

James Baho - Noémi Baho

ECL English Practice Tests for Level C1

Felkészít tesztkönyv az angol fels fokú ECL nyelvvizsgára



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Ezúton szeretnénk megköszönni a segítséget Dr. Háry Lászlónak és Dr. Huszti Juditnak, a Pécsi Tudományegyetem munkatársainak.

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Dear Reader,

We set out to write this book to help those students of English with the courage to try the advanced level ECL language exam. It is important to know, that not many learners reach such level of knowledge, so please, take our compliments for getting to this point. The rest is easy.

This book aims to help you in this respectable endeavour. After careful examination of the possible types of exercises you might find in a real-life exam situation, we wrote ten sets of reading, writing and listening tasks with an example of how to do the exercise type with every one of them. We gathered diverse and interesting topics hoping to make your practice work not only a task to accomplish, but also a fun reading and some knowledge to gain. The CD attached to this book contains programmes recorded with native speakers of English presenting you with a diverse taste of real-life English and providing a variety of accents you would probably hear, either at the exam situation or in everyday life.

There are some general points to always keep in mind when doing any kind of exercise:

- Read the items or questions in the exercise before you start reading the texts or listening to the recordings. This makes it possible for you to prepare your brain to concentrate on certain bits of information and filter them out more successfully.
- Pay attention to slight grammatical differences between the text and the questions as those might change the meaning of the item and make you choose the wrong answer.
- Always base your answers on the text you read or the recording you hear and not your background knowledge, as all the questions are designed to be answered without any previous knowledge and what you already know might mislead you. Some of the texts might seem to be too scientific and by this, a bit scary, but all the correct answers can be found relying only on text so please, do not feel intimidated by an unknown word, rather try to find it out from the context.
- Not everybody writes like Shakespeare, but even the writing tasks can be significantly improved if you follow certain simple points. Read the task and take a moment to think about what you can write about for each point. There are always four instruction points in every writing task, and there is a logical relationship amongst the points most of the times. This might help you to build up a logical structure and clear reasoning of your writing. Even if your ideas are not the most original, this structure can give a natural flow to your message which improves the final outcome of your work.

We hope that this book will be useful and entertaining for not only those with a language exam in mind, but also for those people who would like to keep their existing level of knowledge and read something interesting.

Whatever your goal is, we would like to wish you good luck and a really fun time with this book.

As a last word, our appreciation and thanks go towards Eszter Papp for helping with the corrections and the finishing touches. Without her help, we could not have finished this book.

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James and Noémi

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Az ECL nyelvvizsga részei

Szóbeli vizsga

1. Szóbeli kommunikáció

A jelölteket kettesével (páratlan számú vizsgázó esetén hármasával) vizsgáztatják. A szóbeli vizsgarész körülbelül 20 percet vesz igénybe.

Bemutatkozás (körülbelül 3-5 perc)

E résznek az a funkciója, hogy a vizsgázók feloldódjanak, ráhangolódjanak a vizsga-szituációra, ill. hogy a kérdez információkat szerezzen a vizsga további lefolytatásához. A vizsgának ezt a részét nem értékelik.

Irányított beszélgetés (5-8 perc)

A vizsgáztató kezdeményezi a beszélgetést az általa kiválasztott téma alapján, és a vizsgázókhoz intézett kérdéseken túl szorgalmazza a két vizsgázó közötti beszélgetést. Az értékel feladata a vizsgázók nyelvi teljesítményének megítélése, pontozása.

Önálló témakifejtés vizuális stimulus alapján (5-8 perc)

A képanyagot a vizsgáztató adja. Szükség esetén kérdésekkel segíti a vizsgázókat.

A szóbeli kommunikáció értékelésének szempontjai és az elérhet pontszámok:

Nyelvhelyesség (alak- és mondattan)	0-5 pont
Szóbeliség (kiejtés és intonáció, a beszéd folyamatossága)	0-5 pont
Szókincs (terjedelme és használatának változatossága)	0-5 pont
Stílus (a beszédhelyzethez igazodó nyelvhasználat)	0-5 pont
Kommunikatív hatékonyság (a helyzetnek megfelel feladatmegoldás)	0-5 pont

2. Hallott szöveg értése

A vizsgázónak felvételr l elhangzó 2 szöveg kétszeri meghallgatása alapján a kapott feladatlapok helyes kitöltésével kell igazolnia, hogy képes megérteni a vizsgaszint követelményeinek megfelel nehézség beszélt nyelvi szövegeket.

Írásbeli vizsga

1. Írásbeli kommunikáció

A jelöltnek két (megadott szószámú) fogalmazást kell irányítási szempontok szerint írnia 90 perc alatt. Az értékelés szempontjai, ill. az elérhet pontszámok:

Nyelvhelyesség (alak- és mondattan)	0-5 pont
Írásbeliség (szövegtagolás és helyesírás)	0-5 pont
Szókincs (terjedelme és változatossága)	0-5 pont
Stílus (a fogalmazás m fajához és témájához igazodó nyelvhasználat)	0-5 pont
Kommunikatív hatékonyság (a helyzetnek megfelel feladatmegoldás)	0-5 pont

2. Olvasott szöveg értése

A vizsgázónak két (különféle típusú) szövegértési feladat helyes megoldásával kell igazolnia, hogy szótár nélkül képes a vizsgaszint követelményeinek megfelel nehézség általános szöveg tartalmát megérteni. Az olvasott szöveg értése feladatra 45 perc áll rendelkezésére a vizsgázónak.

A vizsga értékelése

Készségenként egységesen 25-25 pont szerezhet az ECL vizsgán, amely akkor eredményes, ha a jelölt mind a szóbeli, mind az írásbeli vizsgán készségenként legalább 40%-ot elér, összességében pedig eléri mindkét vizsgán külön-külön a megszerezhet pontszám legalább 60%-át.

A mért készségek és pontértékük

Szóbeli vizsga	Nyers pontok
Hallott szöveg megértése	25 pont
Szóbeli kommunikáció	25 pont
Írásbeli vizsga	
Írásbeli kommunikáció	25 pont
Olvasott szöveg megértése	25 pont
Elérhet maximum (2x50 pont):	100 pont

A készségekre kapott pontszámokat rendszerünk külön-külön százalékká alakítja át. Az írásbeli, valamint a szóbeli vizsga eredménye az adott vizsgát alkotó két készség százalékának átlaga.

ECL – Topic List Level C1

1. The individual

- ambition/career building
- the individual and the society
- problems of social integration

2. Partnership

- forms of partnership
- nationalities/minorities
- churches/non-governmental organizations

3. Family

- the social status of families
- the system of family allowances
- overpopulation/decrease of population
- family/career

4. Place of living

- housing situation
- difficulties of building a house
- homelessness and its causes
- housing and mobility
- settling down at home or abroad

5. Travelling/transport

- problems of city traffic
- public transport versus using cars
- transport and environmental protection
- tourism as a source of income
- alternative means of transport
- aspects of traffic development

6. Shopping/shops

- consumers' society
- buying on credit/with credit cards/on the Internet
- business network development
- shopping tourism

7. Communication/keeping in contact

- the Internet in business communication
- Fax, e-mail versus traditional letter writing
- less widely used languages vs. English national cultures

8. Services

- quality/guarantee of services
- quality
- complaints/compensation
- quality assurance
- role, significance of services
- electronic services/online ordering
- public utility services

9. Culture/entertainment

- role of arts in the past and present
- public collections and their maintenance
- mentorship/sponsorship
- antiquities/auctions
- historic sites

10. Time/weather

- natural catastrophes and their consequences
- hole in the ozone layer (its development, consequences)
- medical meteorology
- dangers of global warming

11. Health/illnesses

- science/research serving medical care/genetics
- instruments, new techniques and technology in healing
- incurable diseases/euthanasia
- alternative methods of healing
- health tourism

12. Sport

- first-class sports mass sports/ doping
- professionalism/amateurism in sport
- sport and women (chess, boxing, weightlifting)
- extreme sports
- sports and marketing

13. Media

- media empires
- public and commercial

TV/radio

- objectivity / impartiality of providing information
- Media and politics
- stars and celebrities

16. European Union

- common currency
- legal harmonisation
- the role of the EU in world politics
- competitiveness of the EU in the world economy
- Nation states and the EU
- EU institutions

17. Culture and civilisation *The home country and the target language country*

- economic/political/social characteristics
- fame/recognition in the world
- their relationship to each other
- difference in traditions/ customs /ideology

18. Public life

- constitutional form /legislation/administration/justice
- political parties/NGOs
- the purity of public life
- elections/referendum
- trade unions/ enforcing interests

19. Environmental protection

- prevention in environmental protection
- international co-operation in environmental protection
- environmental investments/their results
- environmental catastrophes and their consequences

20. Current topics/events

- public life/politics
- economy
- arts
- sport

21. Globalisation

- multinational companies
- uniformity (dressing, eating, culture, consumer products, etc.)
- globalisation/maintaining national characteristics
- English versus less widely used languages

22. Current questions of ethics

- genetic engineering / cloning
- genetically modified foods
- Cloning
- animal experiments
- nuclear experiments

23. Current questions on economy/society

- economic crime/corruption
- smuggling: goods/people
- illegal immigration and work
- smoking
- crime
- human rights issues

◆ ECL English Practice Tests ◆for Level C1



Part 1

READING COMPREHENSION PRACTICE TESTS

Read the text below about earthquakes in California region, than find the right answer from the four options of the multiple choice test. There is only one good answer.

California may be in danger of losing its major cities. Several along the coast were built upon a dangerous section of fault line known for ferocity and speed. Some faults can send earthquakes zooming along the ground faster than the speed of sound, scientists say—and California's San Andreas Fault may be one of them. Most earthquake faults "unzip" at around 3 kilometers a second. But evidence is growing that some faults can send quakes zooming much faster—up to 6 kilometers a second. "They are moving faster than the speed of sound, like a sonic boom," said Reah Kapur, a seismologist at Wentworth University in the U.K.

These hasty earthquakes cause much more damage on the ground and are more likely to topple buildings, snap bridges, and crinkle highways than regular upheavals. Now it turns out that the San Andreas Fault may be one of these earthquake "superhighways." It has taken Kapur nearly 30 years to prove their existence because superfast earthquakes are rare. But on February 12, 2006, a magnitude 7.6 earthquake struck the Khatota coastal region of Madagascar. That quake unzipped over 500 kilometers of fault, providing the long-awaited opportunity.

Kapur and her colleagues, by studying the seismic activity, have been able to map out the earthquake's trek. "The quake started slowly, but then accelerated to speeds of a super shear-wave speed, traveling for more than 100 kilometers at a speed of nearly 6 kilometers per second," Kapur said. Kapur and colleagues also realized that the fast section of the Madagascar fault happened to be very long and straight, like a true beam. "When a fault has curves and bends in it, then the earthquake slows," Kapur said. "But on a long straightaway, it can reach breakneck speeds."

Theories are now abound concerning the reason for the colossal damage caused by California's 1904 earthquake. "Directly beneath San Francisco is a long straight section," Kapur said. Efforts are underway to effectively utilize this information. "Much can be done to ensure buildings can cope with the higher frequencies of a faster wave," said Lacy Underawl, a seismologist at Nebraska State University, who wasn't involved in Kapur's work. "New buildings can be built on balls and located on bedrock rather than soft sediments," she added.

San Francisco isn't the only major city at risk. Further down the San Andreas Fault, another section of "freeway" exists underneath the Carrizo Plain down to the Baja Peninsula, Kapur and colleagues say. "As an earthquake moves along this section it is likely to send out shock waves in front, which may focus on cities like Modesto, Santa Cruz, and Los Angeles, some of the most densely populated parts of California," Kapur said.

In a presentation to the National Academy of Subterranean Associates, Kapur outlined the need to classify all the world's fissures according to their probable earthquake speed. She believes that communities can be better prepared if faults are better categorized.

Example:

California...

- A) is in danger of losing its cities.
- B) has already been badly damaged by earthquakes.
- C) is the most densly populated area.
- D) is located above the San Andreas fault.

The correct answer is D.

1. The major cities of California are in danger, because...

- a) the earthquakes are too frequent in the region.
- b) a number of them are located above faults.
- c) the faults are ferocious and zoom faster than sound.
- d) San Andreas is an active fault.

2) Faults...

- a) open up faster than the speed of sound.
- b) like San Andreas can send earthquakes at a
- 6 kilometer per second speed.
- c) can act like a sonic boom.
- d) provide no clear evidence that earthquakes can be as fast as sound.

3) Superfast earthquakes...

- a) in San Andreas cause more damage than other faults.
- b) are stronger than regular highway upheavals.
- c) are devastating because they are fast.
- d) can happen in California as it possibly lies along an earthquake superhighway.

4) The seismic activity...

- a) has to reach 7.6 to be a superfast earthquake.
- b) reached the 100 km per minute speed at the Khatota region.
- c) changed speed and became a superfast earthquake.
- d) studies helped Kapur predict where to expect the earthquake.

5) The Madagascar fault...

- a) proved the origins of superfast earthquakes, being straight and long.
- b) acted like a beam.
- c) would have slowed the earthquake without the curves and bends.
- d) proves that a long highway promotes breakneck speeds.

6) Theories...

- a) flourish about why the 1904 earthquake was so devastating.
- b) directly say that the 1904 earthquake was caused by the long straight section beneath San Franissco.
- c) of the 1904 earthquake got proved by the Madagascar earthquake.
- d) mostly focus on the colossal damage of the 1904 earthquake.

7) New buildings...

- a) are built on bedrock.
- b) will avoid soft sediment.
- c) can use new technologies.
- d) should cope with the higher frequencies.

8) Another risk area ...

- a) is south of Carrizo Plain, under the Baja Peninsula.
- b) is on the second section of freeway down to Carrizo Plain.
- c) exists under the densely populated California.
- d) runs along the Carrizo Plain ending at the Baja Peninsula.

9) Kapur's work is important, because...

- a) she drew a map of world's fissures.
- b) she emphasized the importance of fissure classification.
- c) she suggested that a set category would make it easier to deal with the preparations and aftermath of earthquakes.
- d) she proved that it is easier to prepare if faults are categorized.

10) The conclusion of the article is, that...

- a) new building technologies can prevent the disaster from happening.
- b) straight fissures promote devastating earthquakes and a number of big cities are in danger.
- c) the study proved that fast earthquakes do the most damage.
- d) knowing more about the nature of earthquakes makes it easier to minimize the loss

Read the following text. Some phrases or clauses are missing from the passage, you can find them under the text. Find the right ones and write your answers in the table. There are ten missing clauses, but there are two extras.

Female hyenas get around incestuous mating by, new research shows. The females use their dominant status in hyena society to spurn males in their clan, thereby avoiding the risk of inbreeding, the study suggests. This tactic has never been demonstrated before in mammals,, the scientists added.

The ten-year study was based on eight groups, or clans, of spotted hyenas living in Azimuth Crater, Congo. A team, led by Joachim Schmidt at the Wildlife Research Estate in Düsseldorf, Germany, ...2.. using field observations and DNA samples of more than 400 individuals.

The findings conclude that young female hyenas prefer mating with males that immigrate from other clans, or with younger males. Older females were also found to mate with immigrants, ...3... As a result of these preferences, 89 percent of young males left their clans to have sex elsewhere.

Schmidt said this pattern towards coupling is the result of females following an innate code that prevents these perverse, sexual encounters. "..4.. after the females were born. The older females also have an additional rule: They don't particularly like young, male upstarts that they are unfamiliar with," Schmidt said.

..5...] or other crippling disabilities. It's particularly important in the female's interests to avoid incestuous relationships, the team argues, because female spotted hyenas provide their offspring particularly lengthy care, lasting 15 to 18 months.

Males, on the other hand, are largely absent fathers. [..6..], and then abscond to forage and rest. "..7..," Schmidt said. "If males breed with a close relative, they lose little because they have so many other females to choose from." However, male hyenas must go along with the mating preferences of the socially dominant females, [..8..].

Kyle Laurent of Columbia University commented that the female mate choice rule proposed by the study team "is very simple and very plausible, and ...9..., but the level of male sex-biased dispersal in natural populations of other species is not yet clear."

Laurent added that the study "supports a hypothesis many of us have favored for many years—that ...10...."

Possible answers:

- A) investigated the migration patterns of male hyenas
- B) no young males are allowed to join the group
- C) whose bizarre genitalia make forced sex almost impossible
- D) the rule requires males to have entered the group
- E) after the mating is successfully accomplished
- F) females invest greatly in their young
- G) but may be widespread among other species that live in groups

H) encouraging male relatives to look elsewhere for sex

- I) males typically perform the sexual act
- J) so might apply to other social or nonsocial mammals as well
- K) female mate choice is all-important in this species
- L) favoring those that had courted them for several years
- M) inbred offsprings are vulnerable to disease

DO NOT MAKE CORRECTIONS IN THE BOXES. Any correction in the grid will be considered a mistake.

0	1	2	3	4	5	6	7	8	9	10
н										

Read the following text. Some words are missing from the passage, you can find them under the text. Find the right ones and write your answers in the table. There are ten missing words, but there are two extras listed. The first one is done as an example.

