'electronic' cinema (e-cinema), suggest different approaches to, and

aspects of, the business. Digital cinema refers to the physical capture of images; e-cinema covers the whole chain, from production through post-production (editing, addition of special effects and construction of soundtrack) to distribution and projection.

D And what about the effects of the new medium? The main selling point of digital cinema is the high resolution and sharpness of the final image. But those who support the old-fashioned approach to film point to the celluloid medium's quality of warmth. A recurring criticism of video is that it may be too good: uncomfortably real, rather like looking through an open window. In 1989, the director of the first full-length American digital high-definition movie admitted that the picture had a 'stark, strange reality to it'.

E Even the money-saving aspect of e-cinema is doubted. One expert says that existing cinemas will have to show the new material and not all of them will readily or rapidly furnish themselves with the right equipment. 'E-cinema is seen as a way of saving money, because print costs a lot,' he says. 'But for that to work, cinemas have to be showing the films because cinemas are the engine that drives the film industry.'

F This view has prompted some pro-digital entrepreneurs to take a slightly different approach. HD Thames is looking at reinventing the existing cinema market, moving towards e-theatre, which would use digital video and projection to present plays, musicals and some sporting events to the public. This is not that different from the large-screen TV system that was set up in New York in 1930, and John Logie Baird's experiments with TV in the late 1920s and early 30s.

Questions 7–11

Complete the summary below using **NO MORE THAN THREE WORDS** from the passage.

There are big changes ahead for cinema if digital production takes place and the industry no longer uses 7 and gets rid of the old-fashioned 8 and used to show movies. The main advantage is likely to be that the final image will be clearer. However, some people argue that the digital picture will lack 9 In addition, digital production will only reduce costs if cinemas are willing to buy new 10 As a result, experiments with what is called 11 '.....' may mark a change in the whole entertainment industry.

Writing skills

Academic Writing Task 1

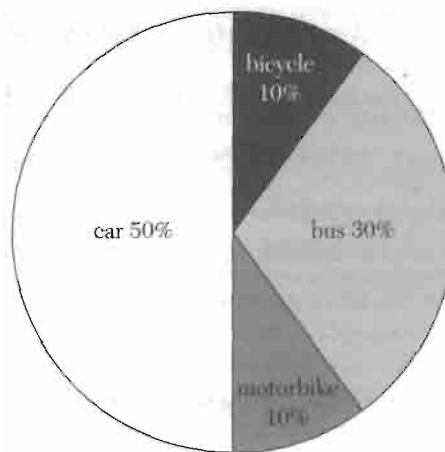
You should spend 20 minutes on this task.

The table and pie chart below give information on transport and car use in Dangleford.

Write a report for a university lecturer describing the information shown below.

People's reasons for using the car in town

Travel to work	40%
Shopping	15%
Leisure activities	15%
Taking children to school	55%
Business	45%



You should write at least 150 words.

