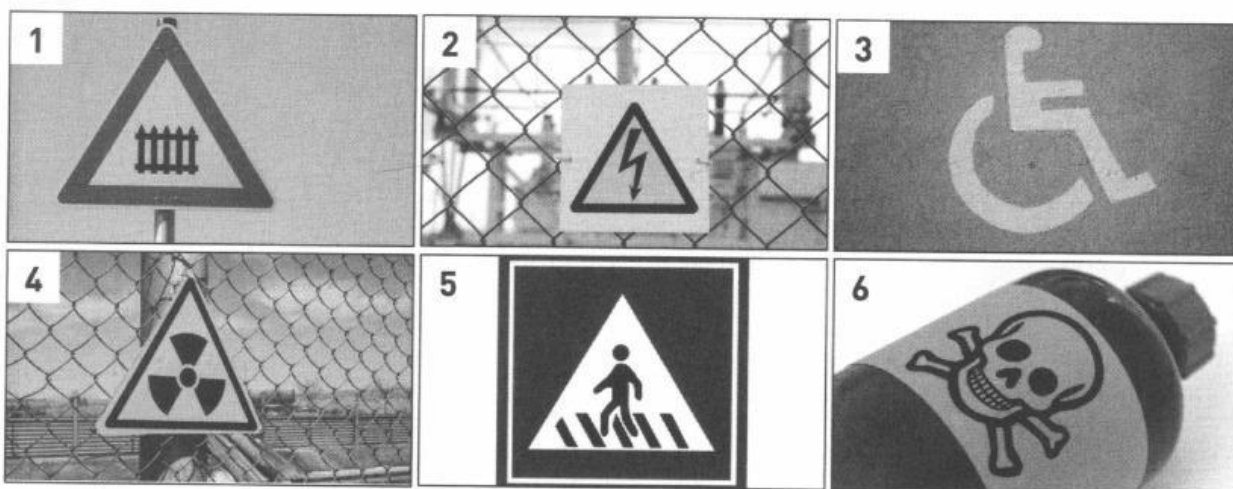# 5 Non-verbal clues

Exam focus: Answering multiple-choice questions
Aims: Locating information in a text | Summarising ideas | Using paraphrases
Identifying incorrect distractors | Using key words and scanning

Part 1: Vocabulary

1 The pictures above are all non-verbal means of communication. Match the pictures 1–6 with their meanings a–f.

a danger of electrocution ____
b level crossing ____
c parking reserved for the disabled ____

d poisonous substance ____
e radioactive substance ____
f pedestrian crossing ____

2 Underline at least ten words or phrases related to the topic of communication in the text below. Use your dictionary if necessary.

> Poor communication between NHS hospitals and care homes may be putting elderly people at risk of contracting MRSA and other infections, the health and social care regulator has warned. The Care Quality Commission (CQC) found nearly one in five homes in England were not being told if patients discharged from hospitals were or had been infected.
>
> Hospitals are meant to include a written infection history on discharge summaries. But the survey revealed 17 per cent of care homes said they did not receive information from hospitals, while another 28 per cent complained of incomplete and illegible data.
>
> Ambulance crews were also often left uninformed. Where there was communication about patients, it was verbal and not written down. A spokesperson said: 'If we are to tackle infections effectively we need to check that all providers of care are talking to each other.'

3   Complete the sentences 1–10 with the correct form of the verbs. The verbs all relate to body language.

clap   nod   point   shrug   wave
frown   nudge   shake   smile   wink

1   I could tell she was happy because she was _____.

2   He didn't need to tell me that I didn't get the job. I had already seen him _____ his head.

3   I hate saying goodbye, so I'll just _____ goodbye from the train.

4   Every time she wants to draw my attention to something, she _____ me with her elbow, which I find annoying, and painful, too sometimes.

5   Don't say anything; just _____ if you agree.

6   The audience were delighted with the performance and they wouldn't stop _____ and cheering.

7   I asked them if they knew where my keys were, but they just _____ their shoulders.

8   I knew he was joking: he _____ at me before he told us the news.

9   _____ at people with your finger is impolite.

10 I wasn't expecting a good mark; the teacher was _____ while she was reading my essay.

4   Look at the phrases 1–8. Write P if the phrase has a positive connotation and N if it has a negative one.

1   to hug someone   _____   5   to stroke someone   _____

2   to glare at someone   _____   6   to tickle someone   _____

3   to kick someone   _____   7   to slap someone   _____

4   to kiss someone   _____   8   to stare at someone   _____

5   Match the sentence fragments 1–7 with the sentence fragments a–g.

1 When the company asked me to sign the form, I didn't realise I was signing _____	a up for the army.
2 I have to stay home because I need to sign _____	b in before they can go upstairs.
3 I've decided what I want to do in the future: I'm going to sign _____	c on the dole.
4 My dinner is ready so I need to sign _____	d for a parcel I'm expecting.
5 She lost her job so she's signing _____	e away my rights to compensation.
6 I really need faster internet, so I'm going to sign _____	f off now.
7 All visitors must sign _____	g up for the broadband offer.

