# **ENGLISH FOR SPECIFIC PURPOSES**

## **Students of Health Sciences and Sports**

Compiled by Sirle Kivihall, MA

Tallinn 2013

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The aim of this practice material is to provide students of Tallinn University Institute of Health Sciences and Sports with an opportunity to enhance their skills in English for Specific Purposes (ESP) at the B2+ level. The material can be used as a self-study programme to become familiar with the terminology that is characteristic of this speciality and/or to prepare for the B2 level exam. The practice material includes reading texts and tasks, listening links and tasks, language structure tasks as well as vocabulary tasks. The key at the end of the material enables the students to check their answers.

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### **SECTION 1**

### **READING**

Read the following text and complete the tasks below.

#### **YOU MAY SCOFF...**

by Emma Young

Who needs diets and exercise? There are plenty of other ways to stay slim.

The holidays are a time of excess. Eat, drink and be merry, for tomorrow we diet - or perhaps not! Unfortunately, we do not all have the self-discipline and **determination** (1) it takes to cut back on cake and hit the gym. But fear not - there could be other ways to shift the fat and stay trim (2).

Just to get this straight, if you over-eat and under-exercise you will gain weight. However, growing evidence suggests that other factors also contribute to excess adiposity (3). Last year, David Allison at the University of Alabama in Birmingham, Ala., highlighted (4) this when he discovered that humans are not alone in piling on the pounds. He looked at wild animals, lab animals, even animals kept on the same highly controlled diets for decades, and found that all were becoming heavier (*Proceedings of the Royal Society B*, vol. 279, p 1626). Allison concludes that whatever factors are fattening up the animals that live around us might also help explain the human obesity epidemic.

That being the case, identifying these alternative factors should give us new ways to fight the **bulge** (5). The good news is that researchers worldwide are beginning to do just that. It is not yet known how much each factor contributes to obesity, but we can **nevertheless** (6) suggest ways of avoiding them – and some are far less painful than dieting or pounding the tarmac.

### **Get vaccinated**

If you catch a cold this holiday season you may have to stock up on new clothes as well as tissues. That's because at least one common cold virus has been linked to obesity. Nikhil Dhurandhar of the Pennington Biomedical Research Centre in Louisiana discovered that adenovirus-36 (AD-36) boosts (7) both the number of fat cells in the body and the amount of fat inside these cells. He also found that obese people are nearly three times as likely as those of healthy weight to test positive for AD-36 antibodies, indicating current or past infection (Obesity, vol. 14, p 1905). Another study reported that children with AD-36 antibodies weighed an average of 23 kilograms more than children without them (*Paediatrics*, vol. 126, p 721).

The "fat effect" of AD-36 might persist (8) for several years in humans, although nobody knows for sure. Meanwhile, another 10 microbes have been reported to make animals fatter.

While it sounds alarming, this could actually be good news in the fight against flab (9). "If indeed some infections contribute to obesity in people, we could have a potentially very simple and effective prevention strategy – vaccination, "says Dhurandhar.

### Chill!

While extreme stress tends to make people lose weight, the everyday kind can have the opposite effect. So, for the sake of your waistline, take a deep breath, and don't let the festive family bickering (10) get to you.

Failing that, try giving the new-year diet a miss. One recent study found that moderate calorie **restriction** (11) made mice much more sensitive to stress, and this effect persisted once the diet was over. The mice went on to choose more high-fat food than those that had never had their food restricted (Journal of Neuroscience, vol. 30, p 16399).

Brain imaging studies by Rajita Sinha, director of the Yale Stress Centre at Yale University showed that stress increases activity in the ventral striatum, a region associated with reward and habits (Neuropsychopharmacology, vol. 36, p 627). "So it increases craving for highcalorie foods in those who have a habit of consuming them," she says. Instead of counting calories, she recommends mindfulness, stress reduction and meditation techniques to cultivate an awareness of how your thoughts and behaviour can undermine your health. "They can help with taking control over the **urges** (12) and stress-related eating of high-calorie food".

Everybody say "om".

### Have a lie-in

If you need an excuse for spending more time in bed during the holidays, this could be it: too little sleep can make you fat. Simona Bo of the University of Turin, Italy, found that the adults who became obese during her six-year study slept an average of about 6.3 hours a night, compared with about 7.2 hours for those who maintained a healthier body weight. The link between sleep and weight held even when her team took into account other important causes of obesity, such as low level of physical activity. Rachael Taylor at the University of Otago, New Zealand, has found that children aged between 3 and 5 who sleep less than the average of 11 hours a night are also more likely to be overweight or obese by the time they are 7 years old. (BMJ, vol. 342, p 2712)

Sleep deprivation (13) reduces the secretion of leptin, a hormone that suppresses appetite, and increases levels of ghrelin, a hormone that stimulates appetite. "Or it could be as simple as less sleep means more time to eat," says Taylor. Either way, an extra hour in bed sure beats going to the gym.

(*NewScientist* 24/31 December 2011, p 62-64)



Decide whether the following statements are True (T), False (F) or No Information (NI). There is an example at the beginning (0).

0	1	2	3	4	5	6	7	8	9	10
T										

- **0.** During the holidays people eat and drink more than usual.
- 1. Getting too little exercise and eating too much is the only reason why people put on weight.
- 2. David Allison's research involved studying rats under laboratory conditions.
- 3. You may need to go shopping for clothes if you come down with a cold.
- **4.** Adenovirus-36 (AD-36) decreases the percentage of fat in the fat cells.
- 5. Vaccination against infections could be used in the future to prevent obesity.
- **6.** People under severe stress can experience breathing difficulties.
- 7. One study indicates that mice that have never been on a diet choose fatty food, when given a choice between high-calorie or low-calorie food products.
- 8. Rajita Sinha has been studying the connection between brain activity and behaviour.
- 9. Simona Bo is planning a follow-up research project based on her six-year study.
- 10. Specific hormones regulate our appetite.

### Task 2

11 of the 13 words in **bold** type in the text correspond to the 11 definitions below. There is an example at the beginning (0). Match the remaining definitions with the corresponding words in **bold** type in the text.

	0	1	2	3	4	5	6	7	8	9	10
Ī	2										

- **0.** 'thin' in an attractive and healthy way (*adjective*)
- 1. a strong desire, especially one which is difficult or impossible to control (noun)
- 2. in spite of what has just been said or referred to (adverb)
- 3. the ability to continue trying to do something, although it is very difficult (noun)
- **4.** the act of arguing about things which are not important (*noun*)
- **5.** to draw special attention to or emphasize something important (*verb*)
- **6.** not having things or conditions that are usually considered necessary (noun)
- 7. continue to exist (*verb*)
- **8.** a fixed limit on something (noun)
- **9.** to improve or increase something (*verb*)
- **10.** soft, loose flesh on someone's body (*noun*)

### II LANGUAGE STRUCTURES

buy new clothes. (have)

### Task 3

Fill in the missing part of the sentence using the word given. Do not change the word. Use two to five words. There is an example at the beginning (0)

0.		They haven't had basketball practice since August.  Thelast time they had basketball practice was in August. (time)
	1.	Gerry decided to become a professional athlete so he left high school.
		Gerry to become a professional athlete. (gave)
	2.	Her parents don't like the fact that she goes on a diet.
		Her parents going on a diet. (approve)
	3.	I am interested in knowing more about the effect of these antibiotics on my body.
		I more about the effect of these antibiotics on my body. ( <u>like</u> )
	4.	The total price of the diet program includes the price of the food supplements.
		The price of the food supplements the total price of the diet program. ( <u>is</u> )
	5.	It was careless of them to start the training session without a proper warm-up.
		They
	6.	Jenny didn't manage to lose enough weight for the dress to fit.
		Jenny enough weight for the dress to fit. (succeed)
	7.	If he met the guru of healthy eating last May, he has forgotten about it.
		He the guru of healthy eating last May. (not)
	8.	The girls asked her, "Have you ever been on a diet?"
		The girls wantedever been on a diet. (know)
	9.	My sister had to buy new clothes because she had become so slim.
		If my sister hadn't become so slim, she

10. I didn't know you lived so far from the health centre. I didn't know you lived ...... the health

centre. (such)

### Task 4

Read the text below and use the word given in bold type to form a word that fits into the space. There is an example at the beginning (0).

### SUNSHINE SUPERSTAR

by Jerome Burne

The case for more vitamin D in our diets has received a big boost with reports of a sharp increase in childhood rickets. But the health benefits are (0) ...potentially... (potential) much more extensive. Could vitamin D even improve our Olympic medal hopes?

When it comes to vitamin D, we could learn a thing or two from the ancient (1) ..... (Greece) athletes – like exercising naked in the sunshine. And with the Olympics coming up, sun-drenched training might even be a secret weapon in the drive for gold.

"This was something Russian and German sports doctors in the 1950s and 1960s were interested in," says Dr John Cannell, a US (2) ...... (psychiatry) and founder of the Vitamin D Council. "There are research papers showing that athletic performance peaks in summer and is the (3) ...... (poor) in the winter. Vitamin D stimulates the (4) ...... (grow) of muscle fibres, and balance and (5) ...... (react) times both improve with higher levels in the blood. Forty years ago, both Russian and German teams used the equivalent of sunbeds to boost performance."

