CONHECIMENTOS ESPECÍFICOS

Art and beauty have long been intertwined. At times, the artist has looked to nature as the standard of beauty and has thus imitated it. At other times, the artist has thought to improve upon nature, developing an alternative standard — an idealized form. Standards of beauty in and of themselves are by no means universal. The Classical Greeks were obsessed with their idea of beauty and fashioned mathematical formulas for rendering the human body in sculpture so that it would achieve a majesty and perfection unknown in nature. The sixteenth-century artist Leonardo da Vinci, in what is perhaps the most famous painting in the history of Western art, enchants generations of viewers with the eternal beauty and mysteriousness of the smiling Mona Lisa. But appreciation of the refined features of this Italian woman is tied to a Western concept of beauty. Elsewhere in the world, these features may seem unattractive or undesirable. On the other hand, the standard of beauty in some non-Western societies that hold body painting, tattooing, and adornment both beautiful and sacred may seem odd and unattractive to someone from the Western world. One art form need not be seen as intrinsically superior to the other: in those works, quite simply, the

DK publishing. Art that changed the world, Londres, 2013, p. 26 (adapted).

Judge the following items according to the text above.

61 The author used the expression "On the other hand" $(\ell.16)$ to connect two different ideas.

perception of beauty varies from an individual to the next.

- **62** "non-Western societies" (ℓ .17) and "Elsewhere in the world" (ℓ .15) refer, in the text, to basically the same thing.
- No change in meaning will occur if "need not be seen" $(\ell.20)$ is replaced with **must not be seen**.
- 64 The author tries to convince the readers that the standards of beauty are the same throughout the world.
- **65** In the fragment "Standards of beauty in and of themselves are by no means universal" (ℓ.5 and 6), the expression "by no means" is the same as **not at all**.

Odds are you carry DNA from a Neandertal, Denisovan or some other archaic human. Just a few years ago such a statement would have been virtually unthinkable. For decades evidence from genetics seemed to support the theory that anatomically modern humans arose as a new species in a single locale in Africa and subsequently spread out from there, replacing archaic humans throughout the Old World without mating with them. But in recent years geneticists have determined that, contrary to that conventional view, anatomically modern *Homo sapiens* did in fact interbreed with archaic humans, and that their DNA persists in people today. The University of Arizona in Tucson examines the latest genetic finding and explores the possibility that DNA from these extinct relatives helped *H. sapiens* become the wildly successful species it is today.

I have an enduring interest in the rise of *H. sapiens* and I am fascinated with Neandertals. So naturally I've been keen to find out how much, if any, Neandertal DNA I have in my own genome. Several consumer genetic test companies now test for Neandertal genetic markers as part of the broader ancestry analysis, and, after one of them lowered the price of their kit to U\$ 99 in December, I decided to take the plunge. As it happens, *National Geographic*'s Genographic Project had recently updated their own genetic test to look for Neandertal DNA, and they sent me a kit. And so it was on a chilly Saturday in late January that I found myself spitting into a test tube for a test company and swabbing my cheek for the Genographic Project.

Of course the two tests look at far more than one's Neandertal ancestry. The company provides a wealth of health information, testing for variation in DNA that might affect disease risk and drug performance as well as mutations that could cause disease in one's children. Genographic's test does not look for health information. Both tests trace one's maternal lineage (and paternal lineage, for males) to beyond 10,000 years ago and reveal what percentage of one's recent ancestry comes from various regions around the world.

Finding my inner neandertal. *In*: Scientific American, April, 2013, p. 5-7 (adapted).

Judge the items that follow based on the text above.

- "that conventional view" $(\ell.9)$ refers to the theory that modern humans came from just one single place in Africa.
- 67 The fragment "in recent years" $(\ell.8)$ is chronologically connected with "a few years ago" $(\ell.2)$.
- The verb form "did" in the fragment "*Homo sapiens* did in fact interbreed with archaic humans" (ℓ.10 and 11) was used to express an indirect question.
- The word "So" $(\ell.17)$ provides a linking between two ideas and it means **because of this**.
- 70 "if any" (ℓ .18) refers to the possibility that there is no Neandertal DNA in the author's genome at all.
- The text is narrative, as shown in its first paragraph.