Progress Test 4

Listening skills

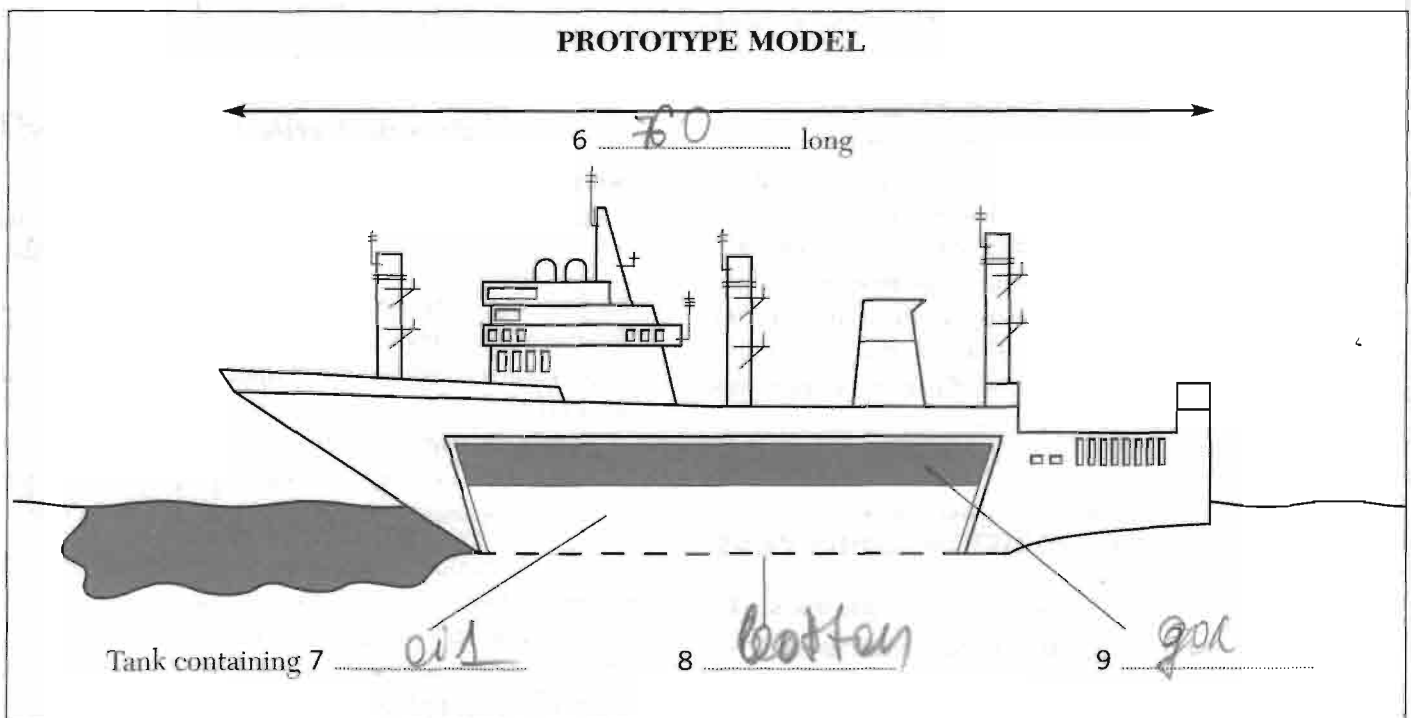
Questions 1-5

Complete the sentences below. Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

- 1 Most of the spilt oil in the sea comes from oil tanker.
- 2 One barrel of oil in every fourth is spilt into the sea.
- 3 The new process would also provide _____.
- 4 Earlier projects have found it difficult to avoid smell as well as oil.
- 5 Standard methods harm the environment because they use collecting water to get rid of the oil.

Questions 6-9

Label the diagram. Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.



Question 10

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

- 10 Which problem does the speaker highlight at the end of his talk?
- A insufficient financial resources -
 - B lack of interest from other countries
 - C difficulties in setting up the trials

Writing skills**Task 2**

You should spend about 40 minutes on this task.

Present a written argument or case to an educated reader with no specialist knowledge of the following topic.

Film stars and music celebrities may earn a great deal of money and live in luxurious surroundings, but many of them lead unhappy lives.

Do you agree? To what extent is this the price they pay for being famous?

You should use your own ideas, knowledge and experience and support your arguments with examples and relevant evidence.

You should write at least 250 words.

Reading skills

Old steamboat 'Delta Queen' keeps rolling along

The *Delta Queen* is America's oldest continuously operating authentic steamboat offering overnight accommodation. At the ripe old age of 77, she's still chugging up and down some of the most scenic rivers of North America. The *Delta Queen* is listed on the US National Register of Historic Places, but it is the only national landmark found in a different place each day. However, life hasn't always been easy for this old boat.

