

Extract 7

page 11, Ex 6a

Man: Welcome to Portsmouth naval dockyard! We are standing next to what remains of King Henry VIII's ill-fated flagship, the *Mary Rose*. As you may know, the ship sank in July 1545 just off the coast of England not far from here. The king himself apparently watched in horror from the shore, as the sea entered her gun ports, she tipped over and sank to the bottom where she lay for more than 400 years ... that's four centuries ... buried in the mud. In 1971 the wreck was re-discovered but it wasn't until 1982 that the ship was raised. Since then a massive research programme has taken place to unravel the mystery of why she sank. One of the scientists is a tree-ring specialist and he's been studying the preserved timbers of the ship and they now believe, after analysing the timbers, they have uncovered a vital clue as to why the ship sank.

Extract 8

page 11, Ex 6b

Mother: Did the school give you a list of what you'll need for the camping trip?
Daughter: Yes, they did. I've got it here somewhere.
Mother: OK ... read it out then.
Daughter: Two pairs of old sports shoes ... one woollen pullover.
Mother: Okay, you've got that!
Daughter: One sleeping bag. One foam mattress. No blow-up mattresses allowed as they don't fit in the tent.
Mother: Right.
Daughter: Six pairs of socks.
Mother: Six!
Daughter: Yes.
Mother: And gloves too?
Daughter: No. Gloves aren't on the list.
Mother: And what about a torch for finding your way around in the dark?
Daughter: Yes, flashlight is mentioned and spare batteries too.

Extract 9

page 11, Ex 8

Student: The new Education building on campus is known as an 'intelligent building'. That means that the lifts are supposed to know if you are waiting for them and the lights should go off automatically if there's no one in the rooms. But in fact, the lights often go off in the middle of lectures and you have to get up and wave your arms around to turn them on again. And in the summer the air conditioning is so cold you often need to wear a coat. I don't think that's very intelligent, do you?

Extract 10

page 11, Ex 8

Reporter: Over the past 150 years, bicycles have undergone an enormous number of changes. In fact, the bicycle is now a 'mature' product; so much so that any dramatic advances are no longer likely. However, there are still exciting times ahead for the bike. Concerns about pollution, health and traffic congestion, as well as fashion and new construction materials are highlighting the role of the bicycle in our everyday lives and for many people, especially over short distances of less than 8 kilometres, using a bike can often be much faster than driving a car.

IELTS Practice Tests

Test 1 SECTION 1

pages 30–31

Man: Hello 'Paragliders' Paradise'. How can I help you?
Maria: Oh hi. I'm interested in doing a course in paragliding.
Man: Which course are you interested in?
Maria: Well, I'm not sure. What's available?
Man: Well ... we've got the introductory course which lasts for two days.
Maria: OK.
Man: Or there's the 4-day beginners' course which is what most people do first. I'd tend to recommend that one. And there's also the elementary pilot course which takes five to six days depending on conditions.
Maria: We might try the beginner's course. What sort of prices are we looking at?
Man: The introductory is \$190; the beginner's course, which is what you'd probably be looking at, is \$320 – no, sorry 330 – it's just gone up – and the pilot course is \$430.
Maria: Right.
Man: And you also have to become a member of our club so that you're insured. That'll cost you \$12 a day. Everyone has to take out insurance, you see.
Maria: Does that cover me if I break a leg?
Man: No, I'm afraid not – it's only 3rd party and covers you against damage to other people or their belongings, but not theft or injury. You would need to take out your own personal accident insurance.
Maria: I see! And what's the best way to get to your place? By public transport or could we come by bike?
We're pretty keen cyclists.
Man: It's difficult by public transport although there is a bus from Newcastle; most people get here by car, though, 'cos we're a little off the beaten track. But you could ride here OK. I'll send you a map. Just let me take down a few details. What's your name?
Maria: Maria Gentle.
Man: And your address, Maria?
Maria: Well, I'm a student staying with a family in Newcastle.
Man: So it's care of ...
Maria: Care of Mr and Mrs. McDonald.
Man: Like the hamburgers!
Maria: Yes, exactly.
Man: McDonald ...
Maria: The post office box address is probably best. It's PO Box 676, Newcastle.
Man: Is there a fax number there, because I could fax you the information?
Maria: Yes, actually, there is. It's 0249 that's for Newcastle and then double seven five four three one.
Man: OK. Now if you decide to do one of our courses, you'll need to book in advance and to pay when you book. How would you be paying?
Maria: By credit card, if that's OK. Do you take Visa?
Man: Yes, fine. We take all major cards, including Visa.

Maria: OK then. Thanks very much.

Maria: Hi, Pauline.

Pauline: Hi, Maria! What's that you're reading?

Maria: Just some information from a paragliding school – it looks really good fun. Do you fancy a go at paragliding?

Pauline: Sure! Do you have to buy lots of equipment and stuff?

Maria: Not really. The school provides the equipment but we'd have to take a few things along.

Pauline: Such as?

Maria: Well it says here. Clothes: wear stout boots, so no sneakers or sandals I suppose, and clothes suitable for an active day in the hills, preferably a long-sleeved t-shirt.

That's probably in case you land in the stinging nettles! It also says we should bring a packed lunch. We do not recommend soft drinks or flasks of coffee. Water is really the best thing to drink. We'd also need to bring sun protection and something to protect your head from the sun!

Pauline: OK that sounds reasonable. And where would we stay?

Maria: Well look! They seem to operate a campsite too, because it says here that it's only \$10 a day to pitch a tent. That'd be fine, wouldn't it? And that way we'd save quite a bit because even a cheap hotel would cost money.

Pauline: Um...or perhaps we could stay in a bed-and-breakfast nearby. It gives a couple of names here we could ring. I think I might prefer that. Hotels and youth hostels would all be miles away from the farm and I don't fancy a caravan.

Maria: No, I agree. But let's take a tent and pray for good weather.

Pauline: OK – let's do it. What about next weekend?

Maria: No, I can't – I'm going on a geography field trip.

Pauline:and then it's the weekend before the exams and I really need to study.

Maria: OK, then. Let's make it the one after the exams.

Pauline: Fine – we'll need a break by then. Can you ring and ...

Test 1 SECTION 2 page 32

Announcer: The Goodwood Museum is currently celebrating some of the most extravagant types of car design in its festival of speed. Here's our reporter Vincent Freed, who's on site, to tell us about some of the cars on display.

Reporter: Well, here I am, standing in front of one of the most prestigious cars ever built, the Duesenberg, a fantastically expensive, luxurious car built in the early part of the 20th century and bearing all the glamorous qualities of the jazz age. How many were there? Well, only 473 Duesenberg J-types were ever built and the model here is one of the rarest. Each had a short 125-inch chassis or framework and the body was always in the form of an open two-seater. The technology behind the car's 6.9-litre engine was extraordinary. It featured capsules of mercury in

the engines to absorb vibration and provide an incredibly smooth ride. In fact, these cars offered unparalleled performance ... in an age when 160 kilometres per hour was considered very fast, the Duesenberg promised a top speed of 180 kilometres per hour and could do 140 kilometres per hour in second gear.

Duesenberg, who designed the car, sold it as a frame and engine ... this was typical of the age again and many prestige manufacturers such as Rolls-Royce did exactly the same. Owners able to afford the hefty \$9,000 price tag for the basic car would then commission a coachwork company to build a body tailored to their own individual requirements.

The Duesenberg's great attraction for the driver, was its instrument panel which offered all the usual features but also several others including a stop-watch. It was the Duesenberg's technology that lay behind its success as a racing car and they dominated the American racing scene in the 1920s winning the Indianapolis Grand Prix in 1924, '25 and '27.