Most people agree with the definition of good health as being a state in which you are free from sickness. Despite this, there are many different opinions about how a person can actually have good health. People used to think of their health only when they were sick. But these days more and more people are taking measures to make sure that they don't get sick in the first place. I will describe now a few of the most common things that you can do to stay healthy.

One of the best things you can do for your body is exercise. But how much is enough? Some people think that doing simple things like cleaning the house are helpful. Other people do heavy exercise everyday such as running or swimming. One thing experts do agree on is that any kind of exercise is good for you.

Along with exercise, having a healthy diet can help promote good health. Foods like vegetables and fruits should be eaten several times each day. It is also important to eat foods high in fiber such as beans, grains, fruit and vegetables. Avoiding foods with a lot of sugar, salt and fat is a good idea. Eating these kinds of foods can lead to a variety of health problems, the main one being obesity which means having so much fat on your body that you are risking your health.

In today's modern world, we all have some level of stress in our lives. Money problems, work and relationships with other people can all cause stress. It can also be caused by good things like getting married or moving into a new house. The important thing to remember is that you can never completely remove stress from your life. It will always be with you. Instead of trying to get rid of stress, people need to be aware of what causes them stress and find ways to reduce the impact that stress has on their lives.

Good health. *In*: Internet: www.eskreadinglessons.com (adapted).

Based on the text above, judge the following items.

- 72 Stress can derive from tragic or frustrating events but also from happy ones.
- 73 Since stress cannot be entirely eliminated from our daily lives, we need to find an effective way to live with it.
- 74 Doing housework cannot be regarded as exercising, because it is not very intense.
- 75 "in the first place" $(\ell.7)$ means basically the same as to start with.
- 76 The expression "Along with exercise" (ℓ .15) can be correctly replaced with **As well as exercising**.
- 77 The expression "People used to think" $(\ell.4)$ suggests that they no longer think that way.

The best way to see most of Washington's monuments and museums is to stroll down the Mall, a greenway crowned by the Capitol and lined with treasure all the way to the Lincoln

Memorial. Start by taking the Metro there (orange or blue line to Smithsonian; take the Mall exit out of the station), as parking is impossible. Then choose your own adventure, rambling in and out of museums and staying only as long as you'd like. If you have kids with you, take a break at the old-fashioned carousel in front of the Arts and Industries building, about halfway down the Mall. Or duck into the sculpture garden at the Hirshhorn Museum nearby. There's a lot to see, so you'll

The National Museum of American History is one museum not to be missed on the Mall. Reopened on Nov. 21, 2008, after a two-year renovation, it is a massive collection of all things American — from Abraham Lincoln's top hat to the Nintendo Game Boy. Another sure thing on the Mall, the National Museum of Natural History has something for everyone in the family. The Hope Diamond is here, along with an insect zoo, an IMAX cinema and a hall full of dinosaurs.

have to prioritize — or chill out and assume you'll be back one

day.

The National Mall. In: Internet: www.content.time.com (adapted)

Judge if the translation suggested in each of the following items is grammatically correct and maintains the meaning of the original text.

- "There's a lot to see, so you'll have to prioritize or chill out and assume you'll be back one day." (ℓ .11 to 13) = **Há muito** o que ver, então você terá que ter prioridades ou relaxar e supor que vai voltar um dia.
- 79 "The National Museum of American History is one museum not to be missed on the Mall" (l.14 and 15) = O Museu Nacional de História Americana é um museu em que você não vai se perder no Mall.
- *Start by taking the Metro there (orange or blue line to Smithsonian; take the Mall exit out of the station)"

 (l.4 and 5) = Comece pegando o Metrô para lá (linha laranja ou azul para Smithsonian; tome a saída para Mall quando chegar à estação).
- 81 "Or duck into the sculpture garden at the Hirshhorn Museum nearby." $(\ell.10 \text{ and } 11) = \mathbf{Ou} \text{ ver os patos no jardim}$ de esculturas no Museu Hirshhorn aí perto.

There are people who are latecomers wherever they go. Lateness is their way of life.

Chronic lateness has spoilt friendships, and it's a habit that has caused people to lose their jobs. Why, then, are so many people late?

According to some specialists, not arriving on time can be a form of avoidance. You are late for a party, or coming home from work because you don't want to be where you're supposed to be. It can also be a habit learned on childhood from a parent or an old brother or sister who also ran late. For others, it's a result of an inability to judge time.

Whatever reason people have, lateness almost always annoys those of us