"Most athletes aren't aware of the link between vitamin D and muscle (6) ...... (strong)," says Professor Tim Oliver, medical oncologist at Barts Hospital in London. "We tested some boxers and found they had really low levels. We can't say how much it's affecting their performance, but since many sportspeople train indoors – (7) ...... (gymnastic), swimmers, track cyclists – there's no way they can be making enough vitamin D from the sun."

And how much is enough anyway? The idea that we should all be getting a lot more took a knock last year when the New England Journal of Medicine declared that the evidence for vitamin D being (8) ...... (benefit) for anything other than bones was "inconclusive". But four months later, an equally (9) ...... (impress) source - the American Endocrine Society - recommended that both children and adults should get their blood level to between 100-150nmol/l (nanomoles per litre, which is how levels in the blood are measured). "Vitamin D (10) ...... (deficient) is common in all age groups," commented the lead author Professor Michael Holick of Boston University Medical Centre. "Everyone is at risk."

A big (11)	(	random) t	rial of vit	tamin D is	s due to re	eport in 20	16, but		
Professor Oliver is i	n no doubt. "	(12)	•••••	(ideal	), you shou	ıld have ab	out the		
same level in your b	lood as some	one from th	ne Masai t	ribe in Af	rica – arou	nd 200nmo	ol/l," he		
says. "It makes s	ense to ask	your GP	to test	your blo	od level,	and if it	's (13)		
(low) than that, boost it up with diet, supplements or sunshine."									

(Reader's Digest, April 2012, p 94-96)

### Task 5

Read the sentences below. Some of the sentences are correct and some have a word that should not be there. If a sentence is correct, put a tick  $(\checkmark)$  by the number. If a sentence contains a word that should not be there, write the word in the space. There are two examples at the beginning (0 and 00).

0	As a child I used to spend a lot of time at the pool.	0✓
00	His first a few days at the health camp were very exciting.	00 a
1.	As a matter of the fact, I have been training for two years.	1
2.	What were you being looking for in the chemist shop?	2
3.	Will food disappear with the introduction of supplementary pills?	3
4.	If he had tried harder, he would be in better physical shape.	4
5.	A new swimming pool is being built near our school at the moment.	5
6.	He won't let us to take another piece of cake.	6
7.	After breaking the world record he started looking down on his rivals.	7
8.	She won't take the pills, unless they are not herbal.	8
9.	Despite of practicing hard, the team didn't make it to the finals.	9
10.	Guess who they ran into in the competition today!	10

#### Task 6

Read the text below and think of the word that best fits each space. Use only ONE word in each space. There is an example at the beginning (0).

### THE DIET DOCTOR: THE "NEAT" WAY TO LOSE WEIGHT

Any type of activity can help you burn calories, says Dr David Ashton of Healthier Weight.

Recently, I was on a long-haul flight and sat (0) ...next... to a very large man who occupied the window seat on my left. To my right, there was a middle-aged man (1) ...... constant moving around began to border on the irritating. One minute he was on his computer, the next he headed to the toilet, then he dived into the overhead locker to get (2)

7

bag and then he fiddled with his smartphone. It was endless. Meanwhile
the obese man (3) utterly inert: not even a toilet stop in six hours of flying.
The difference (4) these two individuals was striking because the 'fidgeter'
was as slim (5) the man next to me was obese.
Resent research corroborates my own observation (6)
The problem nowadays is that modern living, with all (11)
So, in terms of managing your weight, it may (15)easier to focus on NEAT – walking to work, using the stairs, ditching the remote – (16)than slavishly trying (and failing) to get to the gym. And don't forget to fidget!
(Reader's Digest, October 2011, p 116)

### **III LISTENING**

### <u>Task 7</u>

Watch the video and complete the sentences below, using the exact words (2-5) that you hear. There is an example at the beginning (0).

### http://www.howdini.com/howdini-video-6660656.html

0	Don't youdare take away my red wine!
1.	But I think sometimes people
	in some of these drinks.
2.	A large can have up to a
	1000 calories in it.
3.	Drinking a glass of wine is certainly a much

4.	We drink during the holidays because we are in a
	- that's part of it.
5.	When you are at a party, sometimes you are a little nervous, so it's a way to
	down.
6.	If you are having one, have one, and not several and then really
	drinks elsewhere.
7.	Sometimes you feel like you are not
	if you don't try what they are serving.
8.	You don't have to say yes to everything
9.	What about so that they're not as
	potent.
10.	Have a Mohito instead, it
11.	You have done your best - you have tried to drink
	the alcohol.
12.	There are a lot of myths out there too, like 'have a
	and that'll sober you up'
13.	If you don't follow that rule, then, of course,
	is driving you home.

### **SECTION 2**

### **READING**

Read the following text and complete the tasks below.

#### CROSS-COUNTRY RUNNERS......

... except that the 'country' they crossed was America. Twice!

The **stirring** (1) tale of two heroic athletes

On March 4, 1928, 199 men set off from Los Angeles in one of the most gruelling (2) sporting events in history. "The International Trans-Continental Foot Race" to New York first prize \$25,000 – meant running more than 40 miles every day for nearly three months. **0.** ... B ...

The two main British contenders (3) couldn't have been more different. Arthur Newton was a patrician (4) pipe-smoking 44-year-old who'd been living in Southern Africa and hadn't started running seriously until he was 40 – but already held the 50, 60 and 100-mile world records. 1. ...... Even so, the two **struck up** (5) a friendship that lasted through Pyle's even tougher race from New York to LA the following year and on until Newton's death in 1959. Mark Whitaker's calmly written but still astonishing book makes great set pieces of the two races. It continues to amaze when Newton and Gavuzzi earn money during the Depression with a series of extraordinary endurance feats (6). As professionals, they were frozen out of British athletics almost completely.

Later on, their lives turned more melancholy, with Newton obsessively **embittered** (7) by the hypocrisy of amateurism and Gavuzzi increasingly lonely. 2. ........

In this extract, Whitaker describes the end of the second transcontinental race in Los Angeles: "If there was one day that Peter Gavuzzi would have turned over in his mind in the solitude (8) of his Wiltshire retirement cottage, it was Sunday, June 16, 1929. Together with the remaining band of 'Bunioneers' [as the racers were nicknamed] he woke up four miles from Wrigley Field – the stadium where the climax to 78 days of running was to be staged, with a classic 26-mile marathon. The runners were told that because the streets would be so crowded, the four miles to stadium were not part of the race. Once everyone was there, the marathon would start. Gavuzzi held a ten-minute lead over Jonny Salo, and was entirely confident of overall victory. 3. ...... The ship's steward from south London was on the verge of becoming a very rich man.

10

This is how Gavuzzi remembered it almost 50 years later: "As I was coming along, there was a train and the gates went down and unfortunately it was one of those long trains and took five or six minutes to go by." This was an inconvenience (9), no doubt, but Gavuzzi would have realised that it was precisely because of this sort of eventuality (10) that the journey to the stadium was not to count for the race.

However, when Gavuzzi finally arrived at Wrigley Field he found that the marathon had started without him and Jonny Salo was already on his third lap. Gavuzzi had to attempt to catch Salo in front of a packed house of more than 10,000 spectators, all cheering (11) the possibility of an unexpected American victory. C. C. Pyle might have got many things wrong during the epic journey across America, but he had certainly got it right on the final night. 4. •••••

For a **brief** (12) spell Gavuzzi did manage to overtake Salo, but by then it must have become clear to him that his defeat was being stage-managed, that Pyle had decided he wanted an American winner. **5.** .......... "We had run this entire race of 3,635 miles," Peter Gavuzzi was to **recall (13)**, "and I had lost it by two minutes and 47 seconds."

(*Reader's Digest*, April 2012, p 147-148)

### <u>Task</u> 8

6 sentences have been removed from the text. Choose from the sentences A - G the one that fits each gap. There is one extra sentence that you do not need to use. There is an example at the beginning (0).

- A His year of dedicated training had, it seemed, paid off.
- В Known to the press as the "Bunion Derby", the race was organised by C. C. Pyle, promoter and all-round chancer.
- $\mathbf{C}$ The management had gone back on their word: the four miles to Wrigley Field were to be considered part of the race.
- D Peter Gavuzzi, 22, was a working-class south-Londoner.
- $\mathbf{E}$ Due to the severity of the weather conditions, 34 contestants failed to finish the competition.
- $\mathbf{F}$ He had manipulated a stunningly exciting finish.
- G In their final years, though, both men were given at least some of the respect they deserved.

11

11 of the 13 words in bold type in the text correspond to the 11 definitions below. There is an example at the beginning (0). Match the remaining definitions with the corresponding words in **bold** type in the text.