On to another celebrity, the 1922 Leyat Helica. Only 30 of these French propellor cars were built and the model here at Goodwood, which was the fourth to be made, is thought to be the only surviving example still capable of running. The brains behind this car was Marcel Leyat who was an aviation pioneer first and foremost, and the influence of flying is quite apparent in the car. The Leyat very strongly resembles a light aircraft with its front propellor but in this case it's minus any wings of course! It's quite odd to think that this car was whirring through France, just as the Duesenberg was blasting down roads at 160 kilometres per hour across the Atlantic. The Leyats were used regularly in France in the 1920s and were even produced in saloon and van form, as well as two-seater. The Leyat matched its propellor drive with its equally bizarre steering which used the rear rather than the front wheels! But despite looking rather frail, it was a tough machine. In fact, when troops tried to steal it during the Second World War, the car's baffling design was clearly beyond the would-be thieves and it ended up being driven into a tree, breaking the propellor. And now for the Firebird ...

Test 1 SECTION 3 pages 33–34

Tutor: Good morning everyone. Well I think we can start straightaway by getting Rosie and Mike to do their presentation. Would you like to start, Rosie?

Rosie: Yes, well, um, we've done a survey on local entertainment. Basically, we tried to find out how students feel about the entertainment in the town and how much they use it.

Mike: Yes, so we've called our project 'Out and About' ...

Tutor: Yes, that's a good title! 'Out and About'.

Rosie: We wanted to find out how well students use the entertainment facilities in town ... whether they get to see the latest plays, films ... that kind of thing.

Tutor: Now, we have our own facilities on campus of course ...

Rosie: Yes, we deliberately omitted those as we really wanted to examine outside entertainment in the town as opposed to on the university campus.

Mike: Actually there were a lot of areas to choose from but in the end we limited ourselves to looking at three general categories: cinema, theatre and music.

Tutor: Right.

Rosie: OK. Well, first of all cinema. In the town, there are three main places where you can see films. There's the new multi-screen cinema complex, the old Park cinema, and a late-night Odeon.

Mike: So if you look at this chart ... in terms of audience size, the multi-screen complex accounts for 75% of all cinema seats, the Park Cinema, accounts for 20% of seats and the late-night Odeon has just 5% of seats.

Rosie: As you probably know, the complex and the Park show all the latest films, while the late-night cinema tends to show cult films. So, when we interviewed the students, we thought the complex would be the most popular choice of cinema ... but surprisingly it was the late-night Odeon.

Mike: Yeah, and most students said that if they wanted to see a new film, they waited for it to show at the Park because the complex is more expensive and further out of town so you have to pay more to get there as well.

Tutor: Yes, and that adds to the cost, of course, and detracts from the popularity, evidently.

Rosie: Well, next, we looked at theatres. The results here were interesting because, as you know, there's a theatre on campus, which is popular. But there's also the Stage Theatre in town, which is very old and architecturally quite beautiful. And there's the large, modern theatre, the Ashtop, that has recently been built.

Tutor: So you just looked at the two theatres in town?

Mike: Yes. But the thing about the theatres is that there's a whole variety of seat prices. Also, the types of performance vary ... so students tend to buy seats at both and like using both for different reasons and if they want cheap seats at the Ashtop, they can just sit further from the front.

Rosie: What we did find that was very interesting is that there are periods during the year when students seem to go to the theatre and periods when they go to the cinema and we really think that's to do with budget. If you look at this graph, you can see that there's a peak around November/December when they go to the theatre more and then a period in April/May when neither is particularly popular and then theatre viewing seems to trail off virtually while the cinema becomes quite popular in June/July.

Tutor: Mmm. I think you're probably right about your conclusions ...

Mike: Well, lastly we looked at music. And this time we were really investigating the sort of small music clubs that offer things like folk or specialise in local bands.

Tutor: So not musicals as such ...

Mike: That's right.

Rosie: We looked at three small music venues and we examined the quality of the entertainment and venue and

gave a ranking for these: a cross meaning that the quality was poor, a tick meaning it was OK and two ticks for excellent. First of all, The Blues Club, which obviously specialises in blues music. This was a pretty small place and the seating was minimal so we didn't give that a very good rating.

Mike: No! We don't recommend that one really.

Rosie: Then The Sansue which plays a lot of South American music was a big place, very lively, good performers so two ticks for that one. The Pier Hotel is a folk venue ... a good place for local and up-and-coming folk artists to play. Not the best of venues as it's in a basement and a bit dark but the quality of the entertainment was reasonable and the lighting was very warm so we felt it deserved an average rating. Finally, there's the Baldrock Café which features big rock bands and is pretty popular with students and we enjoyed ourselves there as well, so top marks for that one.

Tutor: And then did you get any information from the students as to which of the clubs they preferred?

Test 1 SECTION 4

page 35

Lecturer: In the last lecture, we looked at the adverse effects of desert dust on global climate. Today we're going to examine more closely what causes dust storms and what other effects they can have. As you know, dust storms have always been a feature of desert climates, but what we want to focus on today is the extent to which human activity is causing them. And it is this trend that I want to look at, because it has wide-ranging implications.

So – what are these human activities? Well, there are two main types that affect the wind erosion process, and thus the frequency of dust storms. There are activities that break up naturally wind-resistant surfaces such as off-road vehicle use and construction and there are those that remove protective vegetation cover from soils, for example, mainly farming and drainage. In many cases the two effects occur simultaneously which adds to the problem.

Let's look at some real examples and see what I'm talking about. Perhaps the best-known example of agricultural impact on desert dust is the creation of the USA's 'dust bowl' in the 1930s. The dramatic rise in the number of dust storms during the latter part of that decade was the result of farmers mismanaging their land. In fact, choking dust storms became so commonplace that the decade became known as the 'Dirty Thirties'.

Researchers observed a similar, but more prolonged, increase in dustiness in West Africa between the 1960s and the 1980s when the frequency of the storms rose to 80 a year and the dust was so thick that visibility was reduced to 1,000 metres. This was a hazard to pilots and road users. In places like Arizona, the most dangerous dust clouds are those generated by dry thunderstorms. Here, this type of storm is so common that the problem inspired officials to develop an alert system to warn people of oncoming thunderstorms. When this dust is deposited it causes all

sorts of problems for machine operators. It can penetrate the smallest nooks and crannies and play havoc with the way things operate because most of the dust is made up of quartz which is very hard.

Another example – the concentration of dust originating from the Sahara has risen steadily since the mid-1960s. This increase in wind erosion has coincided with a prolonged drought, which has gripped the Sahara's southern fringe. Drought is commonly associated with an increase in dust-raising activity but it's actually caused by low rainfall which results in vegetation dying off. One of the foremost examples of modern human-induced environmental degradation is the drying up of the Aral Sea in Central Asia. Its ecological demise dates from the 1950s when intensive irrigation began in the then Central Asian republics of the USSR. This produced a dramatic decline in the volume of water entering the sea from its two major tributaries. In 1960, the Aral Sea was the fourth-largest lake in the world, but since that time it has lost two-thirds of its volume, its surface area has halved and its water level has dropped by more than 216 metres. A knock-on effect of this ecological disaster has been the release of significant new sources of wind-blown material, as the water level has dropped.

And the problems don't stop there. The salinity of the lake has increased so that it is now virtually the same as sea water. This means that the material that is blown from the dry bed of the Aral Sea is highly saline. Scientists believe it is adversely affecting crops around the sea because salts are toxic to plants.

This shows that dust storms have numerous consequences beyond their effects on climate, both for the workings of environmental systems and for people living in drylands ...

Test 2 SECTION 1

pages 52–53

Woman: Good morning! University Language Centre. How can I help you?

Man: I'm interested in doing a language course. I did Mandarin last year and now I'd like to do Japanese. Can you give me some information about what courses are available at your centre and when they start. That sort of thing?

Woman: Yes, certainly. Well, we actually offer a number of courses in Japanese at different levels. Are you looking for full time or part time?

Man: Oh! I couldn't manage full time as I work every day but evenings would be fine and certainly preferable to weekends.

Woman: Well, we don't offer courses at the weekend anyway, but let me run through your options. We have a 12-week intensive course three hours three nights a week – that's our crash course! Or an eight month course two nights a week.

Man: I think the crash course would suit me best as I'll be leaving for Japan in six months time.