Natural disasters can sometimes be seen from far off. The most important thing to ..0.. about the ..1.. of New Orleans is that it wasn't a natural disaster: It was a man-made disaster. Katrina was not the ferocious killer the Big Easy had always feared; it was an impish ..2.. that ran past New Orleans, like a mean bus driver past a stop. The city's levees should have beaten back the ..3..; if they were successful, what never would have happened was the ..4.. of private business, the desperation on the rooftops, and the drowning of so many innocent elderly citizens. The Federal Emergency Management Agency (FEMA) was blamed, but the U.S. Army Corps of Engineers was the real ..5.., which sunk the levees that formed the city's man-made defenses and poured clay into the wetlands that once formed its natural defenses. Americans were aghast by the government's solution, but continued to pay taxes into a mismanaged system and were late to come to grips with the government's responsibility for the catastrophe.

Years after Katrina, the effort to protect coastal Louisiana from storms and restore its damaged wetlands has become the government's largest spending [..6.]. Many of the same [..7.] scientists and engineers who noted the vulnerability of New Orleans long before Katrina fear the Army Corps is taking the same mistaken steps again. "If you liked Katrina, they say, you'll love what's on the way," warns Baton Rouge College costal cartographic researcher Christopher Dona.

After Katrina, [..8..] of revelations implicated the Corps for building feeble [..9..] in bogs, and shoddy engineering were only a couple of ways the Corps betrayed New Orleans. But while FEMA director Franklin Pierce's resignation made front-page news, Corps commander Rutherford Hayes's resignation was barely reported in the national papers. By the time Hayes admitted his agency's debacle eight months after the disaster, the U.S. had moved on.

There will be plenty of talk about the future of New Orleans—how to rebuild; bring home the disenfranchised; and deal with crises like education, housing and crime. Nevertheless, recovery plans won't make a difference if homesick ..10.., insurers, and investors believe in the new levees. "Katrina wasn't even close to the really Big One," says Xavier University hurricane researcher Brooks Hawley, author of the Katrina memoir *Katrina: A hurricane as big as God*. "We better expect the unexpected and start getting ready fast."

Possible Answers:

- A) evacuees
- B) coastal
- C) insurance
- D) wrongdoer
- E) robbery
- F) expense
- G) levees
- H) dwarf

I) remember

- J) a succession
- K) falling
- L) soak-job
- M) flood

DO NOT MAKE CORRECTIONS IN THE BOXES. Any correction in the grid will be considered a mistake.

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

Read the following text. You find statements about the text below, decide whether they are true (T), false (F) or not in the text (N/A). The first one is done as an example.

There has been a renaissance of interest into probability theory and what forms it could take in modern society, recently. When the Royal Society, the world's oldest academy of the discipline, was founded in London in 1660, science was referred to as natural philosophy. In the 19th century, though, nature and philosophy went their separate ways as the natural philosophers grew in number, power and influence.

Nevertheless, the bond between the fields remains in the name of one of the Royal Society's journals, Philosophical Transactions. The Society refreshed a discussion to clarify the misunderstanding of the ideas of one particular 18th-century English philosopher, Thomas Bayes.

Bayes was one of two pellagrous influences on the early development of probability theory and statistics. The other was Blaise Pascal, a Frenchman. Yet, where Pascal's thoughts are transparent and easily grasped, Bayes's have always been elusive to all but the most studied.

Pascal developed his ideas similar to that of a craps game: each throw of the dice is removed totally from the previous one. Bayes's allows for the accumulation of experience, and its incorporation into a statistical model in the form of prior assumptions that can vary with circumstances. A previous assumption about tomorrow's weather, for example, is that it will be similar to today's. Assumptions about the weather the day after tomorrow, though, will be modified by what actually happens tomorrow.

Psychologically, people tend to be Bayesian—to the extent of often making false connections. And that risk of false connection is why scientists like Pascal's version of the world. It appears to be objective. But when models are built, it is almost impossible to avoid including Bayesian-style prior assumptions in them. By failing to acknowledge that, model builders risk making serious mistakes.

In one sense it is obvious that assumptions will affect outcomes—another reason Bayes is not properly acknowledged. That obviousness, though, buries deeper subtleties. In one of the papers in Philosophical Transactions David Donars of Brigham Young University points out a cogent example.

Climate models have lots of parameters that are illustrated by numbers, an example being, how quickly snow crystals fall from clouds, or for how long they stay inside those clouds. Actually, these are several ways of measuring the same thing, so whether a model uses one or the other should make no difference to its predictions. And, on a single run, it does not. But models are not given single runs; they are run thousands of times, with different values for the parameters, to produce a range of possible outcomes, since the future is uncertain. The results are presumed to aggregate around the most probable version of the future.

The particular range of values chosen for a parameter is an example of a Bayesian prior assumption, since it stems from actual experience of how the climate behaves—and may thus be modified in the light of experience. But the individual values used to plug into the model can cause trouble.

Models of climate have a plethora of parameters that might somehow be related in this sort of way. To be sure you are seeing valid results rather than artifacts of the models, you need to take account of all the ways that can happen.

(Based on Economist Magazine)

Reading Tests

		T	F	N/A
0	The topic of probability theory received publicity only lately.			X
1	The reason for philosophy and natural sciences to split was the growing number of natural philosophers.			
2	The name of the scientific magazine of Royal Society reflects the connections lost in the 19 th century between science and philosophy.			
3	Bayes had more effect on the early probability theories than Pascal.			
4	Pascal is more straightforward about his thoughts than Bayes.			
5	Pascal based his theory on a card game.			
6	Bayes calculated certain modifying variables into his theory.			
7	In reality, Pascal's model fails in lack of prior assumptions.			
8	Climate models must have a number of ways of measuring the very same thing to be able to predict the most probable outcome.			
9	The essential part of the Bayesian theory is a range of values depending solely on assumptions.			
10	It is impossible to properly set up the parameters as you have to account for all the possible ways it can happen.			

Read the following text. You find statements about the text below, decide whether they are true (T), false (F) or not in the text (N/A). The first one is done as an example.

The fundamentals of public transport, decries Michael Scherrer, an academic and entrepreneur, have not changed very much since the times of the stagecoach. The meandering course and frequent stops of public vehicles make the trip far slower than it would be in a private vehicle and the odious person sitting opposite makes it even less pleasant. But Dr Scherrer's firm, Innovative Conveyor Approaches, thinks it knows how to overcome all this—and give public transport its biggest overhaul in three centuries—using a concept known as rapid transit of personnel, or RTP.

RTP still involves collection points and stations using small, driverless pods, for one to four people, which would travel along narrow tracks. The stations would not lie on the main line, but on bypasses, allowing pods to proceed directly to their final destination without any stops. It is fantasy come to life: carefree passengers rocketing effortlessly around in glitzy capsules, without any concern for the current work-a-day worries.

Since the 1930s, visionaries have been touting RTP as the most efficient way to move people around diminutive cities and immense public spaces such as airports and fairgrounds. In 1962, Gerald Ford insisted that if American ingenuity could transport three men 200,000 miles to the moon, it could also find a better way to transport 200,000 men three miles to work. The answer, he believed, was RTP. To prove it, he pushed through the construction of a model system at the University of Miami. In the end, the work in Miami started to function. The construction cost, originally estimated at \$1m, ballooned to \$126m. Escalating costs and waning political support sank all the other projects.

Dr Scherrer cries that things have changed, part and parcel to strides in engineering and computing. Almost all the elements needed for a RTP scheme can be store bought, he declares, and all on a sensible budget, too. He predicts costs for Innovative Conveyor Approaches' RTP system, cleverly entitled First Wind, at just \$6m-10m per kilometer, which equals the cost of a bus line, because it will use pre-established infrastructure when possible.

The local politicians who have the final say on most proposals certainly seem to worry that RTP will not live up to its promise. The European Commission has studied four potential schemes, and concluded that hesitant local authorities are the only significant obstacle. As Dr Scherrer puts it, "No one ever got fired for proposing a bus system."

		T	F	N/A
0	The most unpleasant features of public transport are the high number of stops and disagreable fellow travelers.	X		
1	RTP is the only answer to these problems.			
2	There are no stops in the RTP system, only the pick up and drop off stations.			
3	The routes would not have fixed lines, passengers could request any kind of detour.			
4	No driver is needed, passengers request a drop off point.			
5	RTP was expected to be the least economical means of public transportation.			
6	The travel to the Moon gave the idea of RTP to Gerald Ford.			
7	RTP could be the most useful at airports and fairgrounds.			
8	The Miami model was the only attempt of constructing RTP, because of the costs.			
9	The selling point of First Wind is using existing infrastructure.			
10	Both local politicians and the EU agree that RTP might not live up to its promise.			

Read the following text. Some words are missing from the passage, you can find them under the text. Find the right ones and write your answers in the table. There are ten missing clauses, but there are two extras. The first one has been done as an example.

It is widely known that junk food is unhealthy. Many 0) ... parents avoid feeding it to their kids, and now there is one more reason why. Studies have found that the combination of additives in all sorts of food harm children, causing them to lose 1) ... quicker and making the learning process harder. This is what a team of researchers led by Stephen Jorgensen of the University of Alabama, found out, although, their findings suggest that the effect is highly 2) ...

In Tuscaloosa, Alabama, a previous study with three-year-olds was conducted. These children were asked to swallow drinks containing a blend of 3) ... and food colorings. The parents reported an increase of hyperactive behavior when the toddlers were administered a mixture of four food colorings and a preservative. But independent observers reached a 4) ... different conclusion.

The first drink was the same as in the first study, containing a mix of sunburst orange, carmiosine, tartrazine and quidtrac with the preservative butylated hydroxyanisole (BHA). To note, candy and cola manufacturers have changed their additives formula in recent years, mostly leaving out quidtrac, a violent red dye that had been associated to 5) ... of the brain and ulcers in a minority of subjects. Therefore, researchers also tested a second blend chosen to be more like what modern children from the area might consume on a daily basis. It contained sunburst orange, propionate, ethylenediamine tetra-acetic acid and quinoline yellow, plus butylated hydroxytoluene (BHT).

With the help of parents and teachers, the researchers could better assess the children's 6) ... to measure the effect of the beverages. The children were also watched by neutral observers within the school settings. A computerized test was administered to the older children, meant to measure attention span. Combining the results of these tests, an average score for each age group was formed.

The researchers concluded that children drinking the cocktail containing tartrazine from both age groups were less well-behaved than those who had been drinking the placebo. Similarly, the results for the second 7) ... were distinctly as clear. The behavior of the eight- and nine-year-olds was significantly degenerative, as well as that of the three-year-olds, finding them often prone to irritability and wild tempers compared with the children who had not received any 8) ...

A little confusion arose with some parents noticing changes when their children received both the additives and the placebo, but this is credited to the parents hyper-sensitivity to the situation and is measured as human error. Moreover the researchers noted that the overall result for the second cocktail, which substituted tartrazine with propionate, was 9) The work was published in the July 6th issue of the American Medical Journal.

Dr Jorgenson declares that great caution should be taken by parents. Simple changes will help their children by removing food additives from a child's diet. Children with the severest form, called "attention deficit hyperactivity disorder" or ADHD, create such a disruptive atmosphere around themselves that very little learning is possible. Estimations approximate that ADHD may affect some 3% of the world's population. 10) ... are credited with this condition by most medical experts, at least partially.

Possible answers:

- A) complicated
- B) inflammation
- C) ineffective
- D) preservatives
- E) subtler
- F) concentration
- G) behavior
- H) markedly
- I) concoction

J) health-conscious

- K) genetics
- L) additives
- M) obesity

DO NOT MAKE CORRECTIONS IN THE BOXES. Any correction in the grid will be considered a mistake.

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

Read the following text. Some phrases or clauses are missing from the passage, you can find them under the text. Find the right ones and write your answers in the table. There are ten missing phrases or clauses, but there are two extras.

In 1999, Miguel Sanchez, a retired Spanish civil engineer, 0) was struck with an idea. "It was the same pyramid-building stuff—old theories, but he wasn't satisfied as an engineer," says his son, Eduardo, a freelance architect.

1) by using computer-based 3-D modeling, and taking the Great Pyramid at Giza for his model, Eduardo was able to begin constructing his father's work. 2) and urged him to look deeper in the riddle that has bewildered humankind for ages: how exactly was the Great Pyramid built? 3) and he can finish the work.

Four thousand five-hundred years ago, The Great Pyramid rose on the heights of Giza plateau, near Cairo, to be home to the pharaoh Khufu. 4) it remains as the lone survivor of the "seven wonders" of the ancient world. Modern architects and engineers marvel at the precision, especially in light of the available resources. Without the benefit of wheels, pulleys and iron tools, 5) were cut and hauled into place by strictly human efforts.

These efforts have impressed mankind through all the ages. But the belief that slaves did the work has long been losing credibility. Researchers now believe the pyramids were huge public works projects where every household in the kingdom was expected to provide workers, food and supplies.

Sanchez consulted with Egyptologists 6) keeping construction faithful to methods of the past and accepted knowledge in the field. Several years into the project, Nova De La Punta, a Spanish software company that makes 3-D models for marine engines and home appliances, 7) in May at a press conference in Madrid, Sanchez revealed the results of his study, which has not yet been published in a scientific journal. 8) as he explained his view of how it was built.

As Sanchez sees it, things worked a little differently: To begin with, workers began by pulling the stones up a straight ramp and assemble the large stone blocks for the pyramid's base layers, by then, 9).... which took about twelve years. Next came the construction of the interior portion, King's Chamber. This has amazed engineers particularly too, due to the separate engineering obstacle. The ceiling relied on sturdy granite struts weighing up to 60 tons each.

10) and most disputed. Sanchez proposed that the builders reached the steep upper layers of the pyramid by means of spiraling internal ramps, or tunnels. Stone blocks from the external ramp, he believes, were cut smaller to fill the top spaces. "At the end you have no waste," he says. "That's why we never found any remains at the site."

Sanchez plans to prove his theory. He has arranged to test for the presence of tunnels using non-invasive technologies such as infrared photography, radar and sonar, which can detect gaps in solid structures by measuring density differences. Permission from Egyptian authorities should come within the next year or two.

Possible answers:

- A) the audience wore 3-D glasses to follow Sanchez through his rendition of the Great Pyramid
- B) questions gathered in his mind
- C) Eduardo Sanchez was determined to prove the validity of his father's idea
- D) the final stage is the most radical
- E) originally 481 feet high and spanning 13 acres

F) while watching a television documentary on the construction of Egypt's ancient pyramids

- G) workers often died of exhaustion
- H) the pyramid's 2.9 million dolomite blocks, weighing several tons
- I) for authentication of his 3-D models of the pyramid
- J) Sanchez thinks his father was onto something
- K) there is a fierce argument about this point
- L) became interested and offered support
- M) nearly two-thirds of the structure's total volume would be finished

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

Read the following text. You find statements about the text below, decide whether they are true (T), false (F) or not in the text (N/A). The first one is done as an example.

If you want a little extra light, you flick the light switch. But not John Pitt, an engineering student at Massachusetts Institute of Technology. For him, it is of a wholly different purpose. When he turns on his lamp, a sensor located on his desk begins receiving signals to download audio files digitally encoded within rapid flickers in the lamp's light. The music is then relayed through a pair of nearby speakers. This hints towards a future that replaces radio waves with light to send information. The concept, known as optical wireless transmission, or open-space optics (OSO), promises the benefits of better security and higher data-transfer rates than existing radio-based communications technologies, says Demetrius Jones, a leading engineer in the field and Mr. Pitt's research supervisor at MIT.

OSO is presently used in limited circumstances. For instance, to hook up local area networks of nearby offices without cables between them: the example, Roy Roger's Medical Institute in Fort Worth, Texas. Further plans to extend the idea into new areas have already begun. For example, in the home, OSO could be used together with interior lighting to provide extremely fast internet downloads. The safe side of this is light does not travel through walls, keeping curious neighbors from spying, or preventing them from using your connection, too.

From the first prototype, hundreds of megabits per second (Mbps) could be sent over these optical systems, but 10Mbps speed was the most popular, says Gabriel Brazzer of FreeReach. The basic attraction of this system continues to be convenience over speed, he says. Proponents of OSO point out its two best qualities: the speed of a fiber-optic link, and the convenience of a wireless link. Installation is simple: just set up a group of infra-red laser transceivers and then align them properly.

Other costs can be bypassed. With OSO, there is no need to apply for a radio-spectrum license or incurring the cost of digging up roads. Plus, OSO can also sidestep prohibitive planning restrictions. In areas where transmitters are forbidden on roofs, OSO transceivers placed indoors can just as easily send and receive data through closed windows. OSO is also secure: the only way to intercept the signal is physically to intercept the beam.

Telecoms operators have taken notice to the technology as an alternative to the microwaveradio links for remote-stations to the operators' core networks. OSO's main shortcoming is bad weather, as rain or fog can interrupt the signal and possibly bring down the entire local network. However, that meteorological interference can also interfere with microwave links. Given that OSO broadcasts over relatively short distances, it is a reliable technology, he says.