The *Delta Queen* was launched in 1927 and started life as a night boat, ferrying passengers on the Sacramento River between San Francisco and Sacramento, California. Then, during World War II, she was painted grey and served in the US Navy to transport soldiers and marines out to the troopships in San Francisco Bay.

For a short while after the war she enjoyed a more glamorous role when she was used to accommodate delegates from around the world who had come to the United States for the launch of the United Nations. Still commissioned a vessel in the US Navy, she served as a floating gun platform to help put down a prison riot at Alcatraz, in San Francisco Bay.

In 1946 her fortunes changed when the *Delta Queen* was sold at auction for the sum of \$46,250 and taken to Cincinnati in Ohio. Getting her there was quite a task. Her superstructure was boarded up to protect her from waves and she was towed by a sea-going tug 8,000 kilometres from the Pacific through the Panama Canal, into the Gulf of Mexico and up the Mississippi River to New Orleans. There the boarding was removed and she continued her journey under her own power up the Mississippi and Ohio rivers to Cincinnati and on to Pittsburgh, where her Navy grey paint was stripped and she was fitted out in the traditional style of the old paddlewheelers to begin her new life. Since then she has carried thousands of passengers up and down the rivers and waterways of North America.

In 1968 the *Delta Queen* survived her first real crisis when she ran into trouble with the law. The U.S. version of the Safety of Life at Sea convention bans wooden vessels of any kind from carrying overnight passengers, so her days looked numbered. However, a million signatures on petitions from loyal passengers, steamboat fans and faithful crew members resulted in a special Act of Congress which exempted her from this law and so the *Delta Queen* lived to see another day.

In 2001, the *Delta Queen* and her sisters, the *Mississippi Queen* and *American Queen*, survived the most sinking blow of all when the company that owned her went bankrupt, threatening to leave the paddlewheelers high and dry in New Orleans. Fortunately, responding to yet another petition from steamboat fans around the world, the *Delta Queen Steamboat Company* was purchased by Delaware North Companies, a leader in hospitality services. Today she continues the proud tradition of Steamboatin' on America's Heartland rivers. "I guess she's just charmed," said her master, Capt. Gabe Chengery.

Do the following statements reflect the claims of the writer of the passage?

Write:

- YES** if the statement agrees with the claims of the writer
NO if the statement contradicts the claims of the writer
NOT GIVEN if it is impossible to say what the writer thinks about this

- 1 The 'Delta Queen' is a unique floating national landmark.
- 2 The 'Delta Queen' was originally designed for river transport.
- 3 People have used the 'Delta Queen' as a floating hotel.
- 4 \$46,250 is very little money to pay for a paddle steamer.
- 5 The 'Delta Queen' went from San Francisco to New Orleans under her own steam.
- 6 It is against the law for a ship made of wood to carry paying passengers in the US.
- 7 It is difficult to make a profit in the paddle steamer business.

Progress Tests: Recording scripts

Progress Test 1 Listening Section 1 CD2 tracks 24–25

Man: Good evening! Red Dragon Restaurant – David speaking.

Woman: Oh hi! I was wondering if I could book a table for a group of people for next Saturday. I'm trying to organise a surprise party for someone.

Man: Certainly. Now let me see, what date is that?

Woman: I think that's the 18th ...

Man: Just let me have a look. The 18th of November ... looks fine. And how many people is that for?

Woman: I think there'll be about 20 of us.

Man: Twenty? I see. It's quite a big party then!

Woman: Yes. Perhaps more ... it might be better to say 25.

Man: OK ... 25 people. I'm sure we can manage that. And what time would you like to come?

Woman: About twenty past seven or thereabouts.

Man: Let's say seven thirty, shall we? We usually take bookings on the half hour.

Woman: Oh! Alright! Seven thirty.

Man: And can I have your name, please?

Woman: Ah ... Jenny Fields.

Man: Fielder, did you say?

Woman: No, Fields. That's F-I-E-L-D-S.

Man: Right. And can I have a contact number for you?