Woman: Are you a beginner?

Man: Not a complete beginner, no!

Woman: Well ... we offer the courses at three levels, beginners, lower intermediate and upper intermediate, though we don't always run them all. It depends very much on demand.

Man: I'd probably be at the lower intermediate level – as I did some Japanese at school but that was ages ago.

Woman: Right, well the next Level Two course begins on Monday 12th September – there are still some places on that one – otherwise you'd have to wait until January or March.

Man: No – I'd prefer the next course.

Woman: Right! Can I get some details from you then so I can send you some information?

Man: Sure!

Woman: What's your name? Family name first.

Man: Hagerty. Richard.

Woman: H A G A R T Y?

Man: No, H A G E R T Y

Woman: Oh, OK! And your address, Richard?

Man: Well perhaps you could email it to me.

Woman: Right. What's your email address?

Man: It's ricky45 – that's one word R I C K Y 4 5, at hotmail dot com.

Woman: And I just need some other information for our statistics. This helps us offer the best possible courses and draw up a profile of our students.

Man: Fine!

Woman: What's your date of birth?

Man: I was born on 29th February 1980.

Woman: ... 1980! So you're a leap year baby! That's unusual.

Man: Yes – it is!

Woman: ... and just one or two other questions for our market research, if you don't mind.

Man: No, that's fine.

Woman: What are your main reasons for studying Japanese? Business, travel or general interest.

Man: My company's sending me to Japan for two years.

Woman: Alright – I'll put down 'Business'. And do you have any specific needs? Will there be an emphasis on written language? For instance, will you need to know how to write business letters, that sort of thing?

Man: No. But I will need to be able to communicate with people on a day-to-day basis.

Woman: OK so I'll put down 'conversation'.

Man: Yes, because I already know something about the writing system at an elementary level and I don't anticipate having to read too much.

Woman: You said you'd studied some Japanese. Where did you study?

Man: Three years at school. Then I gave it up so I've forgotten a fair bit. You know how it is with languages if you don't have the chance to use them.

Woman: Yes, but I'm sure it will all come back to you once you get going again. Now once we receive your enrolment form we'll ...

Announcer: Welcome to this week's edition of Country Wide. And today we're taking a look at a number of different breeds of working dogs. And here to report on the dogs with jobs is Kevin Thornhill.

Kevin: Thanks, Joanne. Well yes, dogs with jobs is the subject of today's programme. Dogs have earned themselves a reputation over the centuries for being extremely loyal. And here's a little story which illustrates just how loyal they are. Just outside the country town of Gundagai, is a statue built to commemorate a dog – a dog which sat waiting for his owner to return to the spot where he'd left him. Well ... the story, which was immortalised in a song, has it that the poor dog died waiting for his master 'five miles from Gundagai!', which is where they built the statue. Now that's what I call loyalty!

Well, because of their loyalty and also their ability to learn practical skills dogs can be trained to do a number of very valuable jobs. Perhaps the most well known of working dogs is the border collie sheep dog. Sheep dogs which work in unison with their masters need to be smart and obedient with a natural ability to herd sheep. Some farmers say that their dogs are so smart that they not only herd sheep, they can count them, too!

Another much-loved working dog is the guide dog, trained to work with the blind. Guide dogs, usually Labradors, need to be confident enough to lead their owner through traffic and crowds but they must also be of a gentle nature. It costs a great deal of money to train a dog for this very valuable work but the Guide Dog Associations in the UK, America and Australia receive no government assistance so all the money comes from donations.

Another common breed of work dog is the German shepherd. German shepherds make excellent guard dogs and are also very appropriate as search and rescue dogs working in disaster zones after earthquakes and avalanches. These dogs must be tough and courageous to cope with the arduous conditions of their work. And so that they can be sent anywhere in the world to assist in disaster relief operations, effective dogs and their trainers are now listed on an international database.

When you arrive at an airport here in Australia, you may be greeted in the baggage hall by a detector dog, wearing a little red coat bearing the words 'Quarantine'. These dogs are trained to sniff out fresh fruit as well as meat and even live animals hidden in people's bags. In order to be effective, a good detector dog must have an enormous food drive – in other words they must really love their food. At Sydney airport where there are ten detector dogs working full time, they stop about 80 people a month trying to bring illegal goods into the country. And according to their trainers, they very rarely get it wrong!

Another famous working dog is the husky. Huskies, which originally came from Siberia, have been used for decades as a means of transport on snow, particularly in Antarctica where they have played an important role. Huskies are well

adapted to harsh conditions and they enjoy working in a team. But the huskies have all left Antarctica now because the International Treaty prohibits their use in the territory as they are not native animals. Many people were sad to see the dogs leave Antarctica as they had been vital to the early expeditions and earned their place in history along with the explorers.

Chairman: We're very pleased to welcome to our special interest group today, Dr. Linda Graycar who is from the City Institute for the Blind. Linda is going to talk to us about the system of writing for the blind known as Braille. Linda, welcome.

Dr. Graycar: Thank you.

Chairman: Now we'd like to keep this session pretty informal, and I know Linda won't mind if members of the group want to ask questions as we go along. Let's start with an obvious one. What is Braille and where does it get its name from?

Dr. Graycar: Well, as you said, Braille is a system of writing used by and for people who cannot see. It gets its name from the man who invented it, the Frenchman Louis Braille who lived in the early 19th century.

Chairman: Was Louis Braille actually blind himself?

Dr. Graycar: Well ... he wasn't born blind, but he lost his sight at the age of three as the result of an accident in his father's workshop. Louis Braille then went to Paris to the National Institute for Blind Children and that's where he invented his writing system at the age of only 15 in 1824 while he was at the Institute.

Chairman: But he wasn't the first person to invent a system of touch reading for the blind, was he?

Dr. Graycar: No – another Frenchman had already come up with the idea of printing embossed letters that stood out from the paper but this was very cumbersome and inefficient.

Chairman: Did Louis Braille base his system on this first one?

Dr. Graycar: No, not really. When he first went to Paris he heard about a military system of writing using twelve dots. This was a system invented by an enterprising French army officer and it was known as 'night writing' It wasn't meant for the blind, but rather ... for battle communications at night.

Chairman: That must've been fun!

Dr. Graycar: Anyway, Braille took this system as a starting point but instead of using the twelve dots which 'night writing' used, he cut the number of dots in half and developed a six-dot system.

Chairman: Can you give us a little more information about how it works?

Dr. Graycar: Well, it's a system of touch reading which uses an arrangement of raised dots called a cell. Braille numbered the dot positions 1–2–3 downward on the left and 4–5–6 downward on the right. The letters of the

phabet are then formed by using different combinations of these dots.

Student: So is the writing system based on the alphabet with each word being individually spelt out?

Dr. Graycar: Well ... it's not quite that simple, I'm afraid! For instance, the first 10 letters of the alphabet are formed using dots 1, 2, 4 and 5. But Braille also has its own short forms for common words. For example, 'b' for the word 'but' and 'h' for 'have' – there are many other contractions like this.

Chairman: So you spell out most words letter by letter, but you use short forms for common words.

Dr. Graycar: Yes. Though, I think that makes it sound a little easier than it actually is!

Chairman: And was it immediately accepted? I mean, did it catch on straight away?

Dr. Graycar: Well, yes and no! It was immediately accepted and used by Braille's fellow students at the school but the system was not officially adopted until 1854, two years after Braille's death. So, official acceptance was slow in coming!

Student: I suppose it works for all languages which use the roman alphabet?

Dr. Graycar: Yes, it does, with adaptations, of course.

Student: Can it be written by hand or do you need a machine to produce Braille?

Dr. Graycar: Well, you can write it by hand on to paper with a device called a slate and stylus but the trick is that you have to write backwards ... e.g. from right to left so that then when you turn your sheet over, the dots face upwards and can be read like English from left to right.

Student: Oh, I see.

Dr. Graycar: But these days you'd probably use a Braille-writing machine, which is a lot easier!

Chairman: And, tell us, Linda. Is Braille used in other ways? Other than for reading text?