Poor weather is of little concern when using OSO indoors, of course. Instead, maintaining a line of sight can be a problem for a laptop that is being carried around within a home or office. Scientists looked up for inspiration. They have been working on a ceiling-based signaling system using a diffuse light source instead of a laser beam that tracks where a receiving device is, and then sends it a signal using several laser beams from a directional transmitter. A prototype was built that runs at 300 Mega bits per second, nearly six times faster than today's typical Wi-Fi links and reckons that speeds of up to 10 Giga bits per second are believable. That is not to say that Wi-Fi is obsolete. Instead, the two technologies may end up being used together: Wi-Fi as the uplink and OSO for the much faster downlink.

Reading Tests

		T	F	N/A
0	John Pitt listens to music by switching on the light.	X		
1	John created the lamp which is used as an adapter coding audio files.			
2	The quick blinks of the light are the transmitter of the signals decoded by the speakers.			
3	OSO is more versatile than the traditional radio-wave technology.			
4	At the moment, there are only private users of OSO due to its limited circumstances.			
5	Interior lighting is capable of providing extremely fast internet downloads.			
6	OSO is mainly attractive for its speed.			
7	OSO can also be a very cost effective solution over radio wave or wire connections.			
8	Bad weather prevents OSO from being used as an outdoor connection.			
9	The signaling system built in the roof can solve the problem of visibility of laser beams.			
10	Wi-Fi and OSO are the greatest competitor technologies of each other.			

Read the following text. Some phrases or clauses are missing from the passage, you can find them under the text. Find the right ones and write your answers in the table. There are ten missing clauses, but there are two extras. The first one is done as an example.

Jennifer Schmidt likes chocolate—especially white chocolate. If she were to pick only one chocolate for the rest of her life, 0) ... but if she were to get milk chocolate for a gift, she wouldn't give it back.

1) ... the truth of your character begins to emerge even further. From an assortment of chocolates, taking a piece one at a time you can easily begin to realize that you favor a single flavor. White chocolate, milk chocolate with almonds, or dark chocolate. Your eyes weave through the disorganized pieces, and pierce the complicated layers but all you see are your favorite selections at once. 2)... if you want to understand prejudice, don't look only at conscious thoughts and spoken words. Instead, penetrate to the ultimate superficial level and look at what people feel and do without realizing it.

That's where the action is in today's research on discrimination, and Schmidt, a 35-year-old social psychologist, is spearing the charge. Her work 3) ... where she utilizes computers to measure microsecond differences in reaction times, and functional magnetic resonance imaging (fMRI) to look at how the brain reacts to stimulus such as interracial encounters. These tools assist her with examining the raw data of how we treat people of different gender, age, religion, language, sexual orientation or even obesity. 4) ... to identify how the mind functions under abnormal circumstances and where the most brain activity occurs.

Schmidt's tests indicate that regardless of who you are, everyone has measurable, often unconscious preferences for some social groups over others. With the use of a computer-based procedure called the Associated Criteria Test, or ACT, 5) ... in how quickly people associate stereotypically "white" names, like "Chuck", with positive words like "heaven" versus how quickly they associate "black" names, like "Tamika", with the same words. Most white Americans, 6) ... are measurably faster to pair the white names with the positive words—and that holds true even for a measurable percentage of African-Americans.

7) ... often do not see how much extra work we do to prove ourselves otherwise. For example, Schmidt and her colleagues recently used an fMRI scanner to display the neural activity in Asian student volunteers as 8) Two brain regions showed unusually high levels of activity: the left mid-cortex and the pituitary gland, both of which are known to evaluate and judge shapes and can help to govern our own behavior—a process some psychologists call "executive function" and the rest of us might call "self-control."

In her office after class, between planning more experiments and planning how to fund the research, Schmidt makes it clear she is still determined. 9) ... to know and an activist's drive to change the world. "We talk in class about Rodney King and the L.A. riots, and my students sometimes say 'that was so long ago.' I tell them look, 10) ... at a mall in Cleveland. This isn't ancient history. And this short thread through history can still be tugged on and be brought into today."

Possible answers:

- A) in a variety pack
- B) it would be hard to tell
- C) in spite of their conscious beliefs
- D) the anecdote relates to what she tells her students
- E) peers into the human subconscious
- F) it would probably be white
- G) the miniscule differences can be measured
- H) studies the pre-determined outcome of prejudice
- I) they looked at photographs of African-American men
- J) she has the combustible energy mixture of a scientist's passion
- K) her highest aspiration is
- L) my mother couldn't try on clothes
- M) we are not aware of our own prejudices and

DO NOT MAKE CORRECTIONS IN THE BOXES. Any correction in the grid will be considered a mistake.

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

Read the text below, than find the right answer from the four options of the multiple choice test. There is only one good answer. The first one is done as an example.

Sometimes there is a common cause for apparently different illnesses. Take for instance various kinds of tumors, which are groupings of cells continuously separating. And lately, a spectacular medical theory has developed. It speculates how illnesses of the central nervous system—such as Lou Gehrig's disease, AIDS and rubella—use a similar process of reproduction. The theory replaces the idea of continuous re-creation with the idea that the body does not remove its own waste properly.

Normally, the cause of these diseases is mishandled plutons. What keeps the system busy, is the process of collecting the waste of healthy cells. Carrier cells pick up the waste as they travel through the blood stream and deposit it in waste depots. Healthy cells create plenty of junk that keep the system busy. The process includes compressing the waste by the means of folding. This can be a lengthy process and with so many steps, that an error is likely to occur. In such a case, the waste must be removed before it causes damage to any serious degree.

In a recent issue of the Pacific Rim Journal of Medicine, Al Chervik of Tokyo Medical School, who helped discover the proteasome 20 years ago, explained the process of the biological waste-disposal system when the brain is infected by a particularly nasty, communicable protein called a pluton. Plutons cause Kluziod-Johan disease (or "wasting disease" in deer) by reorganizing the structure of normal proteins in their own image. Dr Chervik proposes that small groups of plutons penetrate the waste-processing proteasome and cease the cellular garbage disposal. Waste material would remain in the brain and the accumulating toxins would kill the nerve cells.

Experimentations on how plutons disrupt nerve cells have revealed the transformation of the brain into a semi-hard substance. The astonishingly young Janice Laub of Ripon College, was successfully able to demonstrate this process by using a Petri dish of mouse nerve cells and an incandescent reading lamp. Her results clearly showed how the cells had been transformed to a waste acid.

The whole process began with Laub administering a deadly substance to the nerve cells with disease-causing plutons. This caused the cells to degrade quickly and create a loose inner core. The plutons passed though the cells skin, then gathered in bunches and liquidated the center. She then administered an antidote that isolated the accumulated plutons, but left the cell's essential components. The hypothesis was proven as the cell regained its faculties and was able to begin removing waste.

Living pelicans were used in a separate experiment, and similar results were proven. When the pelicans were infected with plutons, toxins collected in their brains. The toxin was connected to amino acids slated for disposal. However, once the plutons had entered the brain, the garbage managed to remain.

Laub's results support the hypothesis that brain cells are motivated by plutons to make long latent viruses come back. She further speculated that these viruses might even carry plutons to other nerve cells, spreading the infection and causing even greater damage to other parts of the brain. If that idea proves correct, plutons would provide many answers to tumor creation.

0) Tumors...

- A) might have common reasons.
- B) are cell clusters which never stop separating.
- C) have various different groups separating.
- D) have developed a spectacular new theory.

The correct answer is B.

1) The new theory...

- A) found the answer of illnesses of the central nervous system.
- B) discovered illnesses such as Lou Gehrig's disease, AIDS and rubella.
- C) describes how nervous system diseases might be similar.
- D) explains the reproduction of certain central nervous system.

2) The basis of the new theory is...

- A) the waste handling mechanisms of the cells.
- B) the continuous re-production of cells.
- C) called plutons.
- D) the importance of keeping the body busy.

3) The cells of the human body...

- A) are to keep the system busy with processing waste.
- B) are specialized for different tasks.
- C) tend to mishandle plutons.
- D) collect the waste that has accumulated.

4) Healthy cells...

- A) would normally keep the system busy with waste.
- B) do not create toxic excess.
- C) are cleaned by carrier cells.
- D) travel through the blood stream.

5) The cleaning process aims at...

- A) folding the waste.
- B) removing the carrier cells.
- C) keeping the system busy.
- D) handling plutons.

6) An error is likely to occur, because...

- A) the process takes a long time.
- B) the process is difficult.
- C) it is bound to happen.
- D) plutons cause damage before they are handled.

7) The plutons...

- A) are communicably toxic cells.
- B) would change the structure of proteins similar to theirs.
- C) were discovered 20 years ago but published only recently.
- D) would kill nerve cells.

8) Janice Laub...

- A) proved the transformation process of the brain.
- B) was the first to begin to administer plutons.
- C) found the transformation of a waste acid.
- D) studies at Ripon College.

9) How do the plutons work?

- A) They infect the brain cells with toxins.
- B) They stop the natural cleaning system of the cells.
- C) They penetrate through the cells' skin.
- D) They group and then isolate.

10) The next step of the hypothesis suggests that plutons...

- A) might activate viruses in the brain.
- B) are the carriers of viruses.
- C) are carried by viruses.
- D) spread the infecti

◆ ECL English Practice Tests 2 **◆** for Level B2



Part 2

WRITING COMPREHENSION PRACTICE TESTS

At the exam, you have 90 minutes to complete the writing task. Write a letter or essay of approximately 300 words on the given topic according to the instructions. Cover all the four points in the instruction, missing one would result in losing points. Pay special attention to the following:

- > Stick to the word limit, +/- 10%.
- Use correct spelling.
- Use correct grammar.
- Pay attention to proper and sophisticated word usage.
- > Build a logical structure of ideas.
- > Support every point with at least one idea, but preferably more (listing of ideas is not acceptable).
- 1. You are a correspondence writer of an English Magazine. You came to Hungary and were struck by the way the local culture is mixing with foreign influence. Write an essay of 300 words covering the following topics.
 - The striking experience of an overwhelming American influence all over Europe according to your earlier experiences and what you saw in Hungary.
 - The interesting mixture of local Hungarian culture with a certain culture that can be best characterized as "global" (give examples from cuisine, clothing, TV programmes, etc.)
 - Warn against the loss of unique cultural features and national identity.
 - Outline the possible reasons and bring ideas how to prevent the loss.
- 2. You live next to a park. One morning you see a sign stating that it will be turned into a shopping centre. Write a letter of protest against the planned construction supporting your protest with the following points.
 - The immediate effects of the loss of green space, which results in negative influence on local environment (air pollution, depressing concrete buildings, etc.)
 - The long term effects on the community (losing a place of social activity, sporting etc.)
 - The over abundance of shopping facilities in the area, no need to have a further one.
 - Possible steps you could take against the construction.
- 3. You have been a regular reader of a bi-weekly publication for six years. A recent article had strongly racist accords about the large number of gipsy children in a local elementary school. Write a complaint to the editor covering the following points.
 - Express your concerns about such a racist attitude in the 21st century Hungary against any minority group in the country.
 - Express your worries about the reasons why such an article can be written and even get published.
 - Admit that there are certain shortcomings of the situation and name some of them.
 - As an overall closure, defend the right of the children to equal education pointing at how this will help develop the drawback factors in the long run.

- 4. You are a social worker student and an activist of a movement aiming to implant the health conscious behaviour in your community. Write an article to the local health magazine with the following points:
 - Introduce yourself briefly and the organization you work for.
 - Give reasons based on first hand experiences that made you join this work (high percentage of your age group drinking, not doing sports, worn out middle age family members with poor state of health)
 - Point at the long term consequences of the non-health conscious behavioural patterns.
 - Bring positive examples when you succeeded helping people start a new lifestyle resulting in better quality of life.
- 5. You are watching a TV programme making fun of fat people and you happen to be overweight yourself. Write a letter of complaint to the TV company with the following points.
 - Express how deeply humiliating you found the programme and demand a correction or apology in the name of overweight people.
 - Express your worries about the false idols people are presented with by the media (TV shows, magazines, show business, etc.).
 - Emphasize the responsibility of the media in developing minority complex and other psychic distortions in not just overweight but normal people as well.
 - Give your ideas about a desirable way of treating the topic.
- 6. You are the director of a local school which was in a really difficult financial situation. You have received a considerable donation from a big company who volunteered to be a long-term sponsor of your institute. As a way to express your gratitude, you write a public letter to a local newspaper to make people know about what happened.
 - Describe your difficult situation with listing some reasons.
 - Sum up how you received help and how much it did for your school.
 - Outline possible ways of co-operation between schools and local companies based on your example.
 - Call out to the broader community to take part in this work.
- 7. You are a mother of a three-year old boy who suffered poisoning from the toxic paint on the plastic toy you gave him for his birthday. Write a letter of complaint to the manufacturer according to the following points:
 - Explain what happened.
 - Express your anger and disappointment about the event pointing at how many children might be involved.
 - Demand compensation for what your son had to go through.
 - Threaten the company with legal actions if there are no steps made to stop the manufacturing of the toy.

- 8. You have received your gas bill statement and find out that you have to pay 35.000 HUF extra for the overdue amount. Write a letter to the gas company about your problem according to the following points:
 - Complain about the extra amount you have to pay giving reasons why you can not pay it in one sum.
 - Mention that you asked for bigger monthly average bills but nothing happened.
 - Blame the high bill on the gas pipe that broke near your house.
 - Suggest some solution to the gas company.
- 9. You are the owner of two houses and would like to sell both so that you could buy another one and move to some other place. Write a letter to a real-estate agent company with the following:
 - Explain your situation offering your properties for sale.
 - Describe both houses and the area (they must be different!) highlighting the advantages.
 - Explain what you are looking for as a change.
 - Ask if the company can arrange a trade for your properties to the new house.
- 10. You went on a package tour with your husband to Egypt and your husband had a mild stroke while you were abroad. He recovered, but all your savings were spent on the hospital bill, although you had insurance. Write a letter to the insurance company.
 - Explain what happened.
 - Describe how unhelpful the insurance team was with you when you called for help.
 - Complain about the process of reclaiming your money from the insurance company (eg. slow processing of request, great amount of administration required, etc.)
 - Ask for compensation for the inconveniences you had to suffer out of the insurance company's fault.

◆ ECL English Practice Tests 2 ◆ for Level B2



Part 3
LISTENING COMPREHENSION

PRACTICE TESTS

Listening Tests

LISTENING 1

You are going to hear a radio programme on racism in executions. First, look at the phrases below, and, as you listen, complete them with a couple words to be whole sentences according to the text you hear. The first one has been done for you as an example.

0) Timothy Schuman from the California State University published a striking study about... racial

differences in death sentencing.
1) The phrase "colorblind justice" means
2)are more likely to be executed than
are more fixery to be executed than
or
3) The data of the total number of death penalty is misleading because
4) So far there was no study which
5) The reason why it's difficult to find proof of any change throughout time is
6) Certain factors, like will increase the punishment,
while other factors, like might make it lower.
7) In well publicized cases, prosecutors try their best to win, because
8) If appellate justices changed death penalty, they would risk
appendict Justices changes down pendicy, and the management of the second control of the
9) The researcher found that a stronger republican political presence meant
10) If the black population reaches 16%, it might be

LISTENING 2

You are going to hear a radio programme about the growing credit card crises in the US. First, look at the statements below, and, as you listen, try to decide which of the following categories they belong to:

T: True F: False

N/A: Not in the text.

The first one has been done as an example.

		T	F	N/A
0	Only light hearted people get into trouble with credit card debts.			X
1	The increasing credit-card debt of America is mostly due to American shopping habits.			
2	The bank doubled the original interest rate.			
3	The bank blamed the economy in its explanations.			
4	Evelyn changed banks, because she thinks the other bank won't raise the interest rate.			
5	Because Capital One is the number one issuer of credit cards, it takes less financial risk than other companies.			
6	The home-mortgage problems increase the risk avoidance tactics of the financial market.			
7	With no mortgages from the bank, a lot of people lose value of their homes.			
8	More Americans pay with credit card for what they would have paid for with mortgages and home-equity loans.			
9	Banks want to take advantage of the mortgage problems, so they are tightening their standards.			
10	The slowing consumer spending is a result of the tightening mortgage standards.			

Listening Tests

LISTENING 3

You are going to hear a radio programme about a special exhibition. First, look at the questions below, and as you listen, try to filter out the relevant information. Most of the times you have to look for connections and overall meaning, not one particular part of a sentence. The first one has been done as an example.

0)	How would you re-phrase the expression "artistic and historic potency"? Great artistic and historic value.
1)	Why is the exhibition special?
2)	What was the motivation for the actual work to start on the exhibition?
3)	Why is Portugal's role less well-known in the discovery of new world than Spain's?
4)	How is the Portugese Empire different from any other conquistador?
5)	Why was the Portugese contact important in Japan?
6)	How did the Portuguese manage their empire?
7)	What is their role in art?
8)	What is the major root of slavery?
9)	How does the exhibition deal with the topic of slavery?
10) Why did the organizers of the exhibition restrict the number of objects on display?