0	1	2	3	4	5	6	7	8	9	10
11										

- **0.** to give a loud shout of approval or encouragement (*verb*)
- 1. the situation of being alone without other people (noun)
- **2.** to start a relationship with someone (*verb*)
- **3.** lasting only a short time (adjective)
- **4.** something, usually unexpected, that might happen or exist in the future (noun)
- **5.** producing strong positive emotions (*adjective*)
- **6.** something difficult that needs a lot of skill, strength, bravery, etc. to achieve it (noun)
- 7. to bring the memory of a past event into your mind (verb)
- 8. a fact or the state of being difficult or troublesome that often causes a delay or discomfort (noun)
- **9.** very angry or resentful about unfair things that have happened to you (adjective)
- **10.** someone who competes with other people to try to win something (noun)

### II LANGUAGE STRUCTURES

### **Task 10**

Fill in the missing part of the sentence using the word given. Do not change the word. Use two to five words. There is an example at the beginning (0)

0.	Tł	hey haven't had basketball practice since August.  Thelast time they had basketball practice was in August. (time)
	1.	Doctors perform an estimated 500 operations on athletes annually.
		An estimated 500 operations
	2.	"How long is this golf course?" a client asked the trainer.
		A client asked the trainer this golf course was. (length)
	3.	Everybody thinks she will accept the place in the national team.

She .....

national team. (expected)

the place in the

4.	Please, give the food coupons to all contestants.
	Please,to all contestants. (hand)
5.	They found it difficult to agree on the new rules of the game.
	They found it difficult
6.	Tom really looks like his father, who's a famous footballer.
	Tom really father who's a famous footballer. (after)
7.	The others couldn't catch him because he swam so fast.
	He swam to catch him. (too)
8.	I don't recommend buying the training equipment online.
	It is the training equipment online. (advisable)
9.	It was a waste of time for me to do the extra training.
	It was the extra training. (worth)
10.	Her racket was so old that she had to throw it away.
	Her racket was so old that she it. (rid)
sk i	'1

### <u>Tas</u>

Read the text below and use the word given in (bold) type to form a word that fits into the space. There is an example at the beginning (0).

### IF YOU'VE GOT THAT PRECIOUS METTLE, THANK YOUR PARENTS

The iron-will you need to bounce back and win in sport, or pass exams, even when the chips are down, may be (0) ... largely ... (large) inherited. (1) ...... (tenacity) winners - such as cyclist Lance Armstrong, who recovered from testicular cancer and went on to win the Tour de France seven times – are naturally tough, a new study suggests, and it may be difficult to boost people who are not naturally (2) ...... (resilience).

Tony Vernon at the University of Western Ontario in London, Canada, led a questionnairebased study of 219 pairs of twins which probed the genetic and (3) ...... (environment) contributions of four traits associated with mental toughness: control over life, (4) ...... (commit), confidence and the (5) ...... (able) to face new challenges.

The <b>(6)</b>	(an	alyse) found	I that 52 per	cent in the	variation of	mental
toughness was d	lown to ger	etics (Pers	sonality and	Individual	Differences,	DOI:
10.1016/j.paid.2008	3.09.2009). It	also com	related (7)	••••	(strong)	with
extroversion. In cor	ıtrast, being ne	urotic or (8)	••••	(anxiety	) indicated a r	educed
likelihood of posses	ssing mental to	ughness.				
"It's about not letting who designed the quantitation that natural (9)	uestionnaire. (	Clough agree	es mental toug	hness is most	ly inherited, b	ut says
	. ,					
(NewScientist 1 N	ovember 2008,	p 16)				

### *Task 12*

Read the sentences below. Some of the sentences are correct and some have a word that should not be there. If a sentence is correct, put a tick  $(\checkmark)$  in the space. If a sentence contains a word that should not be there, write the word in the space. There are two examples at the beginning (0 and 00).

0	As a child I used to spend a lot of time at the pool.	0✓
00	His first a few days at the health camp were very exciting.	00 a
1.	By the end of next month he will have held the record for two years.	1
2.	If only I was being able to run faster than my rivals!	2
3.	They were all surprised at the poor performance of their favourite team.	3
4.	Nobody wants to be on to the losing side.	4
5.	Tim thinks she has a little chance of fully recovering from her injuries.	5
6.	Trust in me! Everything is bound to go well!	6
7.	Listen to them shouting! I'd rather they had stopped.	7
8.	Fiona is so stubborn that it's impossible not to reason with her.	8
9.	Waiting for the game to begin, the audience felt really excited.	9
10.	. I try to put some money aside each month for my new running shoes.	10

#### *Task 13*

Read the text below and think of the word that best fits each space. Use only ONE word in each space. There is an example at the beginning (0).

### **OLYMPIC GOLD IN MIND**

All top-level athletes – and we're thinking of the 17,000 that will descend (0) ... on ... London for the Olympics in July 2012 – will probably have the optimal genes to compete in



their chosen sport. They will have (1) ..... training for years, and their diets will be finely honed. But it is in their minds (2) ..... medals will be won or lost. It's only in the last decade or so that psychological training has been recognized as equally important to sporting success (3) ...... the physical side. The psychologist to the British Olympic team runs twice-monthly sessions for athletes in the final year of the run-up to the Olympics. A pair of psychologists in Israel implement a four-year programme of psychological training with their athletes, which starts as (4) ...... as the last games finish. Medal-winners tend to be those who are best (5) ...... to control their emotions and focus their attention, and are brimming with confidence, motivation and optimism. The idea of psych-training is to help athletes reach this state of mind through strategies (6)..... as goal-setting, imagery, simulating the competitive environment and even talking to themselves. Psychologists will also (7) ...... considering the finer details of the athlete's environment in the run-up to their moment in the spotlight. (8) ...... kinds of information are athletes given during their stay in the Olympic Village? What is the wording like on the notice board? (9) ...... detail counts. Of (10) ....., the best athletes also have the right genes. A sprinter or long jumper might have a certain form of the gene ACTN3 as it leads (11) ...... more fasttwitch muscle – the kind required for short bursts of strength and speed. Endurance (12) ...... commonly have a version of the NRF2 gene which optimizes VO2 max the upper limit of a person's oxygen consumption. So winning is just a matter of having the right expression of genes, putting in years of physical (13) ....., and honing the mental toughness needed to succeed. But not (14) ...... can win. So perhaps some athletes will need a psychologist to help them cope with losing – not that we should even mention that word until after August. (NewScientist 24/31 December 2011, p 26)

#### **LISTENING** Ш

#### Task 14

Watch an interview and for sentences 1-8 choose the best alternative A, B or C. There is an example at the beginning (0).

#### http://www.youtube.com/watch?v=uENQqJVVFh0

- 0. Andre Agassi and Steffi Graf live in
- $\mathbf{A}$ Las Vegas
- Los Angeles В
- C Lowell



- 1. A major focus of the tennis couple's life is
- A Andre Agassi Foundation
- B Andre Agassi Prep School
- C Andre Agassi Tennis School
- 2. It's a tradition at the Wimbledon Ball for the male and female winner to
- A be photographed together
- B be seated at the same table
- C dance together
- 3. Andre Agassi and Steffi Graf's relationship started in
- A 1992
- 1995 В
- C 1999
- 4. Their relationship was successful due to
- A having a similar background
- B Steffi Graf ending her career
- C the birth of their first child
- 5. Andre Agassi's attitude to tennis has
- A become far more positive recently
- changed considerably over the years В
- C fluctuated from one extreme to another
- 6. As Andre Agassi played in tournaments, his wife tended to
- A offer him unconditional support
- B stay at home with their three kids
- C talk him through all his mistakes
- 7. Having children has helped Andre Agassi to
- A be more motivated
- B disregard hardships
- C play better tennis
- 8. For Andre Agassi, being with his family is like a
- A dream come true
- B rollercoaster ride
- C relaxing holiday



### **SECTION 3**

### **READING**

Read the following text and complete the tasks below.

#### ARTISTIC ANATOMY

Da Vinci's **contribution** (1) to science has been underestimated, says Tiffany O'Callaghan.

Around 1523, Leonardo da Vinci made detailed drawings of the heart and wrote nearly 2000 words of notes on the organ in his characteristic mirror handwriting. Intrigued by the way the aortic valve opens and closes to ensure (2) blood flows in only one direction, he set about constructing a model.

"First pour wax into the gate on an ox's heart so that you may see the true shape of the gate," he wrote. With hardened wax as a template (3), he recreated the structure in glass. By pumping a mixture of water and grass seed through the glass he was able to observe how the widening at the base of the aorta caused swirls of seeds. These eddies (4), he believed, helped to close "the little doors of the heart" – the three cusps (5) of the valve.

These studies are among 87 original drawings on display in "Leonardo da Vinci: Anatomist", the largest ever exhibition of his anatomical works. According to curator Martin Clayton, it is time da Vinci was celebrated as a scientist. "Many of Leonardo's drawings have been regarded (6) as science in the service of art," he says. "I want to make the point that this is proper science."

However, it is the interface (7) between da Vinci's worlds that proves most fascinating. In some drawings it is difficult to discern (8) precisely where his observations end and his imaginings begin – as is the case with The Cardiovascular System and Principal Organs of a Woman, drawn around 1509. Reflecting a widely held belief of the time, it depicts the uterus with seven chambers.