Dr. Graycar: Yes, indeed. In addition to the literary Braille code, as it's known, which of course includes English and French, there are other codes. For instance, in 1965 they created a form of Braille for Mathematics.

Student: I can't, imagine trying to do maths in Braille!

Dr. Graycar: Yes, that does sound difficult, I agree. And there's also a version for scientific notation. Oh and yes, I almost forgot, there is now a version for music notation as well.

Chairman: Well, thanks, Linda.

Test 2 SECTION 4

pages 56–57

Lecturer: We're going to look today at some experiments that have been done on memory in babies and young children.

Our memories, it's true to say, work very differently depending upon whether we are very old, very young or somewhere in the middle. But when exactly do we start to remember things and how much can we recall?

One of the first questions that we might ask is – do babies have any kind of episodic memory ... can they remember

particular events? Obviously, we can't ask *them*, so how do we find out?

Well, one experiment that's been used has produced some interesting results. It's quite simple and involves a baby, in its cot, a colourful mobile and a piece of string. It works like this. If you suspend the mobile above the cot and connect the baby's foot to it with the string the mobile will move every time the baby kicks. Now you can allow time for the baby to learn what happens and enjoy the activity. Then you remove the mobile for a time and re-introduce it some time from one to fourteen days later.

If you look at this table of results ... at the top two rows ... you can see that what is observed shows that two-month-old babies can remember the trick for up to two days and three-month-old babies for up to a fortnight. And although babies trained on one mobile will respond only if you use the familiar mobile, if you train them on a variety of colours and designs, they will happily respond to each one in turn.

Now, looking at the third row on the table, you will see that when they learn to speak, babies as young as 21 months demonstrate an ability to remember events which happened several weeks earlier. And by the time they are two, some children's memories will stretch back over six months, though their recall will be random, with little distinction between key events and trivial ones and very few of these memories, if any, will survive into later life. So we can conclude from this that even very tiny babies are capable of grasping and remembering a concept.

So how is it that young infants can suddenly remember for a considerably longer period of time? Well, one theory accounting for all of this – and this relates to the next question we might ask – is that memory develops with language. Very young children with limited vocabularies are not good at organising their thoughts. Though they may be capable of storing memories, do they have the ability to retrieve them? One expert has suggested an analogy with books on a library shelf. With infants, he says, 'it is as if early books are hard to find because they were acquired before the cataloguing system was developed'.

But even older children forget far more quickly than adults do. In another experiment, several six-year-olds, nine-year-olds and adults were shown a staged incident. In other words, they all watched what they thought was a natural sequence of events. The incident went like this ... a lecture which they were listening to was suddenly interrupted by something accidentally overturning, in this case it was a slide projector. To add a third stage and make the recall more demanding, this 'accident' was then followed by an argument. In a memory test the following day, the adults and the nine-year-olds scored an average 70% and the six-year-olds did only slightly worse. In a retest five months later, the pattern was very different. The adults' memory recall hadn't changed but the nine-year-olds' had slipped to less than 60% and the six-year-olds could manage little better than 40% recall.

In similar experiments with numbers, digit span is shown to...

Student: Good morning!

Woman: Good morning – can I help you?

Student: Yes, is this where we register for the Beyond 2000 Conference?

Woman: Yes? What's your name and I'll get your conference bag.

Student: Well ... I haven't actually registered yet. I was told I'd be able to register today, so I hope that's OK ... I've just arrived in Melbourne.

Woman: That should be fine, if you're a student. I'll need to take your details though. So can I have your full name?

Student: Yes, sure. It's Melanie Mitchell.

Woman: Is that M I T C H E double L?

Student: Yes, that's right and that's Ms not Miss.

Woman: OK, fair enough! And what's your address, Melanie?

Student: I live in student accommodation at Sydney University. So my address there is Room 66, Women's College, Newtown.

Woman: OK. And which Faculty are you studying in?

Student: I'm in the Faculty of Education – I'm doing a Master's in Primary School Teaching.

Woman: Right, and may I see your student card because I need to verify that you're a current student?

Student: Yes, sure. Here it is. My number is ... 9 9 4 5 7 8 E D.

Woman: OK – now do you want to attend all three days? The conference runs from Thursday to Saturday.

Student: Yes, I think so – if I can afford it. What does it cost?

Woman: Well, you're eligible for a student discount – which makes it \$15 for a day registration or \$40 for the three days, though it is possible to register for half a day only.

Student: I'll register for all three days, please.

Woman: Good ... now will you be requiring accommodation while you're here in Melbourne?

Student: Yes, I suppose I will. What's available?

Woman: Well... we have several levels of accommodation. You can share a room with another student for \$25 a night.

Student: Um.

Woman: Or you can have your own room but share the bathroom – I believe it's just down the corridor – that's \$45.

Student: Right.

Woman: Or you can have a single room with your own bathroom.

Student: I don't mind sharing a room ... On second thoughts, yes I do – I'll have my own room, but I'll share the bathroom.

Woman: Right ... Now the conference fee does not include meals though you do get tea and coffee in the breaks. Shall I put you down for lunch – that's an extra \$10 a day and there's the conference dinner on Friday night which is \$25 ... oh, and what about breakfast?

Student: Hang on a minute ... it's all starting to sound

rather expensive! I'll have the lunch but not the dinner or breakfast – if that's OK?

Woman: Perfectly OK. Now ... a couple of other things – there are a number of special interest groups organised – they're known as SIG's and you're asked to nominate your preference. They'll take place on the Friday afternoon and Saturday morning but they're filling up quickly which is why you need to nominate now.

Student: Right. What are the SIG's?

Woman: Well, there are six altogether. Let's see, on Friday you have a choice between Computers in Education or Teaching Reading Skills...

Student: Um...

Woman: ... or a session on Catering for the Gifted Child.

Student: Oh they all sound interesting but technology in the classroom is really my area of interest rather than reading, so I'll go for that. I can probably read up on the gifted child topic myself.

Woman: Right ... And then the Saturday options are: a session on Cultural Differences; or there's Music in the Primary Curriculum or you could go to the one on Gender Issues in the Classroom.

Student: Wow! Can I go to them all? They all sound fascinating.

Woman: 'Fraid not.

Student: Well, I am really interested in how boys and girls behave differently, even when they are very young, so I'd better opt for the third session even though the Cultural Differences SIG is probably really interesting, too.

Woman: Right!

Student: ... and the Music option would be ...

Woman: And how would you like to pay? We accept most credit cards – or bank cheques but not personal cheques, I'm afraid. Been caught out too often before – and cash, of course. We never say 'No' to cash.

Student: I'll have to put it on my card 'cos I don't have enough cash on me, right now.

Woman: That's fine. Enjoy your time here with us in Melbourne...

Test 3 SECTION 2

page 73

Woman: Right, let's move on to the beaches here which are absolutely beautiful. You do have over a hundred to choose from, they're mostly sandy beaches and they vary from the largest which is two and a half kilometres long, to tiny sandy coves. But there are a few that I'd really recommend you to visit.

So looking at this pamphlet, first of all there's Bandela beach. This beach is one kilometre away from the old fishing village of Bandela ... which is a beautiful spot. If you park in the car park behind it, there's a small path which leads down to the bay. It's very pretty because the whole beach is backed by pine trees so it's very sheltered. The beach itself is very clean and the water is shallow and safe. That together with the soft sand make it an ideal beach for children and non-swimmers.