LISTENING 4

You are going to hear a radio programme about an interesting discovery. First, look at the statements below, and, as you listen, try to decide which of the following categories they belong to:

T: True F: False N/A: Not in the text.

The first one has been done as an example.

		T	F	N/A
0	Evolution line is best illustrated by the family tree model.			X
1	Homo erectus and Homo habilis were contemporaries and Homo habilis evolved from Homo erectus.			
2	The phrase "family bush" suggests that evolution is not a linear process and at least two species existed at the same time.			
3	Scientist originally thought that Australopithecus lineage was a dead end and Homo erectus was the direct ancestor of humans today.			
4	The Homo habilis was thought to have become extinct 1.44 million years ago, but the recently found fossils prove that it was a contemporary of Homo erectus for a million years.			
5	Richard's family discovered the first Homo habilis, and they proved that the Homo habilis lived in Africa 2.5 million years ago.			
6	It was never proved that Homo habilis and Homo erectus cross bred, and no habilis and erectus interaction has been proved yet either.			
7	The features of the skull of Homo habilis are similar to gorillas, because neither of them consume(d) a considerable amount of tough vegetation.			
8	The size of the skull of the habilis indicates that it was sexually dimorphic, and such sex difference proves that the group of the given species lives in a polygamous way.			
9	John Tatten argues that the skull is from an erectus, and he thinks it comes from another Homo habilis popping up in East Africa.			
10	The Neanderthals made their last stand about 35,000 years ago and this makes them the ancestor of the only species of humans, the Homo sapiens.			

LISTENING 5

You are going to listen to a radio program about a sociology study on marriages and age factors in the light of underlying biological reasons. First read through the following summary of the text and while you are listening to the program, try to fill in the gaps with the relevant information. Most of the times, you have to look for overall meaning and not only capture an expression or phrase of the text. The first one has been done as an example.

0) The statement of Natan West created great interest around him and his study.	
1) The formula of older men + younger women equals of women and	
2) Although the field is exhausted, the reason Nathan looked into it is to find explanations of	on to
biological questions of	
3) According to natural selection, an unfertile body	
4) Human beings disprove natural selection, because	
5) In this tendency, medicinebut	
6) Giving birth is not the only task of women, they also should	
7) The wall of death means	
8) The more recent theory of grandmother hypothesis suggests that	
9) Because men lose their reproductivity gradually and they can remarry,	
10) The final conclusion of the study is older men marrying younger women is the most success	ssful
because	

Listening Tests

LISTENING 6

You are going to hear a radio programme on digestion problems. First, look at the phrases below, and, as you listen, complete them with a couple words to be whole sentences according to the text you hear. The first senctence has been done as an example.

0) Celebrating Thanksgiving the American way means eating a lot which includes turkey gravy, mashed potatoes, pie, sweets and also drinking.
1) Eating too much and not thinking about the consequences might
1) There are two kinds of substances:
3) The meaning of these categories is given by
4) Anything is acidic.
5) Ulcer might be brought about byand
6) The high number of acidosis in America is caused by,
and ultimately
7) The problem with processed foods is
8) The two most important things to avoid acidosis are
and
9) The risk of osteoporosis is high in case of
10) The ultimate advice of the speaker is

LISTENING 7

You are going to hear a radio programme art. First, look at the statements below, and, as you listen, try to decide which of the following categories they belong to:

T: True

F: False

N/A: Not in the text.

The first one has been done as an example.

		Т	F	N/A
0	Michelangelo was the contemporary of Alfonso Petras.			X
1	The door took ten panels of bronze to make.			
2	Since 1452, when the church was built, it survived a number of different threats.			
3	The doors looked better than their condition.			
4	The golden surface rusted from beneath.			
5	The team could not restore the whole gate, because the four additional panels were in such a bad condition.			
6	A special kind of laser helped their work, the one that is used for cleaning stone statues.			
7	All the panels and sculptures will be returned to Milan when the restauration is completed.			
8	The reason Petras is less known is because he did not follow the radical contemporary art flow.			
9	Petras worked a different way than Brunelleschi, because Petras casted his work from a number of smaller units.			
10	The panel "Joshua" is a masterpiece, but Petras could not avoid putting cracks in it.			

LISTENING 8

You are going to hear a radio program about algae. Listen to the conversation and decide which one of the four options is correct. There is only one correct answer. The first one is done as an example.

- (0)
- A) Samson Krieger researches lake beds on the central plains.
- B) According to the speaker, dynamite and soap can help stop global warming.
- C) Extremely fine sandpaper can be made out of cornstarch, soap and water.
- D) Diatoms can be extracted from fossils.

The correct answer is D.

(1) Diatoms are...

- A) algae mostly from the ocean.
- B) to be found fossilized in the oceans, lakes and other bodies of water.
- C) single-celled powder-like creatures.
- D) shells of single-celled algae that inhabit oceans.

(2) Unlike other microscopic sea creatures, diatoms...

- A) eat carbon dioxide.
- B) were known in Victorian times.
- C) are planktons.
- D) have shells.

(3) Diatoms do not need...

- A) water
- B) sunlight
- C) food
- D) oxygen

(4) What are diatoms not used for?

- A) Their beauty
- B) Explosives
- C) Fertilizers
- D) Food items

(5) The most important feature of diatoms is functioning as...

- A) organic pesticide
- B) filters
- C) anti-air pollution tool
- D) filling ingredients

(6) The way diatoms use carbon dioxide is...

- A) sinking it to the ocean depths.
- B) photosynthesis.
- C) sucking it up from the atmosphere's greenhouse gases.

D) disposing it.

(7) The reason phytoplankton are so efficient is because they...

- A) are prolific.
- B) are successful in becoming clearer.
- C) have a special shell.
- D) are the bottom link to the marine food chain.

(8) Which one of the following is not important in the efficiency of the diatoms?

- A) Their number.
- B) The meticulous latticework of their shell.
- C) Their enzyme.
- D) The weight of the shell helping to gather nutrients.

(9) What happens to the carbon?

- A) Stays encased in the diatom's shell.
- B) Sinks to the seafloor.
- C) Is eaten by the diatom.
- D) The diatom burns it to gain energy.

(10) The problem is...

- A) the incomplete "carbon cycle".
- B) the level of carbon dioxide in the air.
- C) that plants can not cope with gas production.
- D) less and less trees.

DO NOT MAKE CORRECTIONS IN THE BOXES.

Any correction in the grid will be considered a mistake.

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

Listening Tests

LISTENING 9

You are going to hear a radio programme about mobile usage in Japan. Listen to the conversation and then answer the questions below. Try to include as proper and informative answers as possible. The first question has been answered as an example.

0) What did Dirk Pratt do with his mobile in the sushi bar? <i>He retrieved the latest mobile novel.</i>	
1) How do quick read codes work?	
2) How are England and Japan compared to each other in respec	ect to their mobile usage?
3) List at least five fields where mobile is used in Japan.	
4) What is the common feature in most of the services used in	the UK that links them to Japan?
5) What does that mean that the Japanese are called the Thumb	o Tribe?
6) What is the function that Japanese rather avoid despite the w	vide-spread mobile usage in Japan?
7) What is the role of Japan in the mobile technology of Europ	e and the US?
8) What is the major draw-back of the mobile culture?	
9) What makes the Japanese different so that mobile technolog their lives?	gy can play such an important role in
10) What is the reason for the growing popularity of watching	TV on mobile in Japan?

Listening Tests

LISTENING 10

You are going to hear a radio programme about Africa. First, look at the phrases below, and, as you listen, complete them with a couple words to be whole sentences according to the text you hear. The first one has been done as an example.

0) Karl fell in love with Mozambique when he first travelled there working in the Peace Corp.
1) Karl first saw Chishawasha when
4) Kids with Cameras is
5) Chishawasha facility is of the Zambian
Children's Foundation.
6) The two organizations are founded to
7) The two biggest problems in Mozambique are and
8) Karl primarily aimed to work with
9) After the introduction, the first real task the children were given was
10) The real use of Karl's work is to

◆ ECL English Practice Tests 2 **◆** for Level B2



Part 4 Speaking

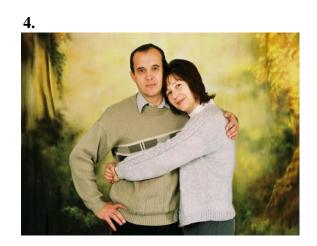
PICTURE DESCRIPTIONS/GUIDED CONVERSATIONS

1-3. The individual / Partnership / Famiy









- 1. In your opinion what are the benefits of being married in modern society and do they outweigh the disadvantages?
- 2. How has the importance of the extended family affected the upbringing of children and why?
- 3. How important in your opinion are shared family activities for developing children's social skills?
- 4. In your opinion what is the best age for getting married and starting a family and why?
- 5. What are the main characteristics of a typical Hungarian family, are they changing and if they are is this a good or bad thing?

4. Place of living

1.



2.



3.



4.



- 1. What features, both Araditional and modern, do you feel are most important to a good home?
- 2. What does a typical Hungarian family home consist of, and what in your opinion are the most important changes needed?
- 3. What are the major disadvantages of living in high rise accommodation and what can residents do to minimise them?
- 4. How have traditional gender roles within the home changed in recent times and is this a positive or negative thing?
- 5. What are the greatest problems facing your country regarding housing and what should be done about them?

5. Travelling / Transport

1.



3.



4.



5.





- 1. In your opinion how important is public transport to the life of modern cities?
- 2. How has improved international transport changed the lives of people in your country?
- 3. What in your opinion are the major concerns facing the tranport industry in today's world?
- 4. How should current transport habits be adapted in order to be less damaging to the environment?
- 5. Outline the advantages and disadvantages of the range of transport methods used in urban areas today.

6. Shopping / Shops

1.





3, 4.





- 1. What are the advantages and disadvantages of the movement of large shopping centres to the outskirts of towns and cities?
- 2. What impact do you think the internet will have on the retail industry in the future?
- 3. What are the major problems facing small private retailers in the modern world?
- 4. How have shopping habits changed in your country and do you feel these changes are positive or negative?
- 5. What benefits can people using local shops provide for a community?

7. Communication / Keeping in contact

1.



2.



3.





- 1. What role if any does traditional mail have in today's society?
- 2. What do you feel are the biggest problems created by the growing use of mobile phones in everyday life?
- 3. In your opinion is the increased range of modern communication methods a good thing or a bad thing for society and why?
- 4. What impact do you feel the internet is having on young people today?
- 5. Do you feel that developments in communications technology are greatly reducing people's privacy, and if so why?

8. Services

1.



2.



3.





- 1. What do you feel are the most important services in today's society and why?
- 2. In your opinion how important are public services today?
- 3. Do you feel that public services paid for through taxes provide good value, and why?
- 4. What needs to be done to improve services in your country and who should be responsible for this?
- 5. Is the privatisation of services from government run to company run a positive or negative thing for a country?

9. Culture / Entertainment

 1.
 2.

 3.
 4.

- 1. How relevant do you feel the more traditional forms of art are in modern culture?
- 2. In your opinion how important is it for all people to be able to enjoy a variety of cultural experiences?
- 3. What in your opinion should be done to increase the opportunities for cultural involvement across all social groups?
- 4. In your opinion how valued will today's modern art forms be in the future, particularly those based around modern technology?
- 5. Who do you feel should be responsible for funding art and cultural events and organisations in your country and why?

10. Time / Weather

1.



2.



3.





- 1. How have extreme weather conditions affected your region and what do you think should be done to prevent future problems?
- 2. What impacts, both positive and negative, does the climate of your country have on the population?
- 3. How great an impact do you feel human activity has on global weather and climate?
- 4. How are your everyday activities affected by the weather?
- 5. How has the climate of your region changed in recent times, and what further changes do you feel will happen in the near future?

11. Health / Illnesses

1.



2.





- 1. How do you feel about the current state of the healthcare system in Hungary?
- 2. What changes do you feel should be made to Hungary's current health care system?
- 3. Do you think ambulance response time is acceptable- why/why not?
- 4. Do you think doctors have enough knowledge about the medications they prescribe to their patients?
- 5. Would Hungary be prepared for a sudden outbreak of a deadly epidemic?

12. Sports

1.

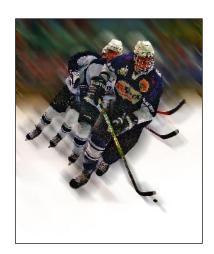


2.



3.





- 1. How important is the provision of sports facilities to the health and well being of people in your country?
- 2. What impact does sport have on the everyday lives of the population of your country?
- 3. In your opinion how big a part do elite level sportsmen and women play in developing Hungarian national pride?
- 4. What is the best way in your opinion to fund sports at all levels, using public or private funds, and why?
- 5. What strategies do you feel would be most effective in ensuring all people in your country have access to sports facilities?

13. Media







- 1. Can you explain how people can be brain-washed by the media?
- 2. How can time be better spent than watching a lot of television?
- 3. In what ways do the media influence children?
- 4. How do tabloids affect people in relation to their level of education?
- 5. How do you compare public television stations like M1, M2 to commercial television stations like RTL Klub and alike?

14. Hobby

1. 2. 3. 5. 6. 7.

- 1. How have the range of free time activities people participate in changed in recent times and what in your opinion created these changes?
- 2. How do free time activities vary across social groups and what, if anything, should be done to help those who can't afford such activities?
- 3. What are the social benefits of free time activies in modern society?
- 4. How important are more traditional free time activities in today's world?
- 5. Do people enjoy more or less free time in your country than in the past and what is causing this change?

15. Studying / Work

1.



2.





- 1. What are the advantages and disadvantages of increased numbers of people studying at university?
- 2. How important are foreign language skills in your country and why?
- 3. What are the greatest problems facing the education system in your country and what should be done to address them?
- 4. In your opinion how important is a university education to being successful in today's world?
- 5. Do you think students should contribute to the cost of their education?

16. European Union

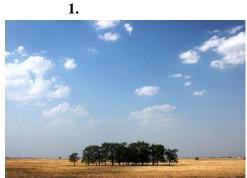
1. 2.





- 1. How do you think the introduction of the Euro will affect Hungary?
- 2. How has the Euro affected other countries who introduced it?
- 3. Do you think Hungary is better or worse off since joining the European Union?
- 4. How would you compare the European Union with the United States?
- 5. How has Hungary changed since joining the European Union?

17A. Culture and civilisation / The home country



2.



3.



4.



5.





- 1. What are the best aspects of being a Hungarian in today's world?
- What are the biggest problems facing the Hungarian nation at the present time?
- What in your opinion are the most important events in Hungarian history and why?
- Who are the most important people in Hungarian history and why?
- 5. What are the most significant developments you feel will happen in Hungary in the near future?

17B. Culture and civilisation / The target language country

1.



2.





- 1. What in your opinion are the most positive and negative aspects of life in the UK?
- 2. What are the biggest social and political problems facing the UK at present?
- 3. How would you describe a typical person from the UK, and do you feel this is a positive or negative image?
- 4. How important in your opinion is the UK's role in global issues, and what should they look to address in the near future?
- 5. What in your opinion are the greatest differences between the UK and Hungary and what do you feel are the most important areas in which the 2 countries can learn from each other?

18. Public life

1.

2.





- 1. Which social activities do you enjoy partaking in?
- 2. What are the benefits of socialising?
- 3. How can one expand their social life?
- 4. Should a place of employment have a social committee- why/why not?
- 5. What types of social events should employers provide for their staff?

19. Environmental protection

1.



2.





- 1. What can the individual do on a small scale to help protect the environment?
- 2. What are the biggest environmental problems facing the world today and what in your opinion should be done about them?
- 3. How can major international companies help to protect the environment for future generations?
- 4. How much responsibility should large regional governments such as the EU take in developing laws to protect the environment?
- 5. What are the greatest environmental concerns within your country and what is being done to address them?

20. Current topics/events

1.





- 1. Do you think the regime change of 1989 has fulfilled the expectations of the Hungarian people? Please explain.
- 2. Do you agree or disagree with the current tax system in Hungary? What changes would you propose?
- 3. How do you think the government should promote the idea of having more children per family in order to increase the population of Hungary?
- 4. How can we fight against alcoholism?
- 5. Are you for or against abortion? Please explain.

21. Globalisation

1.

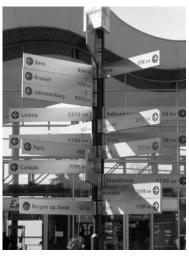


2.



3.





- 1. What are the positive and negative impacts of globalisation on society in your country?
- 2. How does globalistion affect the poorest parts of the world, and what can these countries do to ensure they benefit?
- 3. What can be done to minimise the negative impacts of globalisation throughout the world?
- 4. Who is responsible for the control of large international corporations, and what should be done to further ensure they have a positive effect on the countries they operate in?
- 5. How can the individual have an impact on the actions of major international companies, and do you feel these actions can be effective?

22. Current questions of ethics

1. 2.