Part 2: Practice exercises

1 **Answer the questions 1–3 about yourself. You do not have to answer truthfully.**

1 Have you ever used a social messaging site? Choose one of the four options.
   a never   c sometimes
   b once or twice   d regularly

2 Which of the following languages would you like to learn/learn better? Choose two of the five options.
   a Chinese   c Spanish   e Arabic
   b Japanese   d French

3 Which of the following would you consider signing up for? Choose three of the six options.
   a a social networking site   c twitter   e a language course at an
   b a free online newspaper   d online banking   adult education college
                                                        f an online language course

2 **The questions 1–4 are about the text below. They should be in the same order as the information in the text but they have been mixed up. Put the questions in the right order. You do not have to answer them.**

1 How important are communication skills in sales?   3 What is good communication?
2 What is active listening?   4 What is good management?

The key to good communication is to pay attention to what other people have to say. Good communicators are definitely not those who like the sound of their own voice. Forget the gift of the gab; communication is all about establishing a rapport with your customers, work colleagues or boss.

   The ability to sell is the ultimate test of communication skills. But in the modern world salesmen do not sell, customers choose to buy, says Jon Naylor, the customer service director of PC World. 'You have to empathise with the customer and build a relationship. Listening to the information given and asking the right questions is very important.'

   Not listening costs money in the hard world of sales – returned goods, refunds and the loss of repeat custom. But the ability to listen is as important on the top floor as it is on the shop floor and can have just as profound an effect on the bottom line. 'If you ask what makes a good manager, people almost always say "they listen to what we have to say and consider our needs",' says Dr Paul Dobson, a senior lecturer at Cass Business School.

   Dr Dobson gives MBA students lessons in 'active listening', which is listening and asking appropriate questions, then clarifying and responding to the answers. 'The fundamental thing is to listen to what people say, which means that you have to be motivated to want to know the answers,' Dr Dobson says.

3   Underline the key words or phrases in the questions 1–4.

1   Why has it always been difficult to test the idea of a connection between our taste for music and the calls of monkeys?
2   What do monkeys prefer: music or silence?
3   Is it true that monkeys appeared to be calmed down by listening to the heavy metal band Metallica?
4   Who suggested this new kind of experiment to Professor Snowdon?

> **Exam tip:** Once you have identified which section of the text will give you the answer to a multiple choice question, it can be useful to rephrase what it says in that section in your own words: it may help you identify the correct answer more quickly.

4   Summarise the ideas in the short extracts 1–4 in your own words. Try not to use phrases from the text unless absolutely necessary.

Example:

> *The idea that human musical appreciation stems from the same evolutionary root as the vocalisations that primates use to bond and alert others to danger is not new but it has always been hard to test because monkeys do not generally respond to music.*

Summary: Monkeys tend not to react to music, so it is difficult to prove the old belief that our appreciation of music and the calls that monkeys use to communicate have the same evolutionary origin.

1   When monkeys have been played music, from classical to hard rock, they generally prefer silence. The sole exception has come from one experiment in which monkeys appeared to be calmed down by listening to the heavy metal band Metallica.
2   However, research carried out by Professor Charles Snowdon of the University of Wisconsin-Madison has shown that cotton-top tamarin monkeys, who normally turn a deaf ear to music, show marked changes in mood when they are played tunes composed with their voices and hearing in mind.
3   The findings suggest that the historical roots of human appreciation of music may stretch deep into our evolutionary past, to the common ancestors we share with monkeys.
4   Professor Snowdon took his new experimental approach to the subject at the suggestion of David Teie, who also works at the University of Maryland.

5   Underline the key words in the questions 1–3 and use them to scan the text below. Then answer the questions using bullet points.

1   What made the sounds on the recorded song for the monkeys in the experiment?
2   What behaviour did the monkeys display when they were played the 'threat' song?
3   What happened when the monkeys were played a calming song?

When Mr Teie listened to the calls made by the cotton-top tamarin colony kept at the Wisconsin-Madison psychology department, he immediately recognised emotional states. 'He said, "This is a call from an animal that is upset; this is from an animal that is more relaxed",' Professor Snowdon said.
   Mr Teie then used these insights to compose music using features he had noticed in the monkeys' calls, such as rising and falling pitch and the typical length of particular sounds. His aim was to produce 30-second 'songs' that were tuned to the tamarins' musical sense, rather than to the human ear.
   The first piece Mr Teie wrote contained rhythmic, staccato beats, based on the type of calls tamarins use to indicate a threat or stress. The second piece featured long, melodic tones, with a

descending pitch, that was more like the calming, 'affective' calls the monkeys use during bonding behaviour. All were recorded using the cello and the human voice.