A little further round the coast, again to the east ... in the eastern corner of the island, is the spectacular Da Porlata beach which is basically a long inlet. The land around this beach is marshland ... it's all marsh ... and there's a stream which winds through it and the stream goes into the sea ... and the beach has lovely pale gold sand. Access to this beach is quite tricky and not for the less energetic! You have to go down a long flight of steps – 190 to be exact. But you'll be relieved to know that there's also a road which winds down to a car parking area. When you're level with the sea, there is a handful of shops and bars and you can hire sunbeds and umbrellas. Continuing round the island, just past the Tip of Caln is the next beach I'd suggest you visit and this is San Gett. Why? Because there isn't a beach longer than this on the island. If you want to know, it's exactly two and a half kilometres long and that's a bonus because it means it never gets overcrowded. It has golden sand and clear, blue water shelving into the sea. There are several beach restaurants to choose from and watersports are available when the water is calm. But check first. This beach operates a flag system as the sea can get rough and you should always swim between the flags. There's a large car park which gives you easy access to the eastern end of the beach but the western end is much quieter and more wild as it is harder to reach. Blanaka is another popular beach – just in the north-west corner of the island. It has incredibly white sand and sparkling water. There is ample car parking here and plenty of bars and restaurants. Blanaka has white cliffs all around it and for those of you who'd like a little more to do than just lazing on the beach, there are caves here which you can explore in the cliffs and you can also dive into the water from rock platforms along the side of the cove. Well, my final recommendation for today is Dissidor. Now this beach isn't quite as easy to get to as the others I've talked about. It's quite a remote little beach tucked away here next to Blanaka. You can reach Dissidor by a steep slope which goes over some sandbanks. The beach itself is small and pretty, with reddish-coloured sand and some stony areas on its eastern side. Despite being quite small the bathing is good and you can also go fishing here from the rocks at either side. It's a good idea to take some food and drink with you if you decide to go here as there's only one little bar which isn't always open. So that should give you plenty of ideas to choose from over the next two weeks ...

Test 3 SECTION 3

page 74

Announcer: The start of a new academic year is a challenge for booksellers. Lee Rogers talks to one major book store manager.

Lee: Jenny Farrow, you're the manager of Dalton Books – and you sell an awful lot of books to students, don't you?

Jenny: Yes! We do.

Lee: How do you manage to make sure that you're going to have the books students need when all the new courses begin?

Jenny: Basically, we make preparations long before they

arrive. Like all other major book retailers, we have a database of information, and using that, we contact course convenors in May and ask them to send us their booklists.

Lee: How many books are we talking about?

Jenny: For one course?

Lee: Yes, as an example.

Jenny: An average course requires about 30 books. We ask lecturers to indicate whether a book is what we call 'essential' reading ... you know, the students simply have to get it ... or whether it's what they would term 'recommended' reading or whether it's just a supplementary text that they tend to refer to as 'background' reading.

Lee: What about predicted buyers?

Jenny: It's not a perfect system unfortunately. If a lecturer tells us that he expects us to sell 100 copies of a book, we know that we could actually sell anything from 50 to 150. That's why in practice, when it comes to ordering, it's a lot safer to go by the previous year's sales figures – if that's possible of course ... if we've sold the book before. We also build other factors into the equation including the type of course that the books are for, the students' year group and a measure of our own judgement.

Lee: And these criteria make a fairly accurate guide?

Jenny: As accurate as we can be, yes.

Lee: What about the publishers? Do they take an active role in promoting new books?

Jenny: Certainly. The academic and professional publishing market is worth about £700 million a year, so publishers go to some lengths to make sure their books are known. The standard procedure they use is to mail out catalogues to lecturers or colleges and universities, that's been the main form of promotion for years. Now, of course, they can also post details of new or revised works on websites. Some even go so far as writing individual letters to the appropriate lecturers in order to let them know what's coming up.

Lee: The lecturers then contact you if they're interested ...

Jenny: That's right. The publishers send us – the book sellers – 'inspection copies'. Lecturers can then get a free copy and decide whether it's going to be suitable for their course.

Lee: And how does it work with the students? What are they looking for and who helps them most?

Jenny: I think lecturers are best placed to understand the students' needs. Often the critical issue is what represents value for money for students. This is more important than price per se.

Lee: Do students actually buy books before they start the course?

Jenny: Apparently a large proportion of students wait to see what they need. Students have a firm idea of what constitutes a good book so they tend to give themselves time to look at all the options before making a choice.

They tend to go for books that are clear and easy to use. Often the texts that their lecturers recommend turn out to be too academic and remain here on our shelves.

Lee: Well that was Jenny ...

Lecturer: I'd like to introduce Rebecca Bramwell, an artist and illustrator, who has come along today to talk to you all about getting your first job or commission as an artist ... Over to you Rebecca.

Rebecca: Thank you for inviting me. I remember when I graduated back in 1983, I was very excited about getting my first commission. My degree was in Fine Art and I'd worked long and hard to get it. I was an enthusiastic student and I never found it difficult to find the incentive to paint. I think as a student you're pushed along by fellow students and tutors and the driving force is there. However, when you leave college you find yourself saying things like 'I'll have one more cup of coffee and then I'll sit down to work'. I hate to admit it but I say it myself. Suddenly it isn't finding the inspiration or getting the right paper that's a problem, it's you.

In my view, there are a number of reasons why this happens. It's a real challenge making a decent living as a new artist ... you have to find a market for your work, often you work freelance and need to take samples or portfolios of your work from place to place ... these experiences are common to a lot of professional people ... but artists also have to bare their souls to the world in a way ... more than anything they want praise ... if people don't like what they create then it can be a very emotional and upsetting experience hearing them say this.

I began to realise that these problems were preventing me from having a career in art and so I decided to experiment. I was a painter but I started to dabble in illustration ... drawing pictures for books, cards ... and this offered me the opportunity to become more emotionally detached from my work. I was no longer producing images from the heart but developing images for a specified subject ... taking a more practical approach. I began to develop a collection of my illustrations which I put into a portfolio and started to carry around with me to show prospective clients and employers. But it was still tricky because publishers, for example, want to know that your drawings will reproduce well in a book, but without having had any work published, it's hard to prove this. Having a wonderful portfolio or collection of original artwork is, of course, a first step but what most potential clients would like to see is printed artwork and without this 'evidence' they tend to hold back still when it comes to offering a contract.

Well, I overcame this problem in two ways. And I suppose this is my advice to you on preparing your portfolio of your best work. The first way was by submitting my work for a competition, and the one I chose was for a horoscope design and was sponsored by a top women's magazine. There are a few of these competitions each year and they offer new illustrators an opportunity to showcase their work. The other approach I took was to design and print some mock-up pages of a book. In other words, I placed some of my illustrations next to some text in order to demonstrate how my work would look when it was printed.

Perhaps I was lucky in that I had taken a degree that provided me with all-round creative skills so that I could vary my style and wasn't limited to a certain technique. I think that is important. The art world, and many other creative fields, do try to pigeon-hole people into snug boxes with an accompanying label. I think you should try to resist this if you feel it happening to you. If you don't, you'll find it difficult to have new work accepted if you try to develop your style at a later stage in your career. Nevertheless, when you start out and particularly when you're going for an interview, it's important not to confuse people by having a lot of different examples in your portfolio. One remedy for this is to separate your work into distinct categories. In my case, I did this by dividing my design-inspired illustrations from my paintings. It is then easier to analyse the market suited to each portfolio; such as magazines, book jackets, CD covers etc. Working under two names is also useful as it clarifies the different approaches and offers a distinction between them.

I think it's been hard for artists to be recognised in anything other than the pigeon-holes that they have been placed in. Luckily these barriers are slowly being demolished ...

Test 4 SECTION 1

page 91

Female: Scope charity office, how can I help you?

Male: Oh hello. I'm ringing about the Dragon Boat Race that you're asking people to take part in.

Female: Oh yes, we still need a few more teams. Are you interested in joining the race?

Male: Yes, we want to enter a team but we don't know anything about it? Could I ask you for some more information first?

Female: Of course.

Male: I don't even know when it's being held.

Female: It's taking place on the 2nd July ...

Male: Is that a Saturday?

Female: No, it's a Sunday. It's a much more popular day and more people can take part then.

Male: Right. And where's it being held?

Female: ... at the Brighton Marina.

Male: Oh, I'm an overseas student ... Could you spell that for me?

Female: Yes, it's Brighton Marina, that's MARINA. Do you know where it is?

Male: I'm not sure.

Female: It's a couple of miles past the Palace Pier.