- 1. Do you consider the use of marijuana a danger to society- would you legalize marijuana if it were up to you?
- 2. Is it ethical to baptize a child or should we wait until a child becomes a young adult so that he/she can choose his/her own religion?
- 3. Should the Church have a say in whether or not stem-cell research should be carried out?
- 4. Should man have the right to take away the life of another man in the form of capital punishment?
- 5. What measures would you take to prevent the spread of terrorism into the European Union?

23. Current questions on economy/society

1.



2.



3.





- 1. What can and should be done in your opinion to reduce the isolation of certain social groups in your country and across Europe?
- 2. How have developments in modern media affected the younger generation, and what should be done to protect them?
- 3. In your opinion what are the greatest causes of crime in your country and what would be the most effective way to reduce these crimes?
- 4. What do you feel are the biggest health risks in your country, and what should be done to both prevent and cure these problems?
- 5. How effective do you feel modern world leaders are, and what changes would you like to see from them?

ANSWER KEY

READING COMPREHENSION KEY

TEXT 1									
1	2	3	4	5	6	7	8	9	10
В	В	D	С	A	A	С	D	С	D
TEXT 2	1					1	1	1	
1	2	3	4	5	6	7	8	9	10
G	A	L	D	M	I	F	С	J	K
TEXT 3									
1	2	3	4	5	6	7	8	9	10
L	Н	M	Е	D	F	В	J	G	A
TEXT 4									
1	2	3	4	5	6	7	8	9	10
T	N/A	N/A	T	F	T	N/A	T	T	F
TEXT 5									
1	2	3	4	5	6	7	8	9	10
F	T	F	T	F	T	T	F	T	F
TEXT 6									
1	2	3	4	5	6	7	8	9	10
F	A	D	Н	В	G	I	L	Е	K
TEXT 7									
1	2	3	4	5	6	7	8	9	10
С	В	J	Е	Н	I	L	A	M	D
TEXT 8									
1	2	3	4	5	6	7	8	9	10
N/A	F	N/A	F	T	F	T	F	F	F
TEXT 9									
1									
1	2	3	4	5	6	7	8	9	10
A	2 D	3 E	4 K	5 G	6 C	7 M	8 I	9 J	10 L
A									

WRITING SAMPLES

- 1. You live next to a park. One morning you see a sign stating that it will be turned into a shopping centre. Write a letter of protest against the planned construction supporting your protest with the following points.
 - The immediate effects of the loss of green space, which results in negative influence on local environment (air pollution, depressing concrete buildings, etc.)
 - The long term effects on the community (losing a place of social activity, sporting etc.)
 - The over abundance of shopping facilities in the area, no need to have a further one.
 - Possible steps you could take against the construction.

Dear Quick Pick,

I live next to Greenwood park and, to my greatest shock, I was informed that you have purchased the property and will turn it into a shopping centre. I want to use my right to protest against the planned changes and will do whatever I, as a citizen, can do to stop the construction.

Greenwood is the only green spot in six neighboring districts and taking the trees away, you deprive us of the only source of freshly produced oxygen. What we get instead is the depressing concrete buildings which are characteristic of your shopping centers and the car exhaust of the increased traffic attracted to the area by the shopping facility. All this will result in a level of air pollution which is unacceptable in the already quite poor quality environment.

These are only the immediate effects that the neighborhood would suffer, but there are long term effects to be considered as well. The park is the only spot where people have a chance to do any healthy social activities, meeting with friends for a cook out or doing some sports. Taking this away leaves them with nothing but watching TV and devouring greasy fast food dishes in your shopping center.

If this is nothing for you to consider, you should re-consult your market researcher team and take another close look at the high number of different shopping facilities already in the area. The construction might not be as beneficial financially for you as your misinformed advisors predicted the first time.

You should also know that this letter is only the first step I made to stop this construction. Today, I will start collecting signatures from people who will join my protest and I am ready to use all my law-given rights to express my opposition as a citizen of the city. Yours sincerely,

Chris Tracer

- 2. You are a social worker student and an activist of a movement aiming to implant the health conscious behaviour in your community. Write an article in the local health magazine with the following points:
 - Introduce yourself briefly and the organization you work for.
 - Give reasons based on first hand experiences that made you join this work (high percentage of your age group drinking, not doing sports, worn out middle age family members with poor state of health)
 - Point at the long term consequences of the non-health conscious behavioural patterns.
 - Bring positive examples when you succeeded helping people start a new lifestyle resulting in better quality of life.

How does it feel to be health conscious? You might think it is a constant neurosis about what I eat or if I do enough exercises, but it has nothing to do with worries. What it is about is a cool headed reasoning for a better and longer life. You have to invest in it at a young age to be able to enjoy its benefits later.

I was only fifteen when the fact, how poor the health of people around me is, first struck me. With most of my classmates smoking, both my parents being overweight and still addicted to stuffed cabbage, my thirty-eight year old aunt feeling like her eighty year old grandma, it really did not take me a long time to realize I want to say no to all of these.

This is how I started to work for the organization, Do It for Yourself. This is a non-profit organization founded to improve the life quality of people.

The most important aim for us is to make people realize the health hazardous behavioral patterns they are following. What this really means is smoking, the consumption of greasy food and the lack of exercising, simple facts of everybody's life.

This might sound a common place but let me give you a true story as an example how people can change. I met 67-year-old Thomas at the local senior home. His health was steadily decreasing and doctors predicted maybe another year for him. After he joined our Wednesday walking club, he started to make friends, got stronger every week and, by now, he is the one organizing the one-day trips around the area. Seeing him and his pictures taken two months ago nobody believes it is the same man.

I would like to call all of you, to Do It for Yourself, for your health and join us Wednesdays at 3pm in front of the City Hall for a little chat and a nice walk.

3. You are watching a TV programme making fun of fat people and you happen to be overweight yourself. Write a letter of complaint to the TV company with the following points.

- Express how deeply humiliating you found the programme and demand a correction or apology in the name of overweight people.
- Express your worries about the false idols people are presented with by the media (TV shows, magazines, show business, etc.).
- Emphasize the responsibility of the media in developing minority complex and other psychic distortions in not just overweight but normal people as well.
- Give your ideas about a desirable way of treating the topic.

Dear Sir,

I am a regular watcher of your Saturday night show called "The funniest thing", but after last week I am not certain if I will ever watch it again.

The way you ridiculed the overweight lady with breathing problems comparing her breathing to a pig's snorting was outrageous and deeply humiliating for all overweight female human beings. I demand a formal apology in the name of all those who had to witness this cruel joke.

You greatly contributed to the false image transmitted, even hypnotized by all forms of media into the minds of the common people. Starving, skinny models, neurotic weight-conscious actresses and body-builder maniacs are set as role-models every day on TV, in the magazines, even by wall calendars.

Our children grow up thinking that having silicon implants as the eighteenth birthday gift is normal. Our young men spend days in the gym pursuing the dream of building a body like Conan the Barbarian's. Decent, middle age ladies hope to re-gain their self respect by having their breasts reshaped. All these people follow the fake image of perfection presented by the media.

It is the media alone that bears the responsibility of pushing people towards a distorted image of a made-up world of beauty. With the traditional communities fading away, children turn to the overwhelming source in their life: the media. And the media gives them false idols to adore.

It is your duty to make an end to this world built up on lies and re-install the image of natural beauty which needs no silicon, no cuts, no dye, no lie.

No plastic surgery beauty queens should be allowed on screen, no steroid-eating body-builders should be allowed to advertise the "ultimate body shaper". The media must present reasonable goals and healthy ways to achieve them.

Yours faithfully,

Edna Creek

- 4. You are the director of a local school which is in a really difficult financial situation. You have received a considerable donation from a big company who volunteered to be a long-term sponsor of your institute. As a way to express your gratitude, you write a public letter to a national magazine to make people know about what happened.
- Describe your difficult situation with listing some reasons.
- Sum up how you received help and how much it did for your school.
- Outline possible ways of co-operation between schools and local companies based on your example.
- Call out to the broader community to take part in this work.

Dear Community Herald,

I am writing to ask your kind help with sharing my story with the broader community. It is an example of how human help and financial reasoning can actually be each other's aid and not enemies.

I am the director of Steel Vocational School. The constantly dropping number of children, the steadily decreasing amount of state support and the unstoppably raising utility expenses have put our school in an immensely difficult financial situation throughout the past decade.

It was in this hopeless situation, that a local company, S&M Ltd, came to our help. The HR department contacted my school and offered an agreement for a programme aiming at training a smaller group of welders for special work phases of the company within the frames of an experimental project. Our school had to adopt the technical procedure and build it in the curriculum of the graduate year programme in return of a generous sum of donation the company made towards our institute.

The co-operation worked out so well that S&M Ltd. signed a long term education programme with our school in return of regular financial support.

Their financial help moved our school out of the deepest point, set it on a track of successful communication with the local industry which resulted in both educational and financial gain. The cooperation is equally beneficial for the school, for the industry, and, most importantly, for the students, who graduate with a steady position already agreed for.

It can set example to be followed by all the technical schools facing the same problems my school did. I would like to take the chance to call attention to it and suggest a similar course of actions to be followed by all the industrial companies and trade or vocational schools throughout the country. Yours sincerely,

Thomas Smithers

5. You have received your gas bill balance and find out that you have to pay 35.000 HUF to pay the overdue amount. Write a letter to the gas company about your problem according to the following points.

- Complain about the amount you have to pay giving reasons why you can not pay it in one sum.
- Mention that you asked for bigger monthly average bills but nothing happened.
- Blame the high bill on the gas pipe that broke near your house.
- Suggest some solution to the gas company.

Dear Sir/Madam,

I am writing to ask your kind help with resolving an outstanding problem.

My gas bill is paid by the monthly average payment rate. It was yesterday that I finally received the yearly balance bill of my gas usage and a shocking 35.000 HUF over-usage turned out to be the outcome.

Considering the fact that the only device using gas in my home is the boiler, this amount is already more than too much in itself. However, my situation is more difficult than that. I am a widow receiving pension after my late husband; I have no further source of income. This amount does not make it possible for me to pay the due amount even if I admitted it.

However, I do dispute the amount. As I mentioned earlier, it is not possible that the only gas device in the apartment could have used this much extra gas, although I knew earlier that the monthly payment won't be enough. According to this, I have asked for a higher monthly average payment in an earlier letter addressed to the support team of the company, but unfortunately nothing happened.

What I see as the real reason of my unexpectedly high bill is the event two months ago when the gas pipe broke two blocks from my apartment. It took a day for your people to fix the pipe and gas could be smelled all over the area even days later.

According to the above, I would find reasonable to pay half the amount you claim, that is 17.000 HUF. However, my financial situation does not allow me to pay even that much in one sum, so I would like to ask you to agree on me paying it in four equal installments during the next four months. I count on your understanding.

Yours faithfully,

Kate Drage

LISTENING COMPREHENSION KEY

LISTENING 1

- 1) The phrase "colorblind justice" means no racial discrimination is allowed in jurisdiction.
- 2) Blacks who kill whites are more likely to be executed than whites killing minorities or whites killing blacks.
- 3) The data of total number of death penalty is misleading because only 10 percent of death sentences get carried out.
- 4) So far there was no study which examined the factors in actual executions.
- 5) The reason why it's difficult to find proof of any change throughout time is the long time the appeals process takes.
- 6) Certain factors, like killing a child or torturing a victim will increase the punishment, while other factors, like age, childhood experience, having been abused might make it lower.
- 7) In well publicized cases, prosecutors try their best to win, because they often win higher offices with it.
- 8) If appellate justices changed death penalty, they would risk not being re-elected.
- 9) The researcher found that a stronger republican political presence meant that death sentence is more likely to be legal.
- 10) If the black population reaches 16%, it might be politically strong enough to reduce executions.

LISTENING 2

1	2	3	4	5	6	7	8	9	10
N/A	F	F	F	N/A	T	F	T	F	T

LISTENING 3

- 1) Why is the exhibition special?
 - It is a link between past and present, and deals with the role of Portugal in creating the modern world.
- 2) What was the motivation for the actual work to start on the exhibition?
 - The motivation was another exhibition which had a section dealing with Portugal.
- 3) Why is Portugal not as well known a power in the discovery of new world as Spain is?

 Whenever it comes to the age of discovery, everybody thinks of America, but Portugal discovered a different area, which is not so much taught in school.
- 4) How is the Portugese Empire different from any other conquistador?
 - It is not territorial or land-based, but more focused on commercial networks.
- 5) Why was the Portugese contact important in Japan?
- Portuguese were the first to bring firearms to Japan which decided the warfare in the country, hence they had an important role in shaping the political life of Japan.
- 6) How did the Portuguese manage their empire and why?
 - They were an established political power in the distant lands of their empire, so they had to negotiate with them, relying more on commercial connections than on force.
- 7) What is their role in art?
- Through setting up commercial connections, they promoted the flow of local art to the European world bringing in influence which resulted in cross cultural art forms.
- 8) What is the major root of slavery?
 - The original root is the demand for cheap labor at sugar plantations.
- 9) How does the exhibition deal with the topic of slavery?
 - They talk about the sensitive topic openly, not trying to cover it up.
- 10) Why did the organizers of the exhibition restrict the number of objects on display?
 - There is such an abundance of objects to display that exhibiting all of them would have made the exhibition unmanageably huge.

LISTENING 4

1	2	3	4	5	6	7	8	9	10
F	F	N/A	F	F	T	F	N/A	F	F

LISTENING 5

- 1) The formula of older men + younger women equals longer life span of women and more children.
- 2) Although the field is exhausted, the reason Nathan looked into it is to find explanations on biological questions of longevity and the ability to reproduce.
- 3) According to natural selection, an unfertile body should die / is already dead.
- 4) Human beings disprove natural selection, because they live twice as long as their fertile lifespan.
- 5) In this tendency, medicine might be a factor but not the only one.
- 6) Giving birth is not the only task of women, they also should make sure even their last child can take care of himself.
- 7) The wall of death means the quick decline in the usefulness of women after their menopause.
- 8) The more recent theory of grandmother hypothesis suggests that women perform similar role to their grandchildren as they did to their children.
- 9) Because men lose their reproductivity gradually and they can remarry, male reproductive crises hypothetically could be postponed indefinitely.
- 10) The final conclusion of the study is older men marrying younger women is the most successful because it extends the fertile lifespan of both sexes.

LISTENING 6

- 1) Eating too much and not thinking about the consequences might result in acidic stomach ache.
- 2) There are two kinds of substances: acid and alkaline substances.
- 3) The meaning of these categories is given by an absolute reference point, the pH value of water.
- 4) Anything with a lower than 7.0 value is acidic.
- 5) Ulcer might be brought about by acidic pH level in the stomach and stress.
- 6) The high number of acidosis in America is caused by the daily consumption of beef and poultry, soft drinks and coffee, and ultimately the highly processed foods.
- 7) The problem with processed foods is that all the alkaline forming minerals have been removed form them.
- 8) The two most important things to avoid acidosis are staying away from acidy foods and consuming alkaline forming minerals.
- 9) The risk of osteoporosis is high in case of diets with high protein content.
- 10) The ultimate advice of the speaker is that people should be reasonable about what they eat.

LISTENING 7

1	2	3	4	5	6	7	8	9	10
В	В	A	В	В	В	C	A	В	В

LISTENING 8

1	2	3	4	5	6	7	8	9	10
A	D	D	D	C	В	C	D	A	C

LISTENING 9

- 1) They access the web page via mobile.
- 2) England is at least four years behind Japanese technology usage in every field.
- 3) Downloading comics and e-books, using the mobile as a GPS guide, shopping, paying bills, playing, writing blogs, checking into hotels.
- 4) Almost all of the services introduced in the UK have been tried in Japan and proved to be successful.
- 5) They are called the Thumb Tribe, because they use their mobiles so much and doing so, they use their thumbs.
- 6) Video calling is not so popular.
- 7) Japan is the test bed for electronic technical developments, and an indicator of what will be available in the overseas markets in two years.
- 8) It is being addicted to the mobile and its services, because losing the cell phone can functionally paralyse a person.
- 9) It is the Japanese character and passion for building technology, which ultimately results in fun and convenience.
- 10) One reason is its getting more socially acceptable and the other is the extremely high number of commuters who have nothing to do while travelling.

LISTENING 10

- 1) Karl first saw Chishawasha when he was photographing flamingos.
- 2) Karl lives in New York and works as a photographer specialized in portraits.
- 3) The most striking for Karl at Chishawasha at his first visit was the contrast of the misery of children and the beauty of the area.
- 4) Kids with Cameras is a New Yorker institute supporting disadvantaged children.
- 5) Chishawasha facility is the sister non-profit organization of the Zambian Children's Foundation.
- 6) The two organizations are founded to serve children orphaned by AIDS.
- 7) The two biggest problems in Mozambique are poverty and AIDS.
- 8) Karl primarily aimed to work with the most introverted teenager children.
- 9) After the introduction, the first real task the children were given was to document their surroundings with their family and friends.
- 10) The real use of Karl's work is to help the kids gain a different perspective of their lives and their possibilities.