This work also shows how his artistic background helped his study of anatomy. **Pinpricks (9)** dot the edges of blood vessels and organs, transforming the drawing into a stencil, a technique commonly used for creating frescos.

Da Vinci's renderings became more accurate when he began **dissecting** (10) human **cadavers** (11) – he studied at least 30 - including 20 while working at the University of Pavia with the anatomy professor Marcantonio della Torre. He had intended (12) to compile his anatomical studies into a treatise (13) on the subject. When he died in 1519, however, his notebooks – filled with hundreds of breath-taking renderings – were still unpublished.

Although da Vinci did not realise his anatomical ambition during his lifetime, Clayton is convinced that his extraordinary drawings secure his legacy: "He was the equal of any anatomist in history."

(NewScientist 5 May 2012, p 43)



Decide whether the following statements are True (T), False (F) or No Information (NI). There is an example at the beginning (0).

0	1	2	3	4	5	6	7	8	9	10
T										

- 0. Tiffany O'Callaghan thinks that Leonardo da Vinci has not been valued as a scientist.
- 1. Leonardo da Vinci's handwriting was so small that a magnifying glass was needed.
- 2. The idea of making a model of the heart was a result of da Vinci's interest.
- 3. Da Vinci's model of heart was made of wax.
- **4.** The exhibition *Leonardo da Vinci: Anatomist*, displays all his anatomical drawings.
- 5. Leonardo da Vinci's anatomical drawings have so far been considered art rather than science.
- **6.** In some drawings the line between reality and creativity is blurred.
- 7. In order to improve the accuracy, it is believed that Da Vinci studied about 50 human bodies.
- **8.** Professor Marcantonio della Torre was one of the leading anatomists in Italy.
- 9. Leonardo da Vinci's anatomical drawings were not made public in his lifetime.
- 10. Leonardo da Vinci's notebooks indicate that he had an ambition to become an anatomist.

#### *Task 16*

11 of the 13 words in **bold** type in the text correspond to the 11 definitions below. There is an example at the beginning (0). Match the remaining definitions with the corresponding words in bold type in the text.

0	1	2	3	4	5	6	7	8	9	10
12										

- **0.** to have as a plan or purpose (*verb*)
- 1. something that is used as a pattern for producing other similar things (noun)
- 2. a very small hole in something where a needle has been pushed into it (noun)
- 3. something that you do or give in order to help produce or achieve something (noun)
- **4.** to see, recognize or understand something that is not clear (*verb*)
- 5. an anatomical feature in the wall of the heart that regulates the direction of blood flow
- **6.** a formal piece of writing that considers and examines a particular subject (noun)
- 7. to have an opinion about something or someone (verb)
- **8.** to make certain that something will happen (verb)
- **9.** the circular movement of a substance (*noun*)
- **10.** a dead human body (*noun*)

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### **II LANGUAGE STRUCTURES**

### <u>Task 17</u>

0.

Fill in the missing part of the sentence using the word given. Do not change the word. Use two to five words. There is an example at the beginning (0)

	They haven't had basketball practice since August.
	Thelast time they had basketball practice was in August. (time)
1.	I don't think he is able to pass his anatomy exam.
	I don't think his anatomy
	exam. (capable)
2.	Da Vinci had a great talent for drawing human organs.
	Da Vinci was
	organs. (talented)
3.	The doctor will advise you to consume less fat.
	The doctor will advise you
	consumption. (cut)
4.	The whole group has a good relationship with their anatomy lecturer.
	The whole group their anatomy
	lecturer. (along)
5.	He has to study harder, if he wants to graduate from college.
	It study harder, if he wants to
	graduate from college. (necessary)
6.	It's a pity she didn't attend classes more often.
	If
	more often. (only)
7.	The exam results have really made me sad.
	The exam results have really
	(down)
8.	The teacher will not include such questions in the test.
	Such questions in the
	test. (will)

Dave told me he			th	ne ex	hibition
Leonardo da Vinci: Anatomist. (not)					
10. I'm sure it was Tina who gave the correct answer to the	questi	on.			
It	Tina	who	gave	the	correct
answer to the question. (must)					

### *Task 18*

Read the text below and use the word given in **bold** type to form a word that fits into the

space. There is an example at the beginning (0).
STRANGE FAT KEEPS SKIN WATERPROOF
by Helen Thomas
Considering we know it like the back of our hands, we understand (0) surprisingly
(surprise) little about how our skin forms the watertight barrier that protects us from our (1)
(vary) environments.
Now, for the first time, the basic (2) (molecule) structure of the skin layer
that forms this barrier has been identified. The discovery could pave the way for new
technology to deliver drugs (3) (direct) through the skin.
Previous studies have pinned the barrier down to the outermost layer of skin - the stratum
corneum - and more (4) (specific) to the fat, or lipids, occupying the space
between cells within this layer.
To get a (5) (clear) view of the fat, Lars Norlén, at the Karolinska Institute
in Stockholm, Sweden, and colleagues shaved a layer of skin from the forearms of five (6)
(voluntary). They put the tissue in a high-pressure freezer that
immediately cooled it to below -140°C. Using this technique, every atom is preserved in its
native (7) (locate), Norlén says.
They then sliced the tissue into layers just 25 to 50 nanometres thick and examined the layers
(8) (use) an electron microscope. What the researchers saw came as a
surprise: the lipids were arranged in a way never before seen in nature.
Lipids have a hydrophilic (water-attracting) head and two hydrophobic (water-repelling) tails.
(9) (Normal), the two tails point in the same direction, giving the molecule a
hairpin-like (10) (appear). A group of lipid molecules will arrange
themselves into a two-layered sheet – or bilayer – with all of the tails pointing inwards.
However, the lipid molecules between the cells of the stratum corneum are splayed outwards
so that the two tails of each molecule point in opposite (11) (direct).
These lipid molecules are stacked on top of one another in an alternating fashion. "By
stretching out like this, they form a condensed structure that is much more (12)
(permeable) than a normal bilayer," says Norlén (Journal of Investigative
Dermatology, DOI: 10.1038/jid.2012.43).
This uniquely structured (13) (fat) layer prevents any water from getting past
in either direction – except where the skin layer is modified to form pores.

S
ay
ng
)

### *Task 19*

Read the sentences below. Some of the sentences are correct and some have a word that should not be there. If a sentence is correct, put a tick  $(\checkmark)$  in the space. If a sentence contains a word that should not be there, write the word in the space. There are two examples at the beginning (0 and 00).

0 00	As a child I used to spend a lot of time at the pool.  His first a few days at the health camp were very exciting.	0√ 00 a
1.	If you are not careful, you won't see through to a lie the doctor tells you.	1
2.	The disabled students had ran the entire length of the stadium.	2
3.	They have an allergy; if they eat nuts, they will get an awful rash.	3
4.	This time next month he will be climbing Mount Everest.	4
5.	Could you imagine being an organ donor?	5
6.	His lecture about organ transplants is broadcast in live on the radio.	6
7.	It irritates me how Kate and Gina leave their books lying around.	7
8.	There is plenty of the room for your test samples in our freezer.	8
9.	He has been working in this lab for so a long time.	9
10.	We are looking forward to meeting this acclaimed professor.	10

#### *Task 20*

Read the text below and think of the word that best fits each space. Use only ONE word in each space. There is an example at the beginning (0).

### KNOW YOUR ORGANS: PHARYNX

The pharynx essentially makes up the throat. It's a tube (0) ... about... 12-14 centimetres long that starts at the back of the nose and extends down (1) ...... the gullet, or oesophagus. It has a vitally important role to (2) ...... – not the least in ensuring that the air we (3) ...... and the food we eat don't get mixed up and enter the wrong part of the body. It's organised into three separate sections, each with (4)..... own particular function.

#### **Nosy Parker**

The nasal part – or nasopharynx – is at the back of the nose, above the mouth. The tissue here is engorged with blood. As air is drawn (5) ...... through the nose, it enters this part of the pharynx and is warmed by the blood, before (6) ...... travels down and enters the lungs. A special tube also opens here – the Eustachian tube. This connects the middle ear to the pharynx and helps regulate pressure in the ear. Swallowing opens the tube, (7) ..... is what happens when your ears "pop" in a place after you swallow. There are also pharyngeal tonsils here – sometimes called "adenoids" – which are large lymph nodes that help fight off infections.

### **Mouthing off**

The second part – the oropharynx – is at the back of the mouth. (8) ...... are more tonsils here – the ones that get inflamed and painful when we have tonsillitis. (9) ...... both food and air pass through this part of the pharynx, there's a nifty little flap called the epiglottis that (10) ...... up and down, diverting food into the oesophagus and air into the trachea and towards the lungs.

#### **Swallow hard**

The third part – the laryngopharynx – (11) ..... the section below epiglottis that connects to the oesophagus. When we swallow, the epiglottis closes over the trachea to protect it – that's (12) ...... it's impossible to breathe and swallow at the (13) ...... past the epiglottis and enter the lungs, it's called aspiration. (Reader's Digest, October 2011, p 113)

### III LISTENING

### Task 21

Watch the video and complete the sentences below, using the exact words (2-5) you hear. There is an example at the beginning (0).