Woman: Sure. Best if I give you my mobile number. That's 0414 443 552.

Man: 0414 443 522.

Woman: No, 552.

Man: Right ... got it!

Woman: Now we'd quite like a set menu, if that's possible, so that we know what it's going to cost us. Do you do that sort of thing?

Man: Yes, we do.

Woman: What are the choices?

Man: Well ... you've got a couple of choices with the set menu. We offer what we call our Golden Banquet for £25 per person. That includes a full seafood buffet – eat as much as you like, that kind of thing – with tea or coffee.

Woman: Right! I see. What else can you offer us? That's a bit expensive.

Man: Well, you could go for the Red Dragon Special at £18 per person. That gives you five main dishes to share, including, if you want it, our speciality roast duck. But you need to let us know in advance if you want to order the duck.

Woman: Oh, that sounds better. But £18 is still a little over our budget. We're students, you know. Do you offer a student discount?

Man: No, but I suppose as there are 25 of you coming we could do something for you. Let's say, £15 each. How does that sound?

Woman: Oh, that sounds reasonable. Thank you.

Man: So we'll see you on Saturday then.

Woman: Yes. Oh! One last thing. What's the exact address ... so I can tell everyone how to get there?

Man: We're at a hundred and eleven, Church Road. That's next door to the bank on the corner of Barclay Street.

Woman: A hundred and eleven, Church Road?

Man: Yes, that's right. We'll see you on Saturday.

Progress Test 2 Listening Section 2 CD2 tracks 26–27

Lecturer: Welcome to our regular piece on food and drink. Today's programme is about milk. People all over the world drink milk, but not all that milk comes from cows. In Tibet, for example, children drink yak's milk and near the Arctic circle people get their milk from reindeer. Even buffalo milk is drunk in some countries. So ... how did milk drinking begin?

Well, the first animals that were milked – that we got our milk from – were sheep. That was about 11,500 years ago. About 2,000 years later, people started keeping goats and drinking their milk too. Then there were donkeys and mares, or female horses. In fact cows were not used for their milk until 4,000 years ago, which is really quite recent when you think about it. We know this because rock drawings have been discovered in the Sahara Desert in Africa that show pictures of dairies with people milking cows and making cheese. Some old cheese has even been found in Egyptian tombs dating back 2,300 years. Imagine how that must have smelt ... pooh!

Until the 1800s, milking animals and turning the milk into butter and cheese were jobs done mainly by women. This was because there were no machines to help with the process and, of course, it took a lot of time. The men were busy doing other things. However, milking machines were invented in about 1830, and so soon after that the cheese was made in special factories.

Lecturer: These days, yoghurt is a very popular milk product. But when did we start making yoghurt? Well, there is a legend – a very old story – that the first yoghurt was made by a nomad as he crossed the desert in Africa. Apparently he set out with some milk in a bag made of sheep's stomach, which he attached to his camel. As he rode for quite a long time on his camel, the warmth of the sun turned the milk into thick, slightly sour yoghurt. It was probably very sour in those days but now we add fruit and sugar to make it taste better.

So how much milk do we need? Generally speaking, growing children need to drink half a litre of milk a day in order to develop healthy teeth and bones. It doesn't matter whether this milk comes in the form of cheese, butter or yoghurt. You can even add flavouring to milk and it will still be good for you – but remember that most flavouring contains a lot of sugar which can be bad for you.

Dairy products, as they are known, are good for us and help keep us healthy, though in many countries it is more common to find soya milk products than dairy products. Soya milk is also very good for you. Ultimately, it is all a matter of taste.

Progress Test 3 Listening Section 3 CD2 tracks 28–29

Student 1: Excuse me, I wonder if I could ask you a few questions? Um, I'm doing a small research project as part of my course on the environment ...

Woman: Yes, OK, what would you like to know?

Student 1: Well, we're looking into how much waste people in the town recycle. Do you recycle anything?

Woman: Yes, I do, I've got these boxes here to put things in.