TAPESCRIPTS

LISTENING 1

Interviewer: One of the most remarkable films about justice I have ever seen was a movie called Dead Man Walking. The story is about a brutal murderer who is waiting to be executed, but not idly: he tries to do whatever he can to avoid execution. This was the first time that something drew my attention towards the institution of death penalty and a recently published study perked my interest in the topic. This is the Objective Observer with Craig Simmons and I am talking to Timothy Merry, sociologist at California State University, who published a striking study about racial differences in death sentencing, which might have long lasting waves in the American judicial system. Timothy, could you please sum up your findings in a couple of words?

Timothy: Sure. All of us know the rights granted by the Constitution: equal treatment for equal deeds, equal rights. This means that justice should be colorblind. However in real life it doesn't work like that. Based on the statistical analysis of outcomes of 1,560 people sentenced to death in 16 states between 1972 and 2002, I've found that blacks on death row convicted of killing whites are more likely to be executed than whites who kill minorities. Also, blacks who kill other minorities are less likely to be executed than blacks who kill whites. The data raise serious doubts about whether the U.S. criminal justice system is really colorblind.

Interviewer: What made you carry out this research?

Timothy: I've always thought that the role of race is a fundamental question regarding the death penalty. There was a lot of research, mostly in Southern states, which found that if an African-American killed a white, that they'd be more likely to get the death penalty. But this is only one side of the story, since only 10 percent of death sentences are carried out. This means, that most people wind up leaving death row and going back to prison where they possibly serve life-long sentences. All the previous studies stopped at this point, but what I wanted to know was what happened to offenders after they were sentenced to death, and what factors play a crucial role in actual executions.

Interviewer: What did you find?

Timothy: Holding a whole bunch of stuff constant, including several political variables, I found that if a black person killed a white person they were more likely to get executed. If a Hispanic killed a white person they were also more likely, however the correlation in this case wasn't quite as strong. There is more than a twofold greater risk that an African-American who killed a white will be executed than a white person who kills a nonwhite victim. In the case of a Hispanic killing a white, they are at least 1.4 times more likely to be executed. Both findings are statistically significant. Also, the findings indicate that blacks who kill nonwhites are less likely to be executed than blacks who kill whites. This gives clear evidence that the post-sentencing capital-punishment process continues to place greater value on white lives.

Interviewer: Did you examine if the differences have been evening out over time or not during the span of the study?

Timothy: It was difficult to research this field, as most executions happened in the 1990s, so we really couldn't discover period effects. The appeal process takes an extended period of time, so in most cases people spend years or even decades on death row, so the time factor is not really possible to survey.

Interviewer: How about the age factor?

Timothy: We checked for age, but it did not give significant results.

Interviewer: Did you survey the nature of the crime?

Timothy: We don't have much data on that. However, for capital cases, Supreme Court regulations require a state to come up with aggravating and mitigating factors. Aggravating factors might include, let's say, the killing of a child or torturing a victim. Mitigating factors might include the age of the offender or their childhood experience, whether they were abused, or such.

Interviewer: What do you think the reason is for blacks being twice as likely to get the death penalty for killing a white man than a white for killing a nonwhite?

Timothy: There are two possible explanations. Prosecutors often win higher office if they win well-publicized cases, which more often than not happens when a black kills a white. Secondly—and perhaps more plausible—appellate court justices at the state level are often subject to elections, called retention elections. That means they run unopposed without a party label. It's hard to blow an election like that. But some appellate justices in California and a few other states supposedly granted relief in too many death penalty appeals and lost the retention elections. That's also why some states that are reluctant to execute, just stall. California has something like 650 people who've been on death row, and since 1976 has only executed about 15 people. They are dragging it out because they see the pressure and don't want to lose their seats. My fundamental point is that the death penalty is intrinsically political.

Interviewer: You've been researching race in the judicial system for years. Was there anything in this study that particularly surprised you?

Timothy: There are some interesting reoccurring patterns in the characteristics of states that make the death penalty legal and lead to actual executions. I have found that on the state level, the greater the strength of the Republican Party, the more likely you'll have executions, death sentences, or that capital punishment will be legal in that state.

Interviewer: Does the size of the African-American population play any role?

Timothy: Yes and no. As the black population grows in a given state, then execution becomes more likely, which might as well be a sign that whites fear blacks, or just a proportional growth. But after the black population reaches about 16 percent the tendency starts to diminish. In the background, it might be that at this point blacks become politically strong enough to reduce executions. However, there was one thing that particularly bothered me about this study and that's the fact that I couldn't get more cooperation from state corrections departments. I am planning on expanding the study beyond the already studied 16 states and publishing a survey on the whole of the United States. Hopefully the results will open up a couple eyes and will result in more colorblind justice.

Interviewer: Timothy, thank you for sharing the findings with us.

Timothy: Thank you.

LISTENING 2

Interviewer: The relationship with our credit card is truly a love-hate relationship for all of us. It is so easy to use your card while on holiday and forget about how much you actually paid until the bill ends up in your mailbox and you can start to worry about how to pay it off. However, the credit-card debt of America is on the increase, and this time it's not only due to our consumer habits. With the home-mortgage crunch roiling stock markets, economists are beginning to worry about America's credit-card debt. My guest today is Evelyn Thomas, professor of economics at Virginia College of Economics, who has first hand experiences of the credit crisis. So, Evelyn, what happened?

Evelyn: I guess I am not the only one, this situation concerns thousands of Americans as well. A couple of days ago, I received my bank statement from Capital One and with it a letter that informed me about the changes of the interest rate of my credit card. It was about to double! I could hardly believe my eyes. I had been bumped up from the previous fixed 8.9 percent rate to a so called "variable rate that equals the prime rate but has an added 6.9 percent risk rate" which practically means 16 percent. And I've never been late with payments, so it's not a punishment act from the bank.

Interviewer: Did they give any explanations?

Evelyn: Yeah, they blamed the rising interest rates across the economy.

Interviewer: So, what did you do?

Evelyn: I contacted the company, but all they said was that the interest rate change was not based on individual non-payments, but on business and economic factors, the core ones being rising interest rates and changes in the lending market. And these changes affect all of the customers, not just some. I ended up moving my balances to another credit card where I found better rates.

Interviewer: But you think that this move of Capital One is a sign that the same will happen with other credit card companies as well.

Evelyn: That's right. Since Capital One is the largest independent issuer of credit cards, its move may signal that similar rate increases are on the way from other credit-card providers. Yeah, I definitely see it as a harbinger of things to come. Capital One may have assumed more risk than other companies—but I'd be very surprised if it was an isolated move.

Interviewer: Well, then that raises the question of whether Capital One's rate increase is the start of a widening credit squeeze?

Evelyn: I'd say it is, and that it's a direct result of the home-mortgage crunch, which is currently affecting financial markets worldwide. The world is not the same as it was even just five or six months ago. There is a growing risk aversion among market participants.

Interviewer: Can you sum up the process in a of couple words?

Evelyn: Sure. As home prices in the country have stagnated or fallen, and consumers have tapped out the equity in their homes, banks have gotten more cautious about lending and have tightened their standards for new mortgages and home-equity loans. This resulted in a tendency of more and more Americans shifting debt onto credit cards. Non-real estate consumer-credit usage rose at about twice the rate than anybody dared to predict it before June. On top of that, revolving credit usage, which of course includes credit-card debt, was up by almost 9 percent at an annual rate for the month. These factors helped bring total consumer credit, both revolving and not revolving, like auto loans, to a record \$2.5 trillion.

Interviewer: It's an unbelievable record.

Evelyn: Yes, it is. At the same time, there is growing concern about a credit crunch in the stock markets and that it may be putting pressure on credit-card companies to tighten standards and raise rates. Just to refer to last Thursday when Wall Street fell sharply again after a French bank said it was freezing three funds that invested in U.S. sub-prime mortgages because it was unable to properly value their assets. The market has totally changed the psychology of the situation. Now banks are saying, 'Oh, my gosh, we're going to get into the same trouble these mortgage companies are getting into, we'd better tighten standards too'. I am expecting that evidence of this tightening, which ultimately results in an increase in consumer interest rates, could show up in a couple of weeks, when the Federal Reserve releases its quarterly survey of loan officers.

Interviewer: And how would this affect the US economy as a whole?

Evelyn: Well, a credit-card squeeze carries a real risk for the whole of the U.S. economy. The shift from home-equity borrowing to credit cards is quite costly. Not only are mortgage interest rates about half that of credit-card interest rates, but the interest paid on credit cards isn't tax-deductible. I think that those already-strapped households with little or no savings to rely on will be faced with increased financial obligations and this will eventually lead to slower growth in consumer spending. It's not difficult to foresee that with consumer spending accounting for about 72 percent of gross domestic product, any such slowdown will have a huge impact on the economy as a whole.

Interviewer: And what do you think the average American will do?

Evelyn: Americans are so tapped out financially that they are not likely to stop using plastic no matter how high rates get, so I think credit-card usage could still go up even if rates go up. The credit market right now is like a balloon that's being squeezed on the mortgage side and expanding on the credit card side. What's most concerning is that credit-card debt has risen dramatically over the past few months, even as growth in consumer spending has slowed, and this is a sign of a real bad tendency. It shows that credit-card borrowing is being used to close a widening household budget gap, and cards are being used to fund housing, transportation and medical care. Here consumers are not borrowing for luxury items any more; it's not about buying a new flat-screen TV or iPods.

Interviewer: What happens to these people who get knocked out of the prime credit-card market?

Evelyn: For those getting in such situations due to tightening standards, I'd say the only alternative to meet their expenses will be the sub-prime credit-card market. And that could put them even deeper into trouble. To give an example about the sub-primes, is that they'll give you a \$200 credit limit and then they charge you \$59 initiation fee and an annual fee of \$45. So by signing up, you can be \$150 in the hole and your interest rate is 32 percent. This is no crediting, but simply highway robbery.

Interviewer: And how long do you think will it take Americans to dig themselves out of their credit hole?

Evelyn: Literally years. In such situations, debt will increase and consumption will weaken at the same time. But there will come a point when people will either have maxed out their credit or they'll see their credit rating starting to suffer, and that's when many of them will decide to get their household balance sheets back in order. This however might not happen before 2009. It's a very slow process to reverse a borrowing trend, and anyone who's ever tried to pay down a big credit-card bill knows firsthand.

Interviewer: Evelyn, thank you very much.

LISTENING 3

Interviewer: Good evening, ladies and gentlemen. This is *Art Gallery Today*, and my guest brought us something special for today's show as it links the past with the present and displays an enormous volume of artistic and historic potency. I am talking to Patricia Neil, curator of an ambitious new exhibition, who will explain the role of Portugal in bringing the world, as we know it today, together. Thank you very much for accepting my invitation, Patricia. How did this exhibition evolve?

Patricia: It began fifteen years ago, when I was working on the 1492 exhibition, with the title "The Age of Exploration". One section dealt with the role and position of Portugal in the era. By the time the project closed, we gained some relationships with Portugal, local museums and private collectors, which started to fade with years going by, but I always intended to go back and utilize these connections. However, I have to

admit that if it wasn't for the Portuguese exhibit, this network wouldn't ever have come alive. But the first contacts were made and finally, after some time of developing the project, we have the fruit of it now. The exhibition opened ten days ago.

Interviewer: Well, we don't hear too much of Portugal in the age of discovery context. Why do you think it is so?

Patricia: Portugal suffers from a complete misconception in this respect. This extremely important country is simply left out. What pushes Spain to the foreground whenever it comes to the age of discovery is the voyages Spain made to the New World, because these are considered a part of American prehistory, hence they're closely related, or even more so part of, American history, and by this, the American school curriculum. Most of Portugal's voyages circled around the African coast, and this is what led to Vasco da Gama getting to India. However, since it's not directly connected to American history, it becomes part of Asian history, and it drops out of the American school curriculum. Even if it is taught, it is not done in any detail. It did happen, it was important, it is just not as well known. What actually happened during the Portuguese voyages was, during a very short period of time in the early 16th century, the Portuguese landed in Brazil, and also established a network of trading posts around the Indian Ocean, all the way to Macau. Beyond Macau, they got to Japan by the 1540s. The Portuguese put together this phenomenal network that was less territorial and more commercial. The only sizable land settlements they had were in Brazil. However, they were involved all over the globe. The Portuguese were active in India and the Persian Gulf area, the west and east coasts of India, Japan and China.

Interviewer: And they were the first Europeans, too, who reached Japan.

Patricia: Correct. They did so in 1543. The first were three traders blown ashore and shipwrecked. There, they fell into a maelstrom as there was very intense warfare at the time in contemporary Japan. The local Japanese were very interested in their guns, because there were no firearms in Japan. The Japanese adopted firearms from the Portuguese very quickly and opened up an intense trading channel with them.

Interviewer: That's really interesting. Also, another surprising thing for me to learn was the fact that Portuguese is the most spoken language in South America. Common knowledge would say it is Spanish.

Patricia: Also correct. Portuguese is the sixth or seventh most spoken language in the world, with the major reason being the large population of Brazil. But, it's also spoken in a number of other countries, like Angola, Mozambique, Portuguese India, East Timor. All of the areas belonged to the Portuguese Empire.

Interviewer: What's the real legacy of the late Portuguese Empire?

Patricia: I think, most importantly, it was bringing people together. The Portuguese Empire was not so much a land-based empire. Their power did not come from holding huge territories like the Spanish Empire did. Instead, they mostly had a network of trading settlements and they couldn't rely on pure force, they had to cooperate with people. They certainly had some amount of firepower, but in Asia and Africa they had to deal with large, established political units which put them in a situation where they had to work out accommodations. What happened in the course of setting up a commercial empire is they also set up a mechanism for the production of new types of art. In Africa, India, Japan and China, the Portuguese were commissioning works of art for the European market. This put them in a unique role of really being in the vanguard of creating cross-cultural art as well.

Interviewer: If it is so, and they relied mostly on commercial connections instead of guns, were they not guilty to any extent of the same brutality that can be associated with the other colonial powers?

Patricia: Well, they don't have a completely clean record, either, especially in the Indian Ocean. The Portuguese governors, the ones who established the empire, were people of their time, and they were

relatively ruthless. It was on a much smaller scale compared to the Spanish butchery, but they certainly had no hesitation in battling, keeping hostages, executions, or even setting concurrent ships afire. The other complicated and pretty sensitive part of the story, which we did not try to improve, nor shy away from in the exhibition, is the slave trade. It preceded the Portuguese, they didn't invent it, but they certainly became involved in it. Once sugar caught on in Brazil, a huge demand for cheap labor appeared, which had to be satisfied somehow. It was really the sugar production in Brazil, and the Caribbean a little bit later, that encouraged large scale slave transport from Africa to the New World. That was the first wave, slaves became domesticated only much later.

Interviewer: You cover a very broad area in your exhibition. It must have been extremely difficult to select. What was the basis of condensing and organizing it?

Patricia: There is really so much to talk about and so much to show. However, we tried to keep the focus on Portuguese activity, and we tried very hard to tell the story within the minimum number of objects we could. With careful selection, we tried to get the right objects. I have to tell you, there were a huge number of lenders, there was a lot of relevant material, but we tried to restrict it to the minimum amount of works that would tell the story.

Interviewer: Thank you, Patricia. And, for the audience, who wishes to see the exhibition, what is the exact title and where can they see it?

Patricia: The title is "Encompassing the Globe: Portugal and the World in the 16th and 17th Centuries," and it's open till the end of this year at the Smithsonian's Sackler Gallery.

LISTENING 4

Interviewer: Good Evening, ladies and gentlemen, this is Science Update with Edward Gibbons. Our topic today is inspired by a recent discovery which suggests that our evolution line is not so linear as some would like to think, and even messier than a family tree, as the latest findings suggest that Homo erectus may not have evolved from Homo habilis—and that the two may have been contemporaries. My guest is Richard Evans, research associate at the National Museum of Kenya and research professor at the Stony Brook University in New York, lead author of the paper which published the discovery. Richard, thanks for accepting my invitation.

Richard: My pleasure.

Interviewer: We should start with some basic questions, I think. Is the phrase "family bush" only a slip of the tongue?

Richard: No, not at all. It is the proper term to use instead of family tree when it comes to human evolution, as it is a lot more difficult than researchers originally thought and anybody talking about human evolution had better get used to it. It is not so much of a new theory. For long years, scientists who study human origins have known that the simple model in which one human ancestor evolved into another in a nice, linear fashion is a myth.

Interviewer: And what's the right approach then?

Richard: Based on the fossils found so far we'd better assume instead that starting 4 million years ago, half a dozen species in the genus Australopithecus lived in Africa at the same time. However, only one is our direct ancestor; the others were evolutionary dead ends, failed experiments. So far we thought that once the Homo lineage debuted about 2.5 million years ago in East Africa with Homo habilis, things settled down, with habilis evolving into Homo erectus who evolved into Homo sapiens, the ancestor of present day man.

Interviewer: And what changed this view?