#### http://www.ted.com/talks/christopher\_decharms\_scans\_the\_brain\_in\_real\_time.html

- 0. You can mimic ... what you can ... see.
- 1. People have wanted to look ...... the human brain for thousands of years.
- 2. You could be attacked ...... in the arteries, but now we have the real technology to do this.
- 3. We will be able to fly into the ....., literally fly into his body.



4.	That process has typically taken days or we
	have collapsed that with technology to milliseconds.
5.	If he can see this brain, he can
	learn how to control it.
6.	This is the you are soon going to have.
7.	If you burn yourself, you
8.	And then we that produce the pain.
9.	This may shock you, but we are literally reading this person's brain
	; they're watching their own brain
	activation.
10.	. You will be able to look at all the,
	all your experiences.

### <u>SECTION 4</u>

### **READING**

Read the following text and complete the tasks below.

### SOCCERBOTS ACQUIRE THE ART OF A GRACEFUL FALL

by Jessica Griggs

To compete with human soccer players, soccerbots will have to learn to tip over and get back up without hurting themselves.

Deliberately taking a tumble to **implicate** (1) another player might earn you a yellow card on the soccer pitch, but falling over safely is an essential skill for all soccer players, both human and humanoid.

Now soccerbots in Chile are learning to fall in a controlled way, reducing damage to themselves and their environment, letting them recover quickly and get on with the game they can even fall over deliberately to save a shot on goal, for example.

**0. ... I ...** The aim of the RoboCup project is to have a robotic team in place by 2050 that can beat the best human side – an impossible goal unless soccerbots can learn to fall over without damaging themselves.

Before this, most research on humanoid robotics has concentrated on keeping the robots upright (2) and balanced. But in the real world they are certain to lose their balance and fall over, or trip up on uneven surfaces, says Noel Sharkey, professor of artificial intelligence and robotics at the University of Sheffield in the UK.

When the inevitable (3) happens, most robots fall as a dead weight, unaware that anything has gone awry (4) until their sensors tell them that they are horizontal. 1. ..........

Inspired by the controlled falling taught in some martial arts, Ruiz-del-Solar wanted to find the best ways for a robot to keel over (5). He and his team have come up with a set of equations that quantify how much total damage a fall is likely to cause, given the speed with which the robot crashes to the ground, the forces and torques (6) transmitted to each of its joints and the position of its cameras and other important body parts relative to the ground. 2. .....

To find out the optimum ways for a robot to fall, the team used a computer simulation based on a humanoid robot called Nao, the player used by all teams competing in the RoboCup's Standard Platform League. Nao has 22 simple joints, each with a single degree of freedom, and is typical of the bipedal soccer robots being built today.

3. ..... The simulation computes the stresses on each joint, which can then be plugged into the team's equations to work out the total damage factor.

They found that one of the main ways to minimise damage is for the robot to fold its legs underneath it. 4. ........... Another good strategy is to use a fall sequence (7) consisting of several movements, so the falling body has several points of contact with the ground,

spreading the energy of the impact over a large number of joints, rather than taking it all in one disastrous crunch (8).

The Santiago team tested their method for real using their UCH H1 robot, which they built to compete in the RoboCup's Humanoid League. 5. ................ Using a high-speed camera, they recorded the speed and acceleration (9) of the robot's joints as it fell, and used that to calculate the forces and torques on each joint. The tests confirm that UCH H1 suffers less damage when it bends its legs to keep its centre of mass low as it falls. The work is to be published in *Robotics and Autonomous Systems* (DOI: 10.1016/j.robot.2009.03.011).

While the fine details of the best tumbling strategies will vary from robot to robot, and depend on how the tumble starts, Ruiz-del-Solar is encouraged to find that the result for real robots mirror what happened in the simulation – despite the robots being different models. 6.

Ruiz-del-Solar estimates that a well-equipped soccerbot would need about five different fall sequences stored in its memory, to be triggered when the robot is fouled (10) or needs to dive to save a shot on goal, for example.

The true test of the new work will come at this year's RoboCup, to be held in Graz, Austria, in June and July, where the Santiago team are planning to try out their robot, programmed with safe fall sequences, on the soccer pitch. After that, they hope to develop an algorithm (11) that would calculate from first principles the best way for the robot to fall, removing the "trial and error" element of their approach.

Sharkey describes the work as "novel (12) and promising". He points out that giving a large robot the ability to fall over gracefully could greatly extend the role of humanoid robots outside soccer, including cybersuits and robot legs that assist walking in elderly and disabled people. "At present if anyone tripped in a cybersuit they would fall heavily and sustain (13) injuries," he says. 7. ..... "What we need now is a good method for getting up gracefully".

(NewScientist, 16 May 2009, p20-21)

8 sentences have been removed from the text. Choose from the sentences A – I the one which fits each gap. There is one extra sentence that you do not need to use. There is an example at the beginning (0).

- Among other things, that means the robot is much less likely to hit its head on the A ground.
- B Nao was initially created by a team of Chilean scientists for a Robotics Fair held in Santiago in 2006.
- $\mathbf{C}$ So a good fall will be one that generates a low overall damage number from their equations.
- D Improving the technology could make a fall less harmful for anyone wearing such a suit.
- $\mathbf{E}$ It suggests that the equations should be general enough to apply to any humanoid robot with standard joints, he says.
- $\mathbf{F}$ Ruiz-del-Solar and colleagues put their simulated soccerbot through a series of different fall sequences.
- $\mathbf{G}$ It is similar to Nao but has a stronger frame and joints.

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- **H** And unlike humans, they don't try to break their fall or protect themselves from the impact.
- I Javier Ruiz-del-Solar of the University of Chile in Santiago and his team are training two teams of soccerbots for the annual world RoboCup.

11 of the 13 words in <u>bold</u> type in the text correspond to the 11 definitions below. There is an example at the beginning (0). Match the remaining definitions with the corresponding words in <u>bold</u> type in the text.

0	1	2	3	4	5	6	7	8	9	10	
11											

- **0.** a set of mathematical instructions that must be followed in a fixed order, and that, especially if given to a computer, will help to calculate an answer to a mathematical problem (*noun*)
- **1.** to fall over suddenly (*verb*)
- 2. to do something against the rules of a sport, often causing injury to another player (verb)
- 3. a series of related things or events, or the order in which they follow each other (noun)
- **4.** to suffer or experience something, especially damage or loss (*verb*)
- **5.** not in the intended way (*adverb*)
- **6.** to show that someone is involved in a crime or partly responsible for something bad that has happened (*verb*)
- 7. new and original, not like anything seen before (adjective)
- **8.** vertical (adjective)
- **9.** certain to happen and unable to be avoided or prevented (*adjective*)
- **10.** a difficult situation (*noun*)

### **II LANGUAGE STRUCTURES**

#### Task 24

Fill in the missing part of the sentence using the word given. Do not change the word. Use two to five words. There is an example at the beginning (0)

**0.** They haven't had basketball practice since August.

The ...last time they had... basketball practice was in August. (time)

1. She didn't know anything about *Euro2012*; hence she failed to watch the games.



have failed to watch the games. (if)  2. The umpire postponed the tennis match due to torrential rain.  The tennis match	wouldn't
The tennis match	
rain. (postponed)  3. He wants to earn a lot of money with his business in robotics.  He wants to	
3. He wants to earn a lot of money with his business in robotics.  He wants to	torrential
He wants to with his but robotics. (fortune)	
robotics. (fortune)	
	usiness in
4. You should pay attention to his powerful backhand stroke.	
You should his	powerful
backhand stroke. (out)	
5. Harriet felt sorry that she had not bought proper swimming goggles.	
Harriet proper s	wimming
goggles. (buying)	
6. "They were given personal lockers at the sports club", Gerry said.	
Gerry said that they personal locl	kers at the
sports club. (given)	
7. We became really angry with our coach.	
We	. with our
coach. (temper)	
8. Both tournaments were unsuccessful for her.	
succ	essful for
her. (neither)	
9. You should not let him overpower you on the court.	
should you let him overp	ower you
on the court. (under)	
10. It's a difficult situation and I can't find a solution all by myself.	
It's a difficult situation and I	all by
myself. (work)	an by

Read the text below and using the word given in **bold** type form a word that fits into the space. There is an example at the beginning (0).