Student 1: Oh. That's great.

Woman: I use this one here for things like old envelopes, letters, that kind of thing, and I have to keep them separate from newspapers and magazines – they all go in this one. But I like to keep novels and children's books ... I'm a bit of a collector in that respect ... so I don't recycle anything like that. I suppose I should recycle glass and plastic bottles: that's pretty important, but I still haven't got round to it. But I do put any dresses and jumpers that the children have grown out of in this box – and footwear too.

Student 1: That's three products, then, that you recycle.

Woman: I guess so.

Student 1: Have you only just started recycling, or have you been doing it for some time?

Woman: Ooh, let me think ... I think I've been doing it for about 12 months ... No, I remember, it was after I had that big clear out in the study and there were piles of old documents everywhere – that was six months ago. I thought, this year I really must do something with this stuff – not just throw it out.

Student 1: OK. And we're also interested in the method that people use to do recycling.

Woman: What do you mean?

Student 1: Well, does the Council come and collect it or do you take it to a recycling centre?

Woman: I wish it was collected ... that would save me a lot of time. I take it to the depot in Stoneham – usually on a Monday, though sometimes I forget and then it piles up! I usually take the stuff for the old man next door, as well. He's eighty, so it's almost impossible for him to do these things by himself.

Student 1: That's nice of you! All the more reason for getting the Council to come and collect it.

Woman: But a lot of people round here don't bother, you know. They think there's no point because there isn't a proper system or anything.

Student 1: Do you feel there should be?

Woman: Of course. Then I'd be more motivated to recycle other things like aluminium cans and tin, which are really just as important. I feel quite guilty about that.

Student 2: So how did your research go?

Student 1: Quite well. I've got some data to present in the tutorial.

Student 2: That's good. Let's have a look.

Student 1: I've done a couple of pie charts. The first one, here, shows the ages of the people in our city who say they regularly recycle goods. It's quite interesting.

Student 2: I suppose families do the most recycling.

Student 1: Well, the majority of people are between 36 and 65 and then the old and the young seem to be equally bad at it. Only 15% of young people recycle anything!

Student 2: I think older people take a bit more time to get used to the idea but younger people have no excuse. What about the things they recycle?

Student 1: When I was talking to people they mentioned quite a few things, but overall ... well, as you can see on this chart, it's mainly glass and newspaper – not surprising really. I expected plastic to be quite significant, but instead it's clothes and then plastic. After that there are things like aluminium cans and books. Hardly anyone recycles tin – it's the least popular.

Student 2: Mmm. Maybe people don't eat as much tinned food as they used to.

Student 1: Then I also went to the recycling depot and interviewed some of the people there so that I could find out what sort of things people usually take in ...

Progress Test 4 Listening Section 4 CD2 track 30

Introductory speaker: Today we are most fortunate to have with us a guest lecturer from the United Arab Emirates who has been working with a team of colleagues at the university in Al Ain, on oil recovery. He's here to talk to us today about this most valuable work.

Lecturer: Thank you, and good morning. I'm going to talk about the work we've been doing on oil recovery, in an attempt to reduce the environmental damage caused by crude oil being spilt into the sea. This is mainly oil that has been spilt from oil tankers, and, as I'm sure you are aware, this results in large oil slicks floating on the surface of the oceans, which are a huge hazard to wildlife and the environment generally. It is an alarming fact that for every thousand barrels of crude oil which is transported around the world, one of those barrels ends up in the sea.

Our feeling, here at the university, was that this damage could be dramatically reduced if a recovery ship were able to follow behind and mop up the slick. And not only would the damage be greatly reduced, but at the end of the process we would have a saleable product because we would be able to sell this oil.