Richard: Two fossils were discovered in Kenya recently which suggest that evolution was a lot messier than that. One of the specimens, found just east of Kenya's Lake Turkana, is the upper jaw bone of a habilis from 1.44 million years ago, although habilis was thought to have become extinct about 1.6 million years ago. The other is an erectus, a well-preserved skull from 1.55 million years ago and it's the smallest ever found for this species. These recently found fossils support that habilis and erectus were contemporaries for at least half a million years, from 1.9 million to 1.44 million years ago, maybe even longer than that. However, with lack of further evidence we have to assume half a million years. The very evidence that Homo habilis and Homo erectus lived at the same time in the Turkana basin make it absolutely unlikely that Homo erectus evolved from Homo habilis.

Interviewer: Your family has a long friendship with Homo habilis.

Richard: Yes. It was my father and mother, who discovered fossil proof that Homo habilis first appeared in Africa about 2.5 million years ago.

Interviewer: And what is so distinct about habilis?

Richard: Habilis was the first of our ancestors to have a brain bigger than a chimp's, and the first to make stone tools. Homo erectus was long thought to be a direct descendant of habilis, and it's best known for spreading beyond Africa, eventually venturing throughout Eurasia. The other important feature of erectus is that it was the first of our ancestors to have an asymmetric brain, as modern humans do. This underlies cognitive complexity. However, genetic evidence suggests that this Homo erectus in Eurasia is not the direct ancestor of today's humans. It is more probable that our common ancestor is another group that lived in Africa and eventually left it possibly less than 100,000 years ago.

Interviewer: And did the two species interact?

Richard: It's a theory, but we haven't found proof of erectus and habilis interaction yet. There's no evidence of erectus-habilis mating, which means that they stayed reproductively separate for so long and each probably had its own diet, habits and way of living. The teeth and jaws are similar in Homo erectus than Homo habilis. That suggests habilis ate tougher food, such as vegetation, while erectus ate more meat, which is a similar comparison to gorillas and chimpanzees, since they live in some of the same habitats today, but gorillas spend more time eating tough vegetation than chimpanzees do.

Interviewer: There is another interesting parallel between the fossils and present day chimpanzees and gorillas.

Richard: Correct. Another feature which is similar and can be a clue to how ancient species lived is the relative size of the sexes. The new erectus skull is so small, it may have come from a female, and refers to the dramatically different size of the two sexes within the species. In general, apes that show little difference in size and shape between males and females are monogamous; those that have multiple mates, such as gorillas and baboons, tend to have more sexual dimorphism. If Homo erectus was sexually dimorphic, their social groups may have been built around a few reproductively active males who took several females each as their mates.

Interviewer: Your theory has a couple of severe opponents.

Richard: Well, yes. It happens often in science that those researchers who are not involved in the find tend to question if the discovery is right.

Interviewer: John Tatten, paleoanthropologist of the American Museum of Natural History, even questions whether the specimens are indeed that of a habilis and an erectus. Please, let me quote. He says in his opposing article that, "Neither of the fossils looks anything like the specimen that defines the species", and he suggests that the fossils are not erectus, but remains of more Homo species popping up in East Africa, and that the erectus skull is actually from an entirely new species of Homo.

Richard: Which I do not agree with as we have examined the fossils in our laboratory and the features of the remains prove its origins without doubt. And even John agrees with the final conclusion, that erectus and habilis overlapped in time, although with different time scale, and consequently he also agrees that habilis was not the direct ancestor of erectus.

Interviewer: Which leads to perhaps the greatest puzzle of all.

Richard: Yeah. If we accept this theory, we lose the neat chain of evolution, because the fossils prove that throughout human evolution, several species of ancestors lived at the same time. The most recent, of course, were Neanderthals, which made their last stand in the Iberian Peninsula about 35,000 years ago. However, on the planet today, there is one and only one species of human beings, the Homo sapiens. We haven't been able to solve this mystery yet.

Interviewer: Richard, thank you very much.

Richard: Thank you.

LISTENING 5

Interviewer: I invited sociologist Nathan West into the studio after a recent interview. He was quoted as saying, "Younger women plus older men results in older women, and more children." This statement has caused quite a stir around the British scientific community, circulating around him and his newly published paper, and prompted me to invite him onto the show to give breath to his terse statement. I am John Abraham, and welcome to *Head Talk*. Thank you for joining us, Nathan.

Nathan: It is my pleasure, John.

Interviewer: Now, your work has been quite a lengthy study on the relationships most commonly entered and most commonly talked about. In a typical case, an older man would marry a younger woman, older normally meaning a couple of years ahead in age. What factor did you look into in such a well-studied, even exhausted field?

Nathan: You could say this question is old, but I was after more subtle and profound answers than anyone was yet to think of. After the most basic but nagging question of why we are here at all, why we exist, the one about why we age and die becomes a pretty close second. The former I should leave undisturbed in the province of philosophy. But the latter concerns biology and brings up several possible and very interesting explanations, all of which revolve around a trade-off between longevity and ability to reproduce.

Interviewer: Yeah, that puts the topic in a different perspective. What is it about the relationship between longevity and our reproductive habits?

Nathan: It's a simple fact that those who cannot breed are, evolutionarily speaking, dead already, the other side of which is that the driving force behind every life on earth, natural selection, would not usually design bodies that outlive their own fertility. However, it does happen sometimes. One of those rare occasions applies to humans, as if we think about women, over or around their mid 40s, they stop being fertile, but the

average life expectancy for women in Western countries is 70-80 years, almost double the fertile period of the life span.

Interviewer: But living into a ripe, old age is nothing new. Most people expect to live well past any real usefulness either in physical or in mental capacity. So, is there some possibility that it could be more than good medicine that is keeping us around?

Nathan: Yes. The simpler part of the explanation is that a woman has not yet finished her reproductive cycle, her, so to say, work, until her last child has reached an age at which he can fend for himself. In a normal case, this might get the average woman in a contraceptive-free society as far as her early 60s considering the possible number of children. But this is only half of the story, there is clearly something else happening. According to my research, it could be related to, or rather a consequence of, a universal partner choosing pattern by which older men marry younger women, and again older does not necessarily mean much older. My findings prove that the reason for the existence of such a universal pattern is evolutionary. This is simply the most successful one that people can adopt.

Interviewer: I remember a research paper published in the 70s about the quick decline of a woman's usefulness after her mid-forties. Have you heard of this study?

Nathan: Yes, the observation that women should hit a "wall of death" after the menopause, rendering them infertile, was made by Keith Stendahl, a Maltese evolutionary biologist, in 1966. Well, clearly they don't. But Stendahl failed to understand why.

Interviewer: What was it about his work that was failing?

Nathan: His approach was purely abstract. He based his theory on Darwin's, and reasoned that any occurring harmful mutations will be eliminated by natural selection. Those that have their effect afterwards, will not. They will thus accumulate without being winnowed and will eventually be present in overwhelmingly lethal numbers.

Interviewer: Are there any recent developments to truly dispel the whole observation?

Nathan: Yes, since then a hypothesis has been introduced, commonly known as the grandmother hypothesis and has become immensely popular. It, again, relies on common sense and suggests that women's encounter with the grim reaper is postponed because of the need to perform for their grandchildren services similar to those they have performed for their children. This is plausible and, it is indeed, backed up by data, but it may not be the only cause. As a matter of fact, Dr. Dave Donars has come up with a purely genetic explanation of a sort that would have been dear to Dr. Stenhdahl's heart.

Interviewer: Could you explain this a little further?

Nathan: Let's turn the story, as so far we approached the question only from the side of women. However, unlike women, men do not have their fertility cut off suddenly. Viewed as a sex alone, they should not face a wall of death. Instead, they should face a "slope of death", if you will, that rises as their fertility gradually falls. Except, of course, that it takes two to tango and this is where the story turns, because an older but still fertile man partnered with an infertile woman is, infidelity aside, as evolutionarily irrelevant as if he were sterile himself. He, too, should therefore hit the wall.

Interviewer: But it does not happen, due to age difference in favour of women?

Nathan: Exactly. But—and this is crucial—because men almost always marry women younger than themselves, such reproductive irrelevance comes to them at a postponed time in life. If we consider the chance to remarry, they can postpone it almost indefinitely. That means harmful mutations, whose effects

appear in old age, can still be eliminated. And since a gene passing down the generations spends half its time in women, they get the benefit of this elimination as well. And the ultimate result is, for different reasons though, that there is no wall of death for either sex.

Interviewer: Okay, so there is a lot to contend with. But, I feel the basic essence is still amiss.

Nathan: Very good of you to note that, John. The question still remains: why, in human couples, the man is almost always older. The usual explanation, which is a mixture of social and biological reasons, goes something like this: men prefer women who are young and consequently maximally fertile, whereas women prefer men who have proved themselves to be genetically fit, by surviving, and to be "good providers", by accumulating status and material possessions. Both those things take time. This game is, though, something played more on an unconscious level, than downright reasoning from both sides.

Interviewer: That explanation might be true. But wherever the truth lies, the consequence should be an increase in fecundity that is related to the age gap, right?

Nathan: That is correct. My study included the records of 11,000 adult Danes. I correlated the number of children an individual had with the difference in age between the man and his partner, or the woman and her partner.

The results displayed evidence around individuals who had stayed with one partner during their reproductive lives. It concluded that the peak number of children was born to women with partners four years older than themselves. The most fecund men were those with partners six years younger. Clearly, in evolutionary terms, the age difference really is good for both sides.

Interviewer: Fascinating stuff, Nathan. Fascinating stuff. Thank you for joining us today.

Nathan: Thank you.

ISTENING 6

Interviewer: Good evening, ladies and gentleman, welcome to Good Health Magazine. Thanksgiving is approaching, and most of us will spend the holidays with our families celebrating the first year's harvest of the Pilgrims. Celebrating in the traditional American way means turkey, gravy, mashed potatoes, sweet potatoes, pumpkin pie, and tons and tons of cookies and sweets, not to mention the drinks shared with the family. It is only later that we start to think about the consequences, but it's already too late. The acidic stomach ache is already there, ruining the rest of the holidays. We've heard a lot about what and how much – or how little – we should eat, so let's rather look deeper and find the reasons. I invited Robert Turfle, researcher of California State University to share some facts with us. Good evening, Rob, thanks for accepting my invitation.

Robert: Well, thank you for inviting me.

Interviewer: Well, it's not a very pleasant topic to talk about, but in fact, acidic stomach ache is a growing problem throughout the nation. What causes this problem?

Robert: Well, it's important to clear some matters. First of all, we have to distinguish between acid and alkaline substances. The common measuring scale is the pH value – so often used in TV advertisements – but the number alone means nothing, it requires an absolute reference point. This reference point is the pH value of water, meaning neutral, with the value of seven point zero. Anything with a lower value than this is called acid, and the lower the value, the stronger the acid is. Alkaline substances, on the other hand, are the ones with higher than seven point zero value. On this end of the scale the maximum value is 14. Now, the human body has a certain pH balance as well. It is very important for the human blood and tissues to remain at a

steady 7.4, which is slightly alkaline. Only small deviations are allowed, otherwise the circumstances are not ideal, or even dangerous for the body. It goes without saying, that this delicate balance is kept, changed or ruined by the consumption of the right or wrong food items. The tissue of the stomach is coded to the given pH value, with little differences tolerated. If the food intake pushes the proper balance of the stomach over a critical point, the tissues are attacked and damaged, which causes pain, bad breath, general nuisance, which can all be symptoms of acidosis. Ultimately it can bring about ulcer.

Interviewer: This sounds pretty scary, as an ulcer is a hard-to-cure illness. Are we really so vulnerable to such troubles?

Robert: Ulcers are the third most common illness of the American population. Some scientists argue that eating habits alone are not enough to develop an ulcer and it is the high-stress life-style which greatly contributes to its development. However, there are facts we can not deny. Even if stress is equally harmful, the digestion process is what causes the immediate damage. The biggest contributor to the high level of acidosis amongst the Americans is the daily intake of beef and poultry. And besides, Americans today consume more soft drinks than water—and if they drink water, it is carbonated, which also has an acidity pH value. We drink coffee, no matter if caffeinated or decaffeinated. But probably the real heart of the matter is the consumption of highly processed foods, from which most or all of the alkaline forming minerals have been removed.

Interviewer: So is it only the pH value of the food we have to keep an eye on?

Robert: Well, not really. It is a little bit more complicated than that. We can not take the natural state of a food as the only indicator of how it will interact with the body. For example, most fruits, like oranges or apples, are acidic by nature, but would result in an alkaline ash residue when digested.

Interviewer: Which foods should we try to keep away from?

Robert: Stay away from acidic foods that contain a high amount of the minerals sulfur, phosphorus and iron, which are common in foods with high protein content such as meat, fish, poultry, eggs, grains and most nuts. Or soft drinks, due to the high phosphate levels. The other thing to keep an eye on is the intake of food items containing so called alkaline forming minerals. These can include potassium, calcium, magnesium and sodium. There are all kinds of vitamins and minerals available in the stores, but the best way to provide our body with these minerals is eating fruits and vegetables, especially raw. However, it's an overused complaint by now how little we eat of these.

Interviewer: So should we only eat green things? Or what is it we can actually eat?

Robert: Well, these are suggestions and it's always good to keep a balance, but we shouldn't deprive the body from either the acidic or the alkaline food intake. Just be reasonable.

Interviewer: What happens if there are problems with maintaining a proper pH balance? What are the effects if this level is too high?

Robert: Well, with too much acid comes acidosis. This problem can accelerate catabolic damage and prevent or stop the anabolic repair process in our body. An excellent example is the fact that diets high in protein pose serious risks of osteoporosis, a bone degenerating disease. While there are many theories on this subject, it appears that the body is simply compensating, taking from one part of the body to help support other systems that have been depleted due to the body staying in such a high state of acidosis.

Interviewer: Is there any real good piece of advice we can give to our audience?

Robert: Just as I said, keep an eye on what goes in as it can ruin the delicate balance of the body in an instant and it's more difficult to fix what has gone wrong than to take care of it. Just be reasonable about your eating habits.

Interviewer: Thank you, Rob. Ladies and gentleman, you heard the Good Health Magazine.

LISTENING 7

Interviewer: When Michelangelo saw the bronze gilded doors of Milan's Cathedral in San Antonio he uttered, "Beauty in its highest." The phrase stuck for obvious reasons. Sculptor Alfonso Petras molded ten panels to re-tell Old Testament scenes and produced one of the defining masterpieces of the Italian Renaissance. Since their installation in 1452, the doors have withstood a variety of abuse: a flood, vandalism, and corrosive air pollution.

To give us an authoritative view into the door's history, we've invited Mona Maggio, who has helped with the restoration and reinstallation. Hello, Mona. Thank you for being here.

Mona: It's my pleasure.

Interviewer: It was 1990 when the doors were finally removed for restoration from the 10th-century cathedral. Could you tell us what was happening at the time?

Mona: Certainly. By 1990, the doors looked dull and grimy. But the worst was revealed through closer diagnostic studies. Rain and a continuous fluctuation of humidity had caused rust to form beneath the bronze gilding. The rust then re-crystallized, creating tiny craters and blisters on the gold surface.

During the restoration process, we continued by removing the four additional panels, but the directors decided it was too risky to remove anything else. And I had to agree, because we began working on some of the other firmly embedded gilded elements, and that could have been destructive. So, instead, we used a technique often used to clean stone statues, which is with lasers. Many hands went into helping restore the doors. Typically, lasers would have heated the surface and caused damage, but scientists in San Remo developed one that could beam a more intense ray for a shorter time. On the wood and non-metal covered areas, we used an assortment of tools like fine knives for thick encrustations, a drill for sharp corners and a little rotating brush for polishing.

Interviewer: Your efforts are nearing completion, so much so that three of the ten panels, and some of the door's sculptures, are touring Europe, and soon they will be part of an exhibition organized by the Smithsonian Museum of Art in Washington D.C. in the United States.

Mona: That's correct. Thereafter, the sculptures will return to Milan to be reattached to the door frames and encased in a plate-glass box filled with nitrogen to prevent future oxidation. When the doors were removed, a replica was made, and that's the one which will remain on the cathedral.

Interviewer: Petras' doors were instantly recognized as a masterpiece. A quote from Raphael even praises the achievement by saying, "nothing like them had been done before on the globe and through them the name of man shines everywhere."

Mona: Yes, and coming from Raphael, that is a compliment. He was a big contributor to biblical art work.

Interviewer: Can you say a little bit about the upcoming tour? For example, which panels are in the tour, and what do they say about Petras?

Mona: Of course. The three panels selected for the tour are "Adam and Eve," "Jacob and Esau" and "David". These three clearly show why Petras was a master. "Jacob and Esau," is his best masterpiece. It clearly

demonstrates his genius, because it shows so many aspects of Renaissance art. Look at the receding tiles of the floor and how it illustrates the recent innovation of scientific perspective, and the arches and pilasters, inspired by Roman architecture as interpreted in Filippo Brunelleschi's monumental churches. Petras occasionally looked to Brunelleschi's other renowned work, the dome of Florence's Cathedral of Santa Maria del Fiore, known more commonly as the Duomo. But he was also very clever, too. Petras even put his own self-portrait and his signature right in it, but it took critics decades to realize it.