### FAST WATERS RUN DEEP FOR OLYMPIC SWIMMERS

### by Amarendra Swarup

When (0) swimmer (swim) Rebecca Adlington from Great Britain won the 800-metres freestyle Olympic final last week, she finished in a world-record time of 8 minutes, 14.10 seconds, (1) (wipe) more than 2 seconds off the previous record, which
had stood for 19 years.
A day later, America's Michael Phelps won a record (2) (eight) gold medal
in a single Games, having smashed seven world records along the way. In total, 25 world
speed records have been broken in the pool since the Beijing Olympics began on 8 August.
By contrast, just eight world records were set by the pool-swimmers in Athens in 2004. Why
the big (3) (different)?
The answer, according to Brent Rushall, an expert in exercise and (4)
(nutrition) sciences at San Diego State University, may lie in the (5)
(deep) of the Beijing pool. It is 3 metres compared with standard pools such as the one used
in Athens, which are only 2 metres.
A swimmer's (6) (move) through water causes two waves to form around
the body: a bow wave at the front of the body, which moves outward and downward, and a
stern wave at the rear. This process transfers energy to the water and is (7)
(responsibility) for much of the drag that impedes a swimmer's progress. Patterns of
reflected waves depend on the swimmer's velocity and the shape of the pool.
"The downward portion of the bow wave hits the bottom and reflects back towards the
surface," explains Rushall. If this returning wave coincides with the stern wave or hits the
swimmer, this slows them down. "That is why shallow pools are 'slow'."
In contrast, if the pool is deep, the swimmer will have moved further by the time the bow
wave has reflected back upwards and so less (8) (add) resistance
occurs, if any.
The Beijing Water Cube pool has other features designed to reduce swimming resistance,
such as an extra lane at each edge of the pool to reduce (9) (reflect) from
the side. The Athens pool had a similar design, however.
Questions have been raised about the (10) (valid) of the Beijing records.
But there are other official pools that are 3 metres deep or more, says Rushall. "The current
spate of swimming records is fair and valid."
(NewScientist 23 August 2008, p 13)

Read the sentences below. Some of the sentences are correct and some have a word that should not be there. If a sentence is correct, put a tick  $(\checkmark)$  in the space. If a sentence contains a word that should not be there, write the word in the space. There are two examples at the beginning (0 and 00).

0	As a child I used to spend a lot of time at the pool.	0✓					
00	His first a few days at the health camp were very exciting.						
1.	You really look tired. Have you been exercising in the gym?	1					
2.	This acclaimed sportsman was sentenced to the five years in prison.	2					
3.	Nobody's got to train late all this week, do not they?	3					
4.	The team succeeded by owing to their professional attitude.	4					
5.	They were on the point of winning the game, when Tom injured himself.	5					
6.	Guess who turned herself up at the festive tournament gala!	6					
7.	We were all robbed out of our luggage at the airport.	7					
8.	There is no one to be blamed for the defeat but yourself!	8					
9.	Suddenly I felt the canoe to sink underneath my weight.	9					
10.	Does she go in for downhill skiing as a hobby?	10					

### *Task 27*

Read the text below and think of the word that best fits each space. Use only ONE word in each space. There is an example at the beginning (0).

### **ATHLETIC MINDS**

The bodies of athletes are clearly special – the result of good genes and lots of hard graft – but
(0) what about their brains? Is there any grey-matter advantage (1)
helps the likes of Usain Bolt and Michael Phelps to outperform their rivals?
Many sports require specific patterns of stereotypical body movements, and these certainly
leave their mark (2) the brain. In the somatosensory cortex, which monitors
signals from (3) parts of the body, and the neighbouring motor cortex, which
controls movements, areas corresponding to the most regularly used body parts expand with
use.
Good hand-eye coordination can also be traced to a (4) part of the brain.
Tests in the lab using prisms that alter hand-eye relationships by shifting images to the right
or left or turning them (5) down, reveal that some people adapt more quickly
than (6)
activity in a region (7) PEG in the parietal cortex – which contains maps
of space and of our bodies – on the opposite side to the movement.
Some people may also have brains that allow them to (8) on going when
lesser competitors give (9)
sporting activity seems to be generated (10) in the muscles but in the

brain, through a signalling molecule called interleukin-6. Perhaps this signal is naturally weaker or easier (11) ...... ignore in some brains. If (12) ....., this might be why some athletes can push their bodies beyond the limits that most people are able to endure.

(NewScientist 4 October 2008, p 32)

### **II LISTENING**

#### *Task 28*

Watch an interview and for sentences 1-8 choose the best alternative A, B or C. There is an example at the beginning (0).

### http://www.youtube.com/watch?v=sMdrlztBPJs&feature=channel&list=UL

- 0. A world class British sprinter Dwain Chambers, decided to take illegal steroids because he was
- **A** forced into it by his trainer
- **B** lacking in experience
- C participating in an experiment
- 1. He made the decision to take drugs
  - after his long recovery from an injury
  - В at the beginning of his sprinting career
  - C when he was an experienced sprinter
- 2. The first contact with Victor, the coach who supplied steroids, happened
  - A after a competition
  - В in a training camp
  - $\mathbf{C}$ in a training centre
- 3. At the time Dwain was the
  - first sprinter in the world
  - В third sprinter in the world
  - $\mathbf{C}$ fifth sprinter in the world
- 4. Dwain trusted Victor because Victor
  - got on well with Dwain's real father Α
  - В had a good relationship with Dwain
  - was friendly with Dwain's stepfather  $\mathbf{C}$
- 5. Dwain was afraid that if he decided to quit taking steroids



- he would lose his speed on the track A
- he would not make the national team В
- C his career would definitely be over
- 6. The steroids Dwain took were in the form of
  - injections
  - В a liquid
  - C tablets
- 7. Dwain regrets
  - being fooled A
  - В getting caught
  - C taking drugs
- 8. Dwain's mission now is to
  - clear his tarnished name and stay clean
  - improve athletes' knowledge about steroids В
  - C prevent others from taking illegal drugs

### **SECTION 5**

### **READING**

Read the following text and complete the tasks below.

### BRITAIN MEETS THE BLUE BADGE GUIDE

There are some 1,700 guides in Britain introducing visitors to Britain's history and culture while guiding them around its vast (1) offering of tourist attractions and destinations. Sian Ellis talks to Tony Randall about what it takes to be a Blue Badge Guide.

"My job is as satisfying and enjoyable as any other job in the world," Tony Randall says. "I'm an ambassador for my country, meeting lots of different people and showing them around wonderful places."

The 61-year-old Londoner has worked as a freelance (2) Blue Badge Guide – the highest guiding qualification in Britain – since 1971. A 'typical' day would see him leaving his Buckinghamshire home at 5.45am, heading to the capital to meet a group of visitors for the day, and returning at 8.30pm.

"You need stamina (3)," he says. "And to be able to communicate with all sorts of people – I can say 'sorry' in 16 languages!"

One of Tony's contacts is a leading London sightseeing company Golden Tours, with whom he takes visitors to explore some of his favourite heritage (4) places in Britain.

"I love going to Leeds Castle because it's in the middle of the Kent countryside and probably England's prettiest castle, plus the hospitality (5) there is great. Stratford-upon-Avon, of course, has its Shakespeare connections and it's also a lovely town with its little cafés.

"Our most popular tour is to Bath, Stonehenge and Windsor, a tremendous (6) package of famous sights. It's a lot to cover in a day - 300 miles round trip - but you're in a luxury coach (7) and travelling through beautiful countryside. As a guide, you learn to show the maximum in the minimum amount of time without rushing people.

"The most popular walking tour is Jack the Ripper's London," he adds. "People just love the gory (8) details!"

Training to become a Blue Badge Guide, under the auspices (9) of the Institute of Tourist Guiding, is stringent (10) and can take nearly two years. Students, of all ages and backgrounds, must master the details of Britain's national history and culture as well as indepth (11) local knowledge.

"I first went into guiding to earn some extra cash," Tony admits. "I worked as a bank clerk and took visitors on tours at weekends. I got hooked (12) on it. In 1983, I became a guide full time and it was quite simply the best decision of my life.

I would say that 25 per cent of my work is knowledge and 75 per cent is coordination and communication. You have to be prepared for anything, whether travel delays or being asked tricky questions. I always find answers even if I don't know at the time – I once sent a reply

on a postcard to someone two weeks after they had returned home. It's all part of caring for people.

I also lost my voice once and had to scribble (13) notes and pass them to the coach driver! After that, I went to a speech therapist who gave me useful tips on how to protect my voice better."

Working as a Blue Badge Guide can be seasonal, with quieter winter months providing time to brush up on knowledge – his specialisms include sport and religion as well as history. He also plans to write a book featuring some of his funnier moments.

"I have been asked what number on London's Oxford Street was Oxford University. Another visitor asked me why the Normans had been so crazy as to build Windsor Castle close to an airport. And I've had to explain during lunch that horseradish sauce doesn't contain any horse. There's a lot of humour as well as hard work in my job."

(Britain, December 2009/January 2010, p 98)

Task 29 Decide whether the following statements are True (T), False (F) or No Information (NI). There is an example at the beginning (0).

0	1	2	3	4	5	6	7	8	9	10
NI										

- **0.** All the 1,700 guides in Britain are Blue Badge Guides.
- 1. Besides being a Blue Badge Guide, Tony Randall is also an official ambassador of the UK.
- 2. Tony Randall lives in the capital of England.
- 3. Tony Randall can speak 16 foreign languages sufficiently well.
- **4.** Golden Tours is one of the most prestigious sightseeing companies in London.
- **5.** Windsor is situated 300 miles from London.
- **6.** The walking tour *Jack the Ripper's London* is so popular due to the horrors of his crimes.
- 7. The training of Blue Badge Guides is held in the Institute of Tourist Guiding.
- 8. Tony Randall has required professional help from a specialist to manage better with his job.
- 9. Tony Randall has more work in summer than in winter.
- 10. Tony Randall has collected the funniest moments of his career as a guide into a book.