When the monkeys were played the 'threat' song, they moved around more and showed more anxious and social behaviour, all of which are signs of heightened alertness. The monkeys were also more likely to face towards the hidden speaker from which the music was played.

The 'affective' song, by contrast, led to less movement and social behaviour, calmer reactions, and increased feeding – all of which suggest the animals were less stressed and on their guard. Human music that was designed to be calming or threatening produced few reactions among the monkeys.

Monkeys interpret changes in pitch and tone in different ways to humans, but the new research suggests they also use musicality to communicate. Professor Snowdon said: 'People have looked at animal communication in terms of conveying information – "I am hungry" or "I am afraid". But it's much more than that.' He said that monkeys did more than simply convey information. 'I am not calling just to let you know how I am feeling, but my call can also stimulate a similar state in you,' he said. 'That would be valuable if a group was threatened. In that situation, you don't want everybody being calm, you want them alert.'

6 **Underline the key words in the questions 1–4 and use them to scan the text below. Then answer the questions using your own words, not words from the text.**

1 What is innovative about the predictive texting system that has been developed by Sanjay Patel?

2 What types of hardware and software could work differently in the future because of this invention?

3 What characteristics of the new systems make them so fascinating for the general public?

4 Why is this invention important for Scotland?

'It was so good that my brother, Hash, can type faster than most people using both hands,' said the managing director and founder of KeyPoint Technologies, based in the Innovation Centre, Hillington, Glasgow. 'It helped him use his left hand effectively – and it gave him the confidence to paint again with that hand.'

Hash's accident, which left him disabled, was also the genesis of the software application, written and devised by Sanjay Patel, now 38, that is set to change the way we punch information into our mobile phones and computer keyboards.

Patel and his associates, John Locker, a former games developer, and Dr Mark Dunlop of Strathclyde University and a leading authority on user interface systems, have created AdapTex, a language processing system that cuts down keystroking by around 80%. The software analyses the user's writing patterns and predicts words, cutting down on the number of keystrokes required. It has seen some of the technology industry's biggest players knocking at Patel's door.

'Originally it was an ergonomic idea targeting people with disabilities, but the more research I did, I thought this applies to more than disabled people. The driving force was to reduce the actual physical activity. So in 1997 I started working on creating a piece of software for the mass market that would learn your language traits. It made me realise how inefficient we were when it comes to writing information with e-mail, text messaging, and word-processing on a keyboard. Everybody wants to go faster, so they build the technologies to move faster; what hasn't changed is the human ability to use that technology more effectively,' he said.

'We don't want to change people's practices, we have to complement or improve them. But you can't expect people to change unless you make things better, simpler to use and non-intrusive. I think that's why AdapTex intelligence systems are creating such interest.'

Over the past 15 years, Patel has worked within systems architecture in telecoms and finance. He worked for Nucleus Consulting and project-managed the setting-up of a system for the Merchants' Exchange of St Louis, under the guidance of the Chicago Board of Trade. He completed the two-year contract in a little over a year.

Today Sanjay Patel lives in Partick in Glasgow. Previously from Croydon, he was encouraged to move to Scotland by the prospect of support from Scottish Enterprise, Scottish Development International and by the availability of specialist facilities at the Innovation Centre.

Patel's software takes the predictive text used on mobile phones to the next level: 'A mobile phone is predictive, which uses guesswork, it isn't natural. What we have created is pre-emptive because it is relevant and uses the context. It learns and reshapes itself dynamically. It is about recognition of the patterns you use and is therefore unique to the user. It remodels itself from any document to reflect the author's natural vocabulary, language traits and topics,' he said.

Patel's family arrived in the UK in the 1970s after fleeing from Idi Amin's regime in Uganda. He was brought up in London and, even before his brother's accident, he was fascinated with the science of language patterns. The great selling point is that this pre-empts text in any language because it recognises the patterns,' he said.

Patel is now in discussions with several large international companies interested in incorporating AdapTex into their next-generation computers. 'Some are more cautious than others, but we are on the verge of signing with one of the big PC makers, and hopefully this will mean that they all follow suit,' said Patel.

He is delighted with the support he has been given in Scotland. 'I came because people understood what I was talking about. The business network here, through Global Scot, has given me introductions to the highest levels in the USA. This has been imperative.'

Patel's advisers include John Falconer, a former director of Xerox, who said: 'The market is worth millions and Sanjay could become a very rich man. It could become a significant success story for Scotland.'

7 Using your answers to the questions in Exercise 6 above, choose one correct answer for each question 1–4.

1 What is innovative about the predictive texting system that has been developed by Sanjay Patel?
a It can help his disabled brother.
b It uses guesswork.
c It processes language very fast.
d It works in a way that is unique to each writer.