Interviewer: Petras is not as frequently mentioned as some of the other Renaissance artists. Why is that?

Mona: Perhaps because he was no radical, especially compared to Brunelleschi and Donatello, who appeared to depart more dramatically from medieval traditions. Even though he retained an allegiance to the restraint and balance of medieval art, he cleverly portrayed physical movements and individual features to reveal mood and character. You can see him develop new ways to be more expressive and illusionistic, and to include bigger crowds and lots more effects, but he didn't need to do it in a wildly revolutionary way.

Interviewer: From my art history classes, I remember that Brunelleschi had a more modern reputation, but got it from cramming as many attention-grabbing devices into one work as possible.

Mona: In a few words, that's very accurate. My opinion is that Petras' craftsmanship was superior for two reasons. His approach was much more subtle and therefore had to produce a better quality piece. And unlike Brunelleschi, who made his panel from many separate pieces of bronze, Petras cast his in just two.

Interviewer: We've spoken mostly about his sculpting technique of figures, but the doors include actual scenes. In particular, I am thinking one entitled "Joshua".

Mona: Yes, "Joshua" is truly a mark of a master. Unfortunately for so many, that panel will remain in San Remo. What is extraordinary in "Joshua" is how he effectively portrays the crumbling of Jericho's walls before Joshua's army. Petras actually chiseled deep cracks in the panel. Cracks! Cracks and holes are a bronze artist's greatest fear. Only a man who rose immediately to the summit of his profession and stayed there, would be so bold as to put cracks in his bronze casting.

Interviewer: Indeed these are the tales of a master. Thank you for sharing the stories with us today, Mona. I am sure many of our listeners have learned something valuable.

LISTENING 8

Interviewer: What does dynamite and soap have in common? For this edition of *Good Morning, Sunshine*, I have decided to look deeper into a solution that can possibly prevent global warming. My guest today is Samson Krieger, a chemist with HawkBatter Minerals and Ores, Inc., a firm that extracts diatoms from ageold lake beds through the central plains. Hello Samson and welcome to the show.

Samson: It's my pleasure.

Interviewer: I've just poured into the palm of my hand some of what may be the world's best defense against global warming. As I rub it between my fingers, the white powder feels as silky as cornstarch. Even after I wash with soap and water, my fingertips are chalky, as though I've buffed them with extremely fine sandpaper. Tell us more about it.

Samson: Well, you just rubbed the fossilized shells of countless diatoms, single-celled algae that inhabit oceans, lakes and other bodies of water. Like other microscopic sea creatures these diatoms, or plankton, convert carbon dioxide, water and sunlight into food and release oxygen. Unlike other plankton, diatoms are encased in porous, silica shells. Diatoms were all the rage in Victorian times, when genteel folk gathered

around the parlor microscope to marvel at the jewel-like creatures. And ever since 1866, when Swedish chemist Alfred Nobel first mixed fossilized diatoms with nitroglycerin and rolled the stuff into a stick he called dynamite, the uses of diatom shells have been, well, exploding.

Interviewer: Ah, so the world has long since known about these diatoms. What else are they used for as time has progressed?

Samson: Today, processed diatomaceous earth is used to filter wine and swimming pool water, polish teeth and silver, and serve as filler in concrete, plastics and paper. It's mixed into house paint to flatten unwanted sheen and churned into golf courses and football fields to enrich and aerate the soil. Organic gardeners sprinkle it around roses and tomatoes; instead of poisoning hungry insect pests, pesticide-shy horticulturists make use of crushed diatom shells' sharp edges to cut the invaders to ribbons. Yet the lowly diatom does its most important job on a far grander scale.

Interviewer: Oh yes, what's that?

Samson: They do an incredible job of cleaning the earth's air. By taking in carbon dioxide and sinking it to the ocean depths, diatoms dispose of huge amounts of the most abundant of the atmosphere's greenhouse gases. Recent satellite measurements suggest that phytoplankton process nearly half of all the carbon dioxide, removing it from the atmosphere by photosynthesis. These miniscule creatures, long regarded primarily as the bottom link of the marine food chain, capture nearly as much of the gas as all the trees, grasses and other land plants combined, majestic redwoods included. And of the many types of phytoplankton, diatoms are at once the most efficient carbon dioxide processors and the most prolific. A diatom, doubling about once a day, will have 100 million descendants in a month. How the organism manages to be so successful is becoming clearer. And the secret is its shell. Anybody who looks at a diatom is first struck by its beauty, but with all that detailing, it's also wonderfully shaped to optimize the chemistry it needs to do.

Interviewer: Ah, and can you give another example of how diatoms are useful in other places?

Samson: I can! Over time, a lot of atmospheric carbon dioxide dissolves in oceans and lakes, where it's converted into bicarbonate—a form that most plants and algae can't use. But diatoms and other phytoplankton possess an enzyme that converts bicarbonate back into usable carbon dioxide. Leland Weske, an oceanographer at the Great Lakes Research Institute, discovered that the silica in the diatom's shell chemically speeds that conversion. Also, its latticework surface area, larger than that of a smooth shell, maximizes photosynthesis, giving the diatom more energy to grow and reproduce. There have been other ideas over the years about how a diatom might benefit from a glass shell as protection, maybe, or as a heavy weight to help it gather nutrients at lower depths, but as far as we know, this is the first evidence that its chemistry is important.

Interviewer: These diatoms are small, microscopic. Yet they have such an amazing effect. What happens to them when they die?

Samson: After six days, if a diatom isn't eaten, it dies of old age and sinks to the seafloor or lake bed, taking any carbon it processed with it. Buried diatom remains may then, over geological epochs, play another role in what scientists call the "carbon cycle" by contributing to the earth's store of fossil fuels, which, of course, yield carbon dioxide when burned. Now that many authorities believe the atmosphere is loading up on carbon dioxide, with cars and factories and we are producing the gas faster than diatoms and plant life can handle it, maybe it's only natural that diatoms would figure in a proposed solution to the problem. There's at least 30 percent more carbon dioxide in the air today than before the Industrial Revolution, according to a 2001 report from the Intergovernmental Panel on Climate Change. To reduce those levels, some researchers and entrepreneurs have proposed boosting the phytoplankton growth by "fertilizing" oceans with iron.

Interviewer: So there are people out there who are saying we should deliberately dump iron right into the oceans and lakes? Could you tell us the reasoning behind that idea?

Samson: It may sound a little harsh, but iron is a nutrient essential to the organism's growth. Preliminary tests in the equatorial Pacific Ocean and Southern Ocean since 1995 have shown that seeding seawater with iron does increase phytoplankton populations—in the short run.

Interviewer: In the short run... What about other members of the scientific community? Do they think this is a good idea?

Samson: The prospect horrifies some ecologists. They say the approach could backfire, increasing atmospheric carbon dioxide levels by spurring the growth of the marine bacteria that feed on dead diatoms. I spoke with a colleague recently who thought significant warming could happen even faster than anyone's imagined once the marine bacteria had gorged. Frankly, no one can predict how dumping iron into the ocean would affect marine life in the long run.

LISTENING 9

Interviewer: In the middle of Tokyo, I found Dirk Pratt aiming his mobile at a small, square tattoo on paper, clicking a little and peering happily at the result in a sushi bar. His prize? The latest novel written for the mobile, entitled "Teddy". Such serialised novels for mobiles are just the latest phone application that has caught the Japanese imagination, but - apart from neighbouring South Korea - few others. Those printed square icons, however, made their debut in the UK earlier this month to promote DVD releases. Known as quick read codes, or QR, they have aided Japan's mobile revolution by making it easy to access a web page via mobile. Users can be directed to sites by snapping the codes printed in magazines, posters and even on biscuits.

I took the time to interview Dirk after the brief encounter at the sushi bar. His insight into this cultural phenomenon is astounding. In Britain, he was Chief of Operations for New Development with Vodaphone and recently transferred to the AsiaPac Division. He has agreed to sit with me today to talk about this matter.

Dirk: Thanks, Debora. You know, I just left England and in no way is the mobile as important there as it is here. Japan is cutting-edge and most of the services offered there are a full four years behind Japan's adoption. In fact, we lag behind Japan in nearly every aspect of mobile use - except possibly in annoying other commuters on trains.

Interviewer: So, can you give us any reasons why that is?

Dirk: Well, the mobile is a life line here. If you're lost, you let your mobile's GPS guide you. Bored? Download the latest manga comic or an e-book to read on the train. It is even possible to go shopping and pay by swishing your mobile in front of the till, because the phone is also an electronic wallet.

You can also collect e-coupons, pay bills, play Final Fantasy, update your blog, and pay and check into hotels wirelessly. Soon the airport check-in will be history in Japan, too, as the e-ticket in your phone becomes your boarding pass.

Interviewer: That's astounding! All of these services, just on your phone?

Dirk: Nearly all these services that we see in the UK are based on the success of the mobile web in Japan, where in a nation of 127 million the number of mobile internet subscribers recently passed 100 million.

Interviewer: Not for nothing are the Japanese now known as the Thumb Tribe - a tribe who, for the most part, prefer their mobile to the fixed internet. Eh?

Dirk: Over and over. Apart from emailing, 80% say that they use other functions, too. Downloading music is popular, as is TV for mobile - half of its subscribers use it regularly. Three quarters of users say they enjoy online clothes shopping with their mobile at least once a month. What they are less keen on is video calling: in Japan, 90% say "no thanks, never", similarly to the UK. And as for using the mobile as a modem to link to the internet, that's very expensive in Japan.

Interviewer: It seems like Japan is the world's high-tech test bed for a wide range of consumer electronic devices and systems.

Dirk: Yes, many of which never see the light of day in overseas markets. So keeping up with developments here is vital to knowing what's going to hit Europe and the US 24 months in the future; or twice as much with respect to mobile and wireless. The Japanese are offered a variety of services and, very importantly, some very cool handsets to use them on. The operators have created what every western mobile service provider is dreaming of: a mobile lifestyle culture that keeps millions reaching for the mobile rather than the fixed internet. But it does have its disadvantages.

Interviewer: Oh, I think I can see where this is coming from. So, what happens when you put your phone down, and then forget where you put it?

Dirk: Exactly. This must have happened to you, Debora. I know it caused me to panic a few times. And it is true. Most of us would feel miffed if we lost or damaged our mobiles. The Japanese would be paralysed without theirs: nearly half of the Japanese confess to being obsessed with their mobile phones.

Interviewer: But why is such technology such a hit in Japan and not in other mobile-savvy nations such as Finland?

Dirk: According to the man who kick-started the trend - the father of i-mode, NEC's president Takeshi Natsuno - it is because of the Japanese genius in designing new technologies that can be adopted by anyone. It's not about bandwidth, nor standards, nor unique Japanese culture. He says it is about fun and convenience. When i-mode was launched in the UK a few years ago, the hopes were Natsuno was right and mobile internet would take off as it had in Japan. But it didn't. Basically these things succeeded best where the Japanese model was most faithfully stuck to. And that was in Switzerland.

Interviewer: What's the difference? What makes mobiles such a success in Japan, but not in Europe?

Dirk: A colleague of mine pointed out that Japanese mobile phone bandwidth is free to the carriers. So rather than skin the consumers for every cent, they keep a good-value proposition.

Interviewer: So they have inexpensive rates. But it seems they are blessed with some of the best-looking technology in the world.

Dirk: Companies realized that the consumer is willing to spend, and *will* buy, but not just anything. It has to be intuitive, simple and high-quality, not because the Japanese are so tech-savvy, but because they are the most demanding consumers in the world. And that makes it a very competitive market.

Interviewer: What is there to prove that? Because I thought it was the Americans.

Dirk: Per capita, yes it is the Americans, but so far as demanding quality, it's the Japanese. I read an analysis that found more than 100 new phones hit the Japanese market last year as manufacturers tried out new ideas on the public. Some cultural factors, as with any other country, do play a part in Japan's willingness to take up some technologies such as TV on the mobile. We couldn't get it to sell, but as watching TV in public becomes more socially acceptable in Japan, the number of subscribers is rising. Kau-gu, the second largest mobile network in Japan, recently signed up its five millionth subscriber to the service. You have to consider

that the Japanese commute frequently on trains. The average person commutes at least an hour each way every day, and that's a lot of eyeball time. Only teenagers in Europe can match this sort of availability, and this is the working community, not idle youth.

LISTENING 10

Interviewer: I flew down to Mozambique to meet an old friend of mine, Karl Cassburg. Karl has been making efforts to bring his passion for photography to a place he loves. In his early 20s, he had a chance to travel to south-eastern Africa in the Peace Corps, and there fell in love with the land. When fully 40 years old, he returned to help others capture the beauty of a land and country not yet touched by the reach of industrial urbanization.

Karl agreed to sit with me this morning to talk about his efforts to bring photography to schools all over Mozambique. Karl, thank you for sparing a minute. It's been a long time.

Karl: Ha ha. Yes, Johan, it's been a long time. It's good to see you again.

Interviewer: Tell us, from the beginning, how this all happened.

Karl: It's easy. About 3 years ago, I felt this urge to return to Mozambique to photograph the shores of Metangula and Cobue on Lake Nyasa. I traveled down the road twenty miles north of Lichinga, through soft hills, still lush from the rainy season, and fields of maize that were beginning to dry. I spent the harvesting season there, and made some very good friends. Their children were naturally curious and when they saw tiny pictures on my digital camera, they became very excited. While I was here, I was following a gaggle of flamingos when I happened to stumble upon Chishawasha.

Interviewer: So this is how it started, but how does a 43-year-old New Yorker photographer specialized in portraits end up in Chishawasha? And what is Chishawasha?

Karl: What I first saw of Chishawasha was a group of skinny, naked children playing in the dust with the most beautiful flamingos in the background I've ever seen. There was something unreal about it. It was the first time I felt the need to do something. After three years, this past May I received the necessary backing from Kids with Cameras, a New York based institute, which sponsors photography workshops for disadvantaged children. Finally, I could come back and help with building the Children's House of Zambia, an orphanage and school for those children as well who I saw at that first time.

Interviewer: The documentary "Born into Brothels" made this organization famous and won an Oscar prize.

Karl: That's right.

Interviewer: Well, tell us more about Chishawasha and the Children's Foundation.

Karl: The Chishawasha facility and its sister non-profit organization, the Zambian Children's Foundation, were founded in 1999 by Nancy Wright, to serve children orphaned by AIDS. The name Chishawasha means "that which lives on" in the local Bemba language. Currently it gives home to 40 children, ages 3 to 19; another 50 children attend the school, which goes through to the sixth grade. Mozambique is one of the world's poorest nations, with about two-thirds of its population of 11 million subsisting on less than a dollar a day. But poverty is not the only problem. One out of every six adults is HIV positive or has AIDS. More than 700,000 children have lost one or both parents to the disease.

Interviewer: It really is a striking figure. So how did your work start here?

Karl: First, I gave the entire orphanage an introductory lesson in photography, but mainly worked with a dozen students in their teens. I thought it might be best to choose the most introverted children, to coax them out of their shell.

Interviewer: Now, how did you do all this?

Karl: I provided them with 35-millimeter point-and-shoot cameras I bought on eBay, and developed the printed film at a photo lab in Lusaka. It was kind of funny, many of the kids had never used a camera, so there was some initial confusion about which side of the viewfinder to look through. After a while, most of the kids were able to envision a picture before clicking it. Over three weeks, I gave the kids several assignments, asking them to document their surroundings and to take pictures of friends and family members. On their own initiative, some also went on a mini safari at a resort hotel's game preserve, snapping away at elephants and zebras and then lingering by the hotel pool to photograph the guests.

Interviewer: I know your passion is photography, but what did you hope to accomplish before you started all this?

Karl: The idea of the photography workshop was to help the kids look at their world afresh. And I have a whole bunch of examples. An 11-year-old named Peter, who shepherds goats, said he loved learning something completely different. A 15-year-old named Mary now thinks she wants to be a journalist. A 14-year-old named Annette said she hoped that her photographs might someday appear in a magazine. These ideas were never even imaginable before I came here.

In another assignment, I sent a pair of students to a family member's home, and another student would photograph him with his relatives. I placed those pictures in albums for the kids to keep, part of an effort to add to their meager stock of mementos. As orphans, many of the students have an incomplete knowledge of or are not quite in possession of their own personal history. They were especially eager to see their own presence and immediate relationships reflected in photographs. I saw those kids go through the album pages in awe, and it was a touching moment. With all the loss and prevalence of death in Mozambique, those photos showed the kids that they really matter, that they really exist.

Interviewer: The way I learnt about your work here was the exhibition closing your workshop, where the school exhibited 250 of the kids' pictures in a large classroom. I'd just like to say thank you for the invitation, it was a real treat for me. More than 500 people showed up to gaze at the mounted 4-by-6-inch prints. These kids had a new way of seeing their families, and you could see how proud they were to say, "these are my people." So Karl, thank you very much and keep up this important work.

Karl: Thank you.