11 of the 13 words in bold type in the text correspond to the 11 definitions below. There is an example at the beginning (0). Match the remaining definitions with the corresponding words in bold type in the text.

0	1	2	3	4	5	6	7	8	9	10
11										

- 0. done carefully and in great detail, or discovering the real reasons which cause something (adjective)
- 1. features belonging to the culture of a particular society, such as traditions, languages or buildings, which still exist from the past and which have a historical importance (noun)
- 2. devoted to or absorbed in something so much that you are unable to stop having it, watching it or doing it, etc. (adjective)
- 3. doing particular pieces of work for different organizations, rather than working all the time for a single organization (adjective)
- 4. with the protection or support of someone or something, especially an organization (noun)
- **5.** to write or draw something quickly or carelessly (*verb*)
- **6.** involving violence and blood (*adjective*)
- 7. when people are friendly and welcoming to guests and visitors (noun)
- **8.** a very great extent, size or quantity (adjective)

2. The storm began when they boarded the cruise ship.

- **9.** a long-distance bus (*noun*)
- **10.** very great in amount or level (*adjective*)

### LANGUAGE STRUCTURES

#### Task 31

Fill in the missing part of the sentence using the word given. Do not change the word. Use two to five words. There is an example at the beginning (0)

They haven't had basketball practice since August.	
Thelast time they had basketball practice was in August.	(time)
I have never visited the United Kingdom before.	
l.	They haven't had basketball practice since August.  Thelast time they had basketball practice was in August.  I have never visited the United Kingdom before.

Kingdom. (time)

The storm		they	boarded	the
cruise ship.	(out)			

3.	Outside the Tourist Information Centre a stranger approached him.
	Outside the Tourist Information Centre
	a stranger. (he)
4.	The coach was too small to carry the whole group of tourists.
	The coach was carry the
	whole group of tourists. (enough)
5.	They are leaving tonight, so they ought to pack their suitcases soon.
	They are leaving tonight, so
	their suitcases soon. (better)
6.	"Yes, I booked a trip to Italy," Harry said.
	Harry to
	Italy. (booking)
7.	Would you mind if I asked this question later?
	Would you object this
	question later. (to)
8.	They will ask to see his ID document at the border.
	He will his ID document at
	the border. ( <b>requested</b> )
9.	Victor lost his passport and also missed his flight.
	Victor
	his flight. (only)
10.	We thought the man was a famous golfer and asked for his autograph.
	We
	asked for his autograph. (mistook)

Read the text below and using the word given in **bold** type, form a word that fits into the space. There is an example at the beginning (0).

### MAYAN TEMPLES REVEAL SORRY TALE OF A CIVILISATION WRUNG DRY

The builders of the ancient Mayan temples at Tikal in Guatemala switched to inferior wood a few decades before they (0) ... suddenly ... (sudden) abandoned the city in the  $9^{th}$  century AD. The shift is the (1) ...... (strong) evidence yet that Mayan civilisation collapsed because they ran out of resources, rather than, say, disease or warfare.

(2)	all six major les, built before
But after that date, large sapodilla logs were almost entirely replaced in temp	ost ( <b>7</b> ) vs Lentz, who
Earlier studies of pollen deposits have suggested that (9)	se. But the
Task 33 Read the sentences below. Some of the sentences are correct and some has should not be there. If a sentence is correct, put a tick $(\checkmark)$ in the space. It contains a word that should not be there, write the word in the space. The examples at the beginning $(0 \text{ and } 00)$ .	If a sentence
<b>0</b> As a child I used to spend a lot of time at the pool.	0✓
<b>00</b> His first a few days at the health camp were very exciting.	00 a
<ol> <li>The weather invariably changes for the worse whenever we go travell</li> <li>The engine of the rented car didn't stand itself up to the heat.</li> <li>She is been considered to be the best guide in the company.</li> <li>He said he has booked tickets on Flight HG304.</li> <li>They shouldn't have being eaten so much Asian food yesterday.</li> </ol>	2
<ul><li>6. We have run up against a slight problem with our accommodation.</li><li>7. You should take out travel insurance before going to abroad.</li></ul>	6 7
8. Fiona was made to open her suitcase for closer inspection.	8

9. The hotel guests appreciate your trying to help them with their luggage. 9 ............

10. Let's meet at the Brown's Restaurant at 7pm.

10 .....

#### *Task 34*

Read the text below and think of the word that best fits each space. Use only ONE word in each space. There is an example at the beginning (0).

## <u>PLANNING A TRIP?</u>

by Jasmine Birtles

With your holiday booked, all that's left is to (0) ... make ... sure you've got everything sorted before you leave. Here are the essentials:

# **Travel insurance** Don't just accept the insurance offered (1) ...... your tour operator. You can get much better rates by using comparison sites. If you travel at least twice a year you should opt (2) ...... a low-cost annual multi-trip policy rather than a single-trip policy. Go to readersdigest.co.uk/magazine for travel-insurance comparisons that will help Remember, though, that with travel insurance, the cheapest isn't always the best. Check the conditions and the excess level to make sure (4) ...... offers the right coverage

for your specific needs, whether it's winter sports or automatic cover for your kids. If you'll be in Europe, get a European Health Insurance card – it gives you the same level of state medical care as (5) ...... citizen in the EU countries, as well as Norway, Iceland, Liechtenstein and Switzerland.

## **Getting to the airport**

The (6) ...... of thumb when going to any UK airport is that the obvious option isn't always the cheapest, so shop around to get the best fares. If you're using a taxi to get to and from the airport, book (7) ...... advance and agree a price rather than paying more at the airport, where taxis are very expensive.

If you're driving to the airport yourself, you could pay up to four times more than you need to if you park in the airport car (8) ...... without prearrangement. Book online for good deals at places such as aph.com and holidayextras.co.uk.

### **Cancel deliveries**

If you have your milk or newspapers delivered to (9) ...... home, make sure you cancel them before you go away; otherwise it's money wasted. It's (10) ...... an invitation to burglars.

### **Photocopy your documents**

Copy your passport, driver's licence and credit cards in case of theft. Take a copy with you (stored separately from the original) and leave one at home (11) ....... a friend or relative.

#### Get a prepaid card

These are ideal for holiday spending. They have no credit facility so you can't lose hundreds of pounds (12) ...... you might if someone stole your credit card. They can also help you to stick to a budget – only preload the card with the amount you want to spend. (Reader's Digest, April 2012, p 122)

# **III LISTENING**

## *Task 35.*

Watch the video and complete the sentences below, using the exact words (2-5) you hear. There is an example at the beginning (0).

# http://www.youtube.com/watch?v=M2Cqo1Aksv4&feature=related

0	I should like to focus attention on the biggest single opportunity we
	have to combat the problem.

1.	I wonder how many of you are fully aware of the benefits, to all of us, if we
	deforestation all together.
2.	Let's just for a minute.
3.	Rain from the forests of the Congo
4.	100 years ago 35% of Ethiopia was covered in trees, but the
5.	And yet the destruction goes on at
6.	You might think that for all these reasons the
	treated with respect.
7.	The problem is that the true value of forests to the world
	and not paid for.
8.	The immediate priority, I believe, is the need to develop a
	, which will give a true value to carbon.
9.	None of this is going to be easy, but surely it should be the
	nations.
10.	Climate change means that their survival and ours is now
	than ever before

# **ANSWER KEY:**

# Task 1.

- 1. F
- 2. NI
- 3. T
- 4. F
- 5. T
- 6. NI
- 7. F
- 8. T
- 9. NI
- 10. T

## Task 2.

- 1. 12
- 2. 6
- 3. 1
- 4. 10
- 5. 4
- 6. 13
- 7. 8
- 8. 11
- 9. 7
- 10.9

### Task 3.

- 1. Gave up high-school
- 2. Don't/do not approve of her
- 3. Would like to know
- 4. Is (also) included in
- 5. Ought to have had/done
- 6. Didn't/did not succeed in losing
- 7. Doesn't/does not remember meeting
- 8. To know if she/he had
- 9. Wouldn't have had to
- 10. Such a long way from/such a distance from

### Task 4.

- 1. Greek
- 2. Psychiatrist



- 3. Poorest
- 4. Growth
- 5. Reaction
- 6. Strength
- 7. Gymnasts
- 8. Beneficial
- 9. Impressive
- 10. Deficiency
- 11. Randomised/randomized
- 12. Ideally
- 13. Lower

# Task 5.

- 1. The
- 2. Being
- 3. V
- 4. Had
- 5. V
- 6. To
- 7. V
- 8. Not
- 9. Of
- 10. V

## Task 6.

- 1. Whose
- 2. His/the
- 3. Was
- 4. Between
- 5. As
- 6. That
- 7. Up
- 8. Make
- 9. To
- 10. Include
- 11. Its
- 12. For
- 13. Researchers
- 14. Didn't
- 15. Be
- 16. Rather