2 What types of hardware and software could work differently in the future because of this invention?
a mobile phones, PCs, e-mail, text messaging, word-processing
b Adaptex intelligence systems
c mobile phones and computers
d telecoms and finance

3 What characteristics of the new systems make them so fascinating for the general public?
a It completely changes the way people do things.
b It works with what people already do and makes it better.
c It can help disabled people.
d It reduces physical activity.

4 This invention is not just important for Sanjay, his family and the computer business but also for Scotland because
a the country has made him feel welcome.
b it has given him financial support.
c of the business network links with the USA.
d the country has helped him become successful.

8 Questions 1 and 2 refer to the text in Exercise 6. Choose two correct answers for question 1 and three correct answers for question 2.

1 Sanjay Patel
a only has one sibling.
b is not yet forty.
c is Scottish.
d has previous experience in his field.
e worked in Chicago for two years.

2 Partick is
a an area in Glasgow.
b in Scotland.
c a business centre.
d a centre for computer technology.
e where Patel grew up.
f where Patel is based.

Part 3: Exam practice

Look at the passage below. For each question choose one answer from the letters A–D.

1 Complex information
   A can only be communicated by human beings.
   B is described as intelligent, self-aware and based on context.
   C is communication across species.
   D is too difficult for Campbell's monkeys to understand properly.

2 Chimpanzees
   A are not as intelligent as birds.
   B can be taught language.
   C can play the keyboard.
   D have the language skills of a four-year old child.

3 Birds have shown evidence of being able to
   A teach themselves to solve problems.
   B use multiple tools better than humans do.
   C read numbers as well as people do.
   D sleep better after taking tests.

LIVEWORKSHEETS

A scientist based in Scotland claims to have found the first evidence of a common language shared by different animal species. The calls, which are understood by monkeys and birds, were discovered by Klaus Zuberbühler, a psychologist at St Andrews University. According to Zuberbühler, animals and birds can communicate complex ideas not just to their peers but across species.

The findings have been heralded as a significant breakthrough in the quest to discover the origins of human language and proof that the ability to construct a complex form of communication is not unique to man. Zuberbühler made the discovery after spending months observing the calls of Diana monkeys in the Tai Forest in Ivory Coast, in West Africa. He and his colleagues recorded thousands of monkey calls and spent hundreds of hours listening to the animals' noises. They noticed that the monkeys adapted their calls to change the meaning to warn one another about different threats or opportunities. For example, the sight of a leopard prompted a 'krack' alarm call. However, when they merely repeated calls made by other monkeys they added an 'oo'.

The researchers found that the calls could be understood by other species of monkey as well as by some birds. 'What our discovery showed is that the alarm calls were far more complex than we had thought,' said Zuberbühler. 'They were conveying information that was contextual, self-aware and intelligent. We then tried playing these calls back to other monkeys and they responded in ways that showed they knew the meaning. What's more, the same calls would be recognised by other species, like Campbell's monkeys. So they are communicating across species. And since then we have found that hornbill birds can understand these calls and they too can understand all the different meanings.'

Among scientists, the idea that animals and birds might be sentient has been around a long time. Chimpanzees are perhaps the most obvious species for comparisons with humans, but their abilities can still surprise, as when researchers at Georgia State University's language research centre in Atlanta taught some to 'speak'. They taught the animals to use voice synthesisers and a keyboard to hold conversations with humans. One chimp developed a 3,000-word vocabulary and tests suggested she had the language and cognitive skills of a four-year-old child.

Perhaps the most surprising signs of intelligence have been found in birds – whose tiny heads and small brains were long assumed to be a complete barrier to sentience. All that is changing fast, however, with many species showing powerful memories and reasoning power. A few years ago Irene Pepperberg of the Massachusetts Institute of Technology taught a parrot to recognise and count up to six objects and describe their shapes.

Last year that was topped by Alex Kacelnik, a professor of behavioural ecology at Oxford, who discovered that crows are capable of using multiple tools in complex sequences, the first time such behaviour had been observed in non-humans. In an experiment seven crows successfully reeled in a piece of food placed out of reach using three different lengths of stick. Crucially, they were able to complete the task without any special training, suggesting the birds were capable of a level of abstract reasoning and creativity normally associated only with humans.

Last week it emerged that researchers from Padua University in Italy had found that birds were able to read numbers from left to right, as humans do, and count to four even when the line of numbers was moved from vertical to horizontal. They also showed that birds performed better in tests after a good night's sleep.

All this is powerful evidence against the idea that people are unique.

Glossary:
species: a class of plants or animals whose members have the same main characteristics and are able to breed with each other
peer: (here) members of the same species
sentient: capable of experiencing things through its senses