Male: Oh yes, I know it.

Female: You take a right turning off the coast road or you can cycle along the seafront.

Male: That's good. What time does the race start?

Female: Well, the first heats begin at 10.00am – but you need to register half an hour before that – at 9.30 and we really recommend that you aim to be there by 9. It's a good idea to arrange a meeting place for your team.

Male: Right ... And the race is to help raise money for charity?

Female: It is. We're asking every team member to try and raise £35 by getting friends and/or relatives to sponsor them. Every crew member will receive a free tournament t-shirt if your team manages to raise £1,000 or more.

Male: Oh that's quite good.

Female: Also we're holding a raffle ... every crew member who takes part in the race this season will be entered into a free Prize Draw.

Male: Oh, what's the prize?

Female: It's pretty good – it's a holiday in Hong Kong.

Male: Sounds great.

Female: Is there anything else you need to know?

Male: Could you just tell me a little bit more about the teams?

Female: Well, you need to have a crew of 20 people for your dragon boat ... and you then need to agree on who's going to be the team captain ... That would probably be you ...

Male: Fine. Um, I've got a group of 20 people who are interested ... do all the team members have to be a certain age?

Female: Well there's no age limit as such but if you have a team member who's under 18 then they have to get their parents' permission to take part.

Male: Yes, that makes sense.

Female: It isn't dangerous but we do have boats that turn over in the water and for that reason we insist that everyone wears a life jacket as well and you can hire life jackets from us when your team arrives.

Male: What do you advise people to wear?

Female: Well, most people wear a t-shirt, shorts and trainers. I certainly wouldn't recommend that you wear jeans or boots. In fact, it's a very good idea to bring some spare clothes.

Male: OK.

Female: It can get quite cold and wet if the weather's bad. And there's quite a bit of hanging around especially if you qualify for the semi-finals or the final ...

Male: I see what you mean.

Female: Have you got a name for your team?

Male: Oh, not yet, no.

Female: Well you need to decide on one and then put it on the entrance form which I'll send you ...

Male: Oh OK.

Female: So if you'd like to give me your address ...

of New Zealand – and sometimes New Zealanders themselves are known as 'Kiwis'. Now, while kiwis in the wild are a rare sight, the kiwi as a symbol is far more visible. Apart from being in toy stores and airport shops all over the world, you'll find them on our stamps and coins. The kiwi is the smallest member of the genus Apteryx which also includes ostriches and emu. It gets its name from its shrill call which sounds very much like this – kee-wee kee-wee. Kiwis live in forests or swamps and feed on insects, worms, snails and berries. It's a nocturnal bird with limited sight and therefore it has to rely on its very keen sense of smell to find food and to sense danger. Its nostrils are actually right on the end of its long beak which is one third of the body length. Now here's an interesting fact. Although kiwis have wings, they serve little purpose because the kiwi is a flightless bird.

Since white settlement of the islands, kiwi numbers have dropped from 12 million to less than 70,000 and our national bird is rapidly becoming an endangered species. This is because they're being threatened by what we call introduced animals animals which were brought to New Zealand such as cats and ferrets which eat kiwi eggs and their chicks.

And so we have launched the Kiwi Recovery Programme; in an all-out effort to save our national bird from extinction. There are three stages to this Programme: Firstly, we have the scientific research stage – this involves research to find out more about what kiwis need to survive in the wild. Then secondly we have the action stage. This is where we go into the field and actually put our knowledge to work – we call this putting science into practice. and then we come to the third stage – the global education stage. By working with schools and groups like yourself, as well as through our award winning kiwi website we are hoping to educate people about the plight of the kiwi.

As part of the action stage, which I just mentioned, we have introduced 'Operation Nest Egg' and this is where your money will be going. It works like this: It's a three-stage process. First of all, we go out to the kiwi's natural habitat and we collect kiwi eggs. This is the tricky part because it can be very difficult to find the eggs. Then, in safe surroundings, away from predators ... the chicks are reared. Now this can be done on predator-free islands or in captivity – they're reared until they are about nine months old at which stage the chicks are returned to the wild. So far it's proving successful and since we started the programme some 34 chicks have been successfully raised this year and their chances of survival have increased from 5 to 85%. However, it's not time to celebrate kiwi survival just yet. About 95% of kiwi chicks still don't make it to six months of age without protection. Which is why Operation Nest Egg is so important and we ask you to give generously today.

Test 4 SECTION 2

pages 92–93

Female: Ladies and Gentlemen – welcome to Auckland Zoo on this sunny Sunday afternoon and to our special kiwi fund raising event. My job is to tell you all about the amazing little kiwi – and your job, hopefully, is to dig deep in your pockets.

Now for the benefit of our overseas visitors here today, I should explain first of all that the kiwi is the national bird

Test 4 SECTION 3

pages 94–95

Tutor: We're very pleased to welcome Professor Isaac Nebworth to our tutorial group today and he's come to share one of his pet passions with us – City traffic and our western dependence on the motor car. I believe questions are quite welcome throughout.

Professor: Thank you. Well, I know you're all very familiar with the super highway here in Melbourne. But do super highways automatically lead to super wealth, as our politicians would have us believe? I think not.

Tutor: Can you give us an example of what you mean exactly?

Professor: Sure ... well, by continuing to encourage this dependence on the motor car, we simply create more congestion and more urban sprawl. And you can see that here in Melbourne right under your nose.

Student: Excuse me. I would just like to say that I feel the sprawl is part of the city. The freeways mean people can enjoy the benefits of living away from the centre ... on larger blocks with gardens ... but still be able to drive back into the city centre for work or entertainment.

Professor: Well I'm not convinced that people want to do that. And is our money being well spent? It may be OK for you now but come back to me in five years' time! Let's take City Link, for example, the new freeway here in Melbourne.

Student: Well ... I use the freeway all the time. I think it's great.

Professor: Ah yes, but it cost \$2billion to build, and you could have gotten ten times the value by putting the money into public transport. If you give the automobile road space, it will fill that space ... and you'll soon find you'll be crawling along your City Link.

Tutor: But surely, you cannot simply blame the car. Some of the blame must rest with governments and city planners?

Student: Well there is an argument, surely, that building good roads is actually beneficial because most new cars these days are highly efficient – they use far less petrol than in the past and emissions of dangerous gases are low. Old congested roads, on the other hand, encourage traffic to move slowly and it's the stationary cars that cause the pollution and smog ... whereas good roads increase traffic speeds and thus the amount of time cars are actually on the roads.

Professor: Well ... this is the old argument put forward by the road lobby but, for me it's clear cut. Roads equal cars which equal smog. Public transport is the way to go.

Tutor: Now ... on that topic of public transport, I read somewhere recently that Australia isn't doing too badly in the challenge to increase the use of public transport.

Professor: Better than America, granted, but by comparison with Canada, it's not so good. For instance, if you compare Toronto with the US metropolis of Detroit only 160 kilometres away ... in Detroit only 1% of passenger travel is by public transport whereas in Toronto it's 24% which is considerably better than Sydney which can only boast 16%.

Tutor: Well I think it's encouraging that our least car-dependent city is actually our largest city. 16% of trips being taken on public transport in Sydney, isn't too bad.

Professor: But it's a long way behind Europe. Take both London and Paris for instance ... where 30% of all trips taken are on public transport.

Tutor: Well, they do both have an excellent underground system.

Professor: ... and Frankfurt comes in higher still at 32%.

Tutor: I understand that they've been very successful in Copenhagen at ridding the city of the car. Can you tell us anything about that experiment?

Professor: Yes indeed. Copenhagen is a wonderful example of a city that has learnt to live without the motor car. Back in the 1960s they adopted a number of policies designed to draw people back into the city. For instance they paid musicians and artists to perform in the streets. They also built cycle lanes and now 30% of the inhabitants of Copenhagen use a bicycle to go to work. Sydney by comparison can only boast 1% of the population cycling to work.

Student: It could have something to do with all the hills!