#### Task 7.

- 1. Aren't aware how many
- 2. Long Island Ice Tea
- 3. Better option
- 4. Festive mood
- 5. Sort of calm yourself
- 6. Focus on (the) less calorific
- 7. Being (a) good guest
- 8. That crosses your plate
- 9. Diluting (the) drinks
- 10. Has significantly fewer
- 11. Some water in between
- 12. Cup of coffee
- 13. Make sure somebody else

## Task 8.

- 1. D
- 2. G
- 3. A
- 4. F
- 5. C

### Task 9.

- 1. 8
- 2. 5
- 3. 12
- 4. 10
- 5. 1
- 6. 6
- 7. 13
- 8. 9
- 9. 7
- 10.3

### Task 10.

- 1. Are performed on athletes by
- 2. What the length of
- 3. Is expected to accept
- 4. Hand the food coupons out
- 5. To come to (an) agreement
- 6. Takes after his
- 7. Too fast/quickly for (the) others

- 8. Not advisable to buy/advisable not to buy
- 9. Not worth me doing
- 10. Had to get rid of

## <u>Task 11</u>.

- 1. Tenacious
- 2. Resilient
- 3. Environmental
- 4. Commitment
- 5. Ability
- 6. Analysis (sing.)/analyses (plur.)
- 7. Strongly
- 8. Anxious
- 9. Worriers
- 10. Thoughts

### Task 12.

- 1. V
- 2. Being
- 3. V
- 4. To
- 5. A
- 6. In
- 7. Had
- 8. Not
- 9. V
- 10. V

## <u>Task 13</u>.

- 1. Been
- 2. Where
- 3. As
- 4. Soon
- 5. Able
- 6. Such
- 7. Be
- 8. What
- 9. Every/each
- 10. Course
- 11. To
- 12. Athletes/sportsmen/sportswomen/sportspeople
- 13. Training/exercise/practice
- 14. Everyone/everybody

## <u>Task 14</u>.

- 1. B
- 2. C
- 3. C
- 4. B
- 5. C
- 6. A
- 7. B
- 8. C

## <u>Task 15.</u>

- 1. NI
- 2. T
- 3. F
- 4. NI
- 5. T
- 6. T
- 7. F
- 8. NI
- 9. T
- 10. NI

## Task 16.

- 1. 3
- 2. 9
- 3. 1
- 4. 8
- 5. 5
- 6. 13
- 7. 6
- 8. 2
- 9. 4

# 10.11

<u>Task 17.</u>

- 1. He is capable of passing
- 2. (very) talented at drawing
- 3. To cut down on
- 4. Gets along with
- 5. Is necessary for him to
- 6. Only she had attended
- 7. Got me down

- 8. Will not be included
- 9. Had not liked
- 10. Must have been

## <u>Task 18.</u>

- 1. Various
- 2. Molecular
- 3. Directly
- 4. Specifically
- 5. Clearer
- 6. Volunteers
- 7. Location
- 8. Using
- 9. Normally
- 10. Appearance
- 11. Directions
- 12. Impermeable
- 13. Fatty
- 14. Seemingly
- 15. Realistic

### Task 19.

- 1. To
- 2. Had
- 3. Will
- 4. V
- 5. V
- 6. In
- 7. V
- 8. The
- 9. So
- 10. V

## <u>Task 20.</u>

- 1. To
- 2. Play
- 3. Breathe/inhale
- 4. Its
- 5. In
- 6. It
- 7. Which
- 8. There
- 9. Because/as/since

- 10. Moves
- 11. Is
- 12. Why
- 13. Same
- 14. Get/go

### Task 21.

- 1. Inside (the) human mind
- 2. By white blood-cells
- 3. Anatomy of Peter's brain
- 4. Months of analysis
- 5. Pattern in his own
- 6. Fourth alternative that
- 7. Pull your hand away
- 8. Can select (the) areas
- 9. In real time
- 10. Aspects that make you yourself

## <u>Task 22.</u>

- 1. H
- 2. C
- 3. F
- 4. A
- 5. G
- 6. E 7. D

## <u>Task 23.</u>

- 1. 5
- 2. 10
- 3. 7
- 4. 13
- 5. 4
- 6. 1
- 7. 12
- 8. 2
- 9. 3
- 10.8

## <u>Task 24.</u>

- 1. If she had known
- 2. Was postponed (by the umpire)
- 3. Make a fortune

- 4. Watch out for
- 5. Regretted not buying
- 6. Had been given
- 7. Lost our temper
- 8. Neither of the tournaments was
- 9. Under no circumstances
- 10. Can't work it out

## <u>Task 25.</u>

- 1. Wiping
- 2. Eighth
- 3. Difference
- 4. Nutritional
- 5. Depth
- 6. Movement
- 7. Responsible
- 8. Additional
- 9. Reflection(s)
- 10. Validity

### Task 26.

- 1. V
- 2. The
- 3. Not
- 4. By
- 5. V
- 6. Herself
- 7. Out
- 8. V
- 9. To
- 10. V

## Task 27.

- 1. That
- 2. On
- 3. Different/various/other
- 4. Specific/particular/special
- 5. Upside
- 6. Others
- 7. Called/named
- 8. Keep
- 9. Up/in
- 10. Not

- 11. To
- 12. So

## <u>Task 28.</u>

- 1. C
- 2. B
- 3. C
- 4. B
- 5. A
- 6. B
- 7. C
- 8. C

## Task 29.

- 1. F
- 2. F
- 3. NI
- 4. T
- 5. F
- 6. T
- 7. NI
- 8. T
- 9. T
- 10. F

## <u>Task 30.</u>

- 1. 4
- 2. 12
- 3. 2
- 4. 9
- 5. 13
- 6. 8
- 7. 5
- 8. 1
- 9. 7
- 10.6

## <u>Task 31.</u>

- 1. Is the first time
- 2. Broke out when
- 3. He was approached by
- 4. Not big enough to
- 5. They had better pack

- 6. Admitted booking a trip
- 7. To my asking
- 8. Be requested to show
- 9. Not only lost
- 10. Mistook the man for

## Task 32.

- 1. Strongest
- 2. Researchers
- 3. Wooden
- 4. Particularly
- 5. Ceremonial
- 6. Construction
- 7. Impossible
- 8. Suitable
- 9. Deforestation
- 10. Ecological

## <u>Task 33.</u>

- 1. V
- 2. Itself
- 3. Been
- 4. Has
- 5. Being
- 6. V
- 7. To
- 8. V
- 9. V
- 10. The

## Task 34.

- 1. By
- 2. For
- 3. Price/offer/bargain/fare
- 4. It
- 5. Any
- 6. Rule
- 7. In
- 8. Park
- 9. The/your
- 10. Also
- 11. With
- 12. As

## <u>Task 35.</u>

- 1. could curb or stop
- 2. look at the facts
- 3. waters half of Africa
- 4. figure today is barely
- 5. a truly terrifying pace
- 6. world's forests would be
- 7. community is not understood
- 8. new credit market
- 9. ethical duty of wealthy
- 10. more closely linked

# **SOURCES CONSULTED:**

Artistic anatomy (2012) NewScientist, 5 May 2012, p 43

Athletic minds (2008) NewScientist, 4 October 2008, p 32

Birtles, J. (2012) Planning a trip, Reader's Digest, April 2012, p 122

Britain meets the Blue Badge guide (2009/2010) Britain, December 2009/January 2010, p 98

Burne, J. (2012) Sunshine superstar, Reader's Digest, April 2012, p 94–96

Cross-country runners (2012) Reader's Digest, April 2012, p 147–148

Griggs, J. (2009) Soccerbots acquire the art of a graceful fall. NewScientist, 16 May 2012, p 20–21

http://www.howdini.com/howdini-video-6660656.html (1.08.2012)

http://www.ted.com/talks/christopher\_decharms\_scans\_the\_brain\_in\_real\_time.html (30.07.2012)

http://www.youtube.com/watch?v=M2Cqo1Aksv4&feature=related (26. 07. 2012)

http://www.youtube.com/watch?v=sMdrlztBPJs&feature=channel&list=UL (27.07.2012)

http://www.youtube.com/watch?v=uENQqJVVFh0 (31.07.2012)

If you've got that precious mettle, thank your parents (2008) NewScientist, 1 November 2008, p 16

Know your organs: pharynx (2011) Reader's Digest, October 2011, p 113

Mayan temples reveal sorry tale of civilization wrung dry (2009) NewScientist, 30 May 2009, p 12

Olympic gold in mind (2011) NewScientist, 24/31 December 2011, p 26

Swarup, A. (2008) Fast waters run deep for Olympic swimmers. NewScientist, 23 August 2008, p 13

The diet doctor: the "neat" way to lose weight (2011). Reader's Digest, October 2011, p 116

Thomas, H. (2012) Strange fat keeps skin waterproof. New Scientist, 5 May 2012, p 10

Young, E. (2011) You may scoff... New Scientist, 24/31 December 2011, p 62-64