So we set ourselves the task of designing a ship that could capture oil floating on the surface of the ocean. I might add that people have been trying to do this for over 30 years, so far without any great success, because they always run up against the same problem – how can you do this without collecting water? At present, the standard way of mopping up oil spills is by surrounding the slick, and then the salvage team gathers up the oil. But the effectiveness of this method depends on the type of oil and you always get a certain amount of water in it. And as well as that, there is further damage to the environment because any oil which is left behind has to be dealt with using chemicals and these chemicals are harmful to the environment.

We've been working on a prototype design and we think we may be close to solving the major problem. So far, we have only produced a model, but we are pretty confident that it can work. Here is a picture of the model. The model is to scale and is 60 centimetres in length, from one end to the other. We floated it in a bath of water which contained a one-litre slick of crude oil. In order to simulate the conditions that you would find at sea, the bath was agitated to create waves. The ship floated over the oil and in only a couple of minutes it had recovered 99% of the oil slick.

Let's have a look at how the technique works. On board the ship there is a large tank. Before the ship leaves the dock this tank is filled with seawater. You can see that here in the diagram. When the ship approaches an oil slick, it opens a series of holes in the bottom of the hull to connect the water in the tank to the water outside. As the ship moves along, its specially designed hull shape forces any oil it meets underneath the boat, past the holes. The oil rises through the holes in the base of the ship, displacing the water in the tank. Because oil is less dense than seawater, the oil rises up through the holes to the top of the tank. Then, as it builds up in the tank, it gradually displaces the seawater until the tank contains nothing but oil. Then the holes are closed and the ship can return to dock to unload its cargo!

There's been a fair bit of interest in our ship and we are working on building a larger version to test in open water. Obviously that's going to require funding and a number of countries are interested. However, the real challenge now is of a practical nature; there are very few countries in the world that will permit oil to be spilt deliberately into the ocean so that they can test out new technologies in realistic conditions. This is a problem that we need to overcome in order to ensure the success of our project.

Now ... are there any questions?

Progress Tests: Answer key

Progress Test 1

Listening

- 18 November // 18 Nov // 18th November // 18th Nov // 18.11
- 25 // twenty-five
- 7.30 (pm) // seven thirty // half past seven
- F I E L D S
- 0414 443 552
- £25 // twenty-five pounds
- tea, coffee (*must have both words*)
- (roast) duck
- £15 (each) / (per person)
- 111 Church Road/Rd

Academic Writing Task 1

- be built
- be found
- are cut
- be made
- are used
- (are) placed
- are added
- are moved
- lifted
- has been done / is done
- be filled in
- is smoothed

Reading

- (almost) 50 kilometres/km
- 75 metres/m
- Calais
- (French) (Emperor) Napoleon
- 1987
- steel (and) concrete
- barge(s)
- 100 metres/m
- concrete
- sand (and) mud

Progress Test 2

Listening

- sheep
- 4,000 years ago
- (some) old cheese

- women
- (about) 1830
- Africa
- fruit AND sugar
- half a litre
- sugar
- Soya milk

Writing

See page 80.

Reading

Vocabulary

- preventing from being successful
- copy
- Normally
- a very large number of (too many to count)
- kept ... secret
- beauty / outward appearance
- distinguish
- notice/discover

IELTS Task

- design (or) colour (*must have both*)
- plastic
- circulation
- Russian roubles
- distribution
- the public
- cash (NOT money)
- automated machines
- central banks

Progress Test 3

Listening

- C } in
- E } any
- H } order
- B
- C
- A
- B
- newspaper(s)
- plastic
- tin

Reading

- iv
- vii
- i
- ix
- iii
- vi
- celluloid (film)
- projectors, screens
- warmth
- equipment
- e-theatre

Writing

See page 80.

Progress Test 4

Listening

- oil tankers (NOT ships)
- thousand // 1000
- a saleable product
- collecting / picking up water
- chemicals
- sixty/60 cm/centimetres
- sea(-)water / seawater
- (series of) holes
- oil
- C

Writing

See page 80.

Reading

- Yes
- No
- Yes
- Not Given
- No
- Yes
- Not Given