Professor: Then they banned cars from many parts of the city and every year 3% of the city parking is removed and by constantly reducing parking they've created public spaces and clean air.

Student: Really!!

Professor: There are also freely available bicycles which you can hire for practically nothing. And of course, they have an excellent public transport system.

Student: Well, that's all very well for Copenhagen. But I'd just like to say that some cities are just too large for a decent public transport system to work well. Particularly in areas with low population, because if there aren't many people using the service then they don't schedule enough buses or trains for that route.

Professor: I accept that there is a vicious circle here but people do need to support the system.

Student: And secondly the whole process takes so long because usually you have to change ... you know, from bus to train – that sort of thing, and that can be quite difficult. Ultimately it's much easier to jump in your car. And often it turns out to be cheaper.

Professor: Sure ... but cheaper for whom, you or society? We have to work towards the ideal and not give in all the time because things are too difficult ... Anyway lets move on to some of the results of the survey ... [fade]

Test 4 SECTION 4

pages 96–97

Lecturer: In today's lecture I'd like to look at the topic of food preservation and start by asking the obvious question 'Why do we need to preserve food?' Well, apart from keeping it fresh for our daily needs, many foods, such as fruit and vegetables are only available at certain times of the year so if we want to be able to eat these foods all year round, we need to preserve them. We also need to preserve food for export overseas to make sure that it doesn't perish in transit, and lastly we need to be able to preserve food for when there are food shortages. There are a number of methods of preserving food which involve both high and low temperatures, chemicals, irradiation and drying. Let's have a look at these in turn. In the 1870s the French scientist, Louis Pasteur, showed that micro-organisms in food could be destroyed by raising the temperature of the food – a process now known as pasteurisation. This involves heating milk to just 65°C for 30 minutes. A new method, the ultra-high temperature or UHT process, involves heating milk to 150°C for three seconds. The advantage of treating milk in this way is that it lasts much longer though I tend to feel, and I'm sure many of you would agree, that taste is somewhat sacrificed in the UHT process.

Tin cans were first used in the early 1800s to store and preserve food. Just as they are now, the cans were tin-plated, steel containers and the process had the advantage of being cost effective. Unfortunately, however, there were many early cases of food-poisoning because the canning process was not fully understood at that stage. We now know the exact temperature and length of time each food needs for proper preservation which has greatly reduced the risk of food-poisoning.

People living in cold climates often preserved food by burying it in the snow and the Romans knew all about the advantages of packing food in ice but for most people this was not an option until the invention of the refrigerator in 1834. Today, however, refrigeration is the most important means of preserving food because the food stays fresh without needing to be treated. However, refrigeration requires an electricity supply and unfortunately if the power goes off, so does the food!!

A variety of chemicals can be added to food and you'll find their names listed on the labels of cans and bottles. Salt is probably the oldest of all the chemical preservatives and was used by many ancient civilisations for many years. Sugar also acts as a preservative and is used to preserve jams in much the same way that vinegar is used to pickle foods. Chemical preservatives are effective but they do not suit all foods and the processes involved are time-consuming.

Another method of preserving food is by drying it. Most foods are 75% to 90% water so if you remove the water the micro-organisms simply can't survive. When food is dried it not only lasts a long time but it also becomes much lighter which is a big advantage as this makes it cheap to store, though some people argue that valuable nutrients are lost in the process. Early methods for drying food involved cutting it into strips and hanging it in the sun or over fires. But there are now a number of more modern methods which involve the use of recent technology. One of these is known as roller drying and it's a highly effective way of making dried foods from liquids, such as soup.

Have a look at this diagram to see how it works. Well, first of all the hot soup is poured in at one end – here. The liquid spreads to form a thin layer on a heated belt. The liquid dries as it moves along. By the time it reaches the end of the belt, all the water has evaporated leaving only dry powder. A blade then scrapes the dried material off the roller and captures it in powder form. All you have to do is add boiling water and you have your hot soup back again, ready to drink!

Another method is called freeze drying ...

Test 5 SECTION 1

page 112

Recorded voice: Thank you for calling Millenium Office Supplies. If you would like to place an order, please press one. Your call has been placed in a queue. A customer service operator will be with you shortly.

Woman: Gina speaking. How can I help you?

Man: Oh, hello – I 'd like to order some stationery, please.

Woman: And who am I speaking to?

Man: John Carter.

Woman: Right – can I just confirm your account number and the name of your company, John?

Man: Sure! The account number is 6 9 2 4 double 1

Woman: Six nine two four one one. Right, and you're from 'Rainbow Computers'?

Man: No. The company is Rainbow Communications

Woman: Oh, OK, I'll just fix that on the system ... comm un ic at ions. And what would you like to order, John?

Man: Envelopes. We need a box of A4 – that is, normal size envelopes

Woman: White, yellow or manilla?

Man: We'll have the plain white please – but the ones with the little windows

Woman: OK ... One box – A4 – white – just the one box, was it?

Man: Um, on second thoughts make that two boxes. We go through heaps of envelopes. As a matter of interest. Are they made from recycled paper?

Woman: No. You can't get white recycled paper. The recycled ones are grey and they're more expensive actually.

Man: Right – we'll stick to white then.

Woman: Something else, John?

Man: Yes, we need some coloured photocopy paper. What colours do you have?

Woman: We've got purple, light blue, blue, light green – whatever you want, pretty much. There are 500 sheets to the pack.

Man: Let's see ... we're going to need a lot of blue paper for our new price lists so can you give us ten packs, please. Make sure it's the light blue though ...

Woman: Ten packs of the light blue. Anything else that we can help you with?

Man: Let me think ... what else do we need? I'm sure there was something else.

Woman: Pens, paper clips, fax paper, computer supplies, office furniture?

Man: Oh, yes! We need floppy disks – do you have those nice coloured ones?

Woman: Yes, but they're a bit more expensive than the black ones.

Man: That's alright. I'm not paying, anyway!

Woman: Right. Floppy disks. And what about diaries for next year? We've got them in stock already and it's a good idea to order early.

Man: No – I think we're alright for diaries but something we do need is one of those big wall calendars – you know, one that shows the whole year at a glance. Do you stock those?

Woman: We certainly do.

Man: OK – can you include a wall calendar then, with the other stuff. Just make sure it's got the whole year on the one side.

Woman: Sure – and do you have a copy of our new catalogue?

Man: No, I don't, but could you send one.

Woman: Yes! I'll pop one in with the order. You'll find it a lot easier to remember what you need if you have our

catalogue in front of you next time.

Man: Yes, good idea. And when can you deliver this?

Woman: Should be with you tomorrow morning.

Man: Can you make sure that it's not after 11.30am because I have to go out at 12 there's only myself here on Fridays.

Woman: Fine – I'll make a note on the delivery docket that they should deliver before half past eleven. Thanks very much.

Man: Thanks.

Test 5 SECTION 2

page 113

Announcer: And now for some information on local events and activities. A couple of announcements for art-lovers and budding artists alike. First, a new collection of artwork is going on show to the public next month in the form of an artists' exhibition. The exhibition will include many different types of art ... over 100 different pieces, by 58 artists from the local area. It's being held at the Royal Museum which – for those of you who are unfamiliar with the area – is located opposite the library in West Street, right on the corner ... the actual address is number 1, Queen's Park Road – it isn't difficult to find. The exhibition will run for 9 weeks and will begin on the 6th of October and continue until the 10th December. So there's plenty of time for you to go along and have a look and I'm sure that will be worth doing.

What will you see there? Well, amongst the items on display will be some exciting pieces of modern jewellery, furniture, ceramics, metal work and sculpture. To give you some examples ... Local artist Kate Maine will be there to discuss her collection of pots and bowls that she has made to resemble garden vegetables. They're the sort of thing that would brighten up any dining table, and range from things like yellow cabbage-shaped bowls to round tomato-shaped teapots. Prize-winner Cynthia Course, will also be there to talk about her silver jewellery, all of which she produced using ideas from the rural setting of her country home. Some of her rings are quite extraordinary and have beautiful coloured stones in them. Or if you prefer sculpture, there's plenty of that too. Take, for example, Susan Cup's sculpture of 25 pairs of white paper shoes. It sounds easy, but believe me it looks incredible! All of these items along with many others will be on sale throughout the exhibition period.

As part of the exhibition, there will be a series of demonstrations called 'Face to Face' which will take place every Sunday afternoon during the exhibition and these will provide an opportunity for you to meet the artists. The second set of activities are for those who would prefer to indulge in some artwork themselves ... the Artist's Conservatory are holding a series of courses over the autumn period. The courses cover all media and include subjects such as Chinese brush painting, pencil drawing and silk painting. All the tutors are experienced artists, course sizes are kept to a minimum of 15 and there will be plenty of individual assistance.

All the sessions offer excellent value for money and the opportunity to relax in a delightful rural setting. Fees are

very reasonable and include the use of an excellent studio and access to the art shop which you will find sells everything from paper to CDs and they also include the provision of all materials. For more information on dates, cost and availability you should get in touch with the programme co-ordinator on 4592 839584 or go direct to the website ...

Test 5 SECTION 3

pages 114–115

Interviewer: Alison Sharp has spent much of her life researching bears and in particular bears in danger of extinction. She is the author of a recent book on bears and we welcome her to the studio today.

Alison: Thank you. Delighted to be here.

Interviewer: First of all, can you give us a quick overview of the history of the bear family?

Alison: Well, the bears we know today actually have as their ancestors bears which have been evolving for some 40 million years. We have fossils of the earliest 'true bear' – and it's important to emphasise this because some creatures are called bears but are *not* ...

Interviewer: ... such as koalas for instance.

Alison: Yes exactly ... fossils of the true bear show a small dog-size animal with characteristics that show a blending of dog and bear traits.

Interviewer: So the general belief is that dogs and bears were of the same family?

Alison: Yes, that's the theory. And then we see the arrival of the early Cave Bear. We know from cave drawings that Neanderthal man used to worship this bear and at the same time fear it.

Interviewer: Understandable perhaps ...

Alison: Yes, but they need not have worried because the Cave Bear only ate plants. In fact the Cave Bear survived two Ice Ages but then became extinct.

Interviewer: So how many bears can we find today and are any of them in danger of extinction?

Alison: Well I'll answer your first question first. There are eight species of bear in all; among them the American Black Bear and the Brown Bear – from which evolved the newest species of bear – the Polar Bear.

Interviewer: So how old is the Polar Bear?

Alison: Oh, he's a relative newcomer – just 20,000 years old.

Interviewer: And could you tell us a little about them? Which is the largest bear, for instance?

Alison: Well, the largest bear existing today is either the Polar Bear or the Brown Bear.

Interviewer: Right ... Don't we know?

Alison: Well, it depends which criteria you use. The Polar Bear is the heaviest; the male weighs up to 1,500 pounds but his narrow body actually makes him look smaller than the much more robust Brown Bear.

Interviewer: So the Brown Bear appears the biggest.

Alison: Yes.

Interviewer: And the smallest?

Alison: Well, the Sun Bear is the smallest of the eight species. They only weigh between 60 and 145 pounds.

Interviewer: That makes him a comparative junior!

Alison: Yes. And then next we have the so-called Giant Panda ... but that's a small bear too, comparatively speaking.

Interviewer: And are all bears meat eaters?

Alison: No, not at all. In fact the Giant Panda is almost entirely herbivorous living on a diet of 30 types of bamboo.

Interviewer: Oh, yes of course. Panda's are famous for that.

Alison: And another interesting bear is the Sloth Bear which eats insects, particularly termites. He can turn his mouth into a tube and suck the insects out of their nests.

Interviewer: So going back to my second question ... Are bears really in danger of extinction?

Alison: Yes indeed ... they are ... the Sun Bear in particular as they've been hunted almost out of existence. And the habitat of the Panda is also being reduced on a daily basis.

Interviewer: Can anything be done to reduce the threat to these endangered species? I know for instance that it's very hard to breed bears in captivity.

Alison: Yes, well ... I think that by raising people's awareness generally we can reduce conflict between humans and animals ... to stop the slaughter in parts of the world where bears are still hunted – supposedly in self-defense or to protect livestock, but ... often quite unnecessarily. And we can also encourage governments to preserve the natural environment of the bear rather than allow the areas where they live to be systematically destroyed in the name of progress.

Interviewer: Yes, of course.

Alison: And in addition to these global efforts, all profits from the sale of my book will go towards the United Nations Bear Protection program.

Interviewer: That's wonderful ... and with the news coming up, thank you for your time, Alison, and best of luck with the book...

Alison: Thank you very much.

Test 5 SECTION 4

pages 116–117

Male: Good evening and welcome to this month's Observatory Club lecture. I'm Donald Mackie and I'm here to talk to you about the solar eclipse in history.

A thousand years ago, a total eclipse of the sun was a terrifying religious experience – but these days an eclipse is more likely to be viewed as a tourist attraction than as a scientific or spiritual event. People will travel literally miles to be in the right place at the right time – to get the best view of their eclipse.

Well. What exactly causes a solar eclipse – when the world goes dark for a few minutes in the middle of the day? Scientifically speaking, the dark spot itself is easy to explain; it is the shadow of the moon streaking across the earth. This happens every year or two, each time along a different and, to all intents and purposes, a seemingly random piece of the globe.

In the past people often interpreted an eclipse as a danger signal heralding disaster and in fact, the Chinese were so disturbed by these events that they included among their gods one whose job it was to prevent eclipses. But whether or not you are superstitious or take a purely scientific view, our earthly eclipses are special in three ways.

Firstly, there can be no doubt that they are very beautiful. It's as if a deep blue curtain had fallen over the daytime sky as the sun becomes a black void surrounded by the glow of its outer atmosphere.

But beyond this, total eclipses possess a second more compelling beauty in the eyes of us scientists ... for they offer a unique opportunity for research. Only during an eclipse can we study the corona and other dim things that are normally lost in the sun's glare.

And thirdly, they are rare. Even though an eclipse of the sun occurs somewhere on earth every year or two, if you sit in your garden and wait, it will take 375 years on average for one to come to you. If the moon were any larger, eclipses would become a monthly bore; if it were smaller, they simply would not be possible.

The ancient Babylonian priests, who spent a fair bit of time staring at the sky, had already noted that there was an 18-year pattern in their recurrence but they didn't have the mathematics to predict an eclipse accurately. It was Edmund Halley, the English astronomer, who knew his maths well enough to predict the return of the comet which, incidentally bears his name, and in 1715 he became the first person to make an accurate eclipse prediction.

This brought eclipses firmly into the scientific domain and they have since allowed a number of important scientific discoveries to be made. For instance, in the eclipse of 1868 two scientists, Janssen and Lockyer, were observing the sun's atmosphere and it was these observations that ultimately led to the discovery of a new element. They named the element helium after the Greek god of the sun. This was a major find, because helium turned out to be the most common element in the universe after hydrogen. Another great triumph involved Mercury ... I'll just put that up on the board for you now. See – there's Mercury – the planet closest to the Sun – then Venus, Earth, etc. For centuries, scientists had been unable to understand why Mercury appeared to rotate faster than it should. Some astronomers suggested that there might be an undiscovered planet causing this unusual orbit and even gave it the name 'Vulcan'. During the eclipse of 1878, an American astronomer, James Watson, thought he had spotted this so-called 'lost' planet. But, alas for him, he was later obliged to admit that he had been wrong about Vulcan and withdrew his claim.

Then Albert Einstein came on the scene. Einstein suggested that rather than being wrong about the number of planets, astronomers were actually wrong about gravity. Einstein's theory of relativity – for which he is so famous – disagreed with Newton's law of gravity in just the right way to explain Mercury's odd orbit. He also realised that a definitive test would be possible during the total eclipse of 1919 and this is indeed when his theory was finally proved correct.

So there you have several examples of how eclipses have helped to increase our understanding of the universe, and now let's move on to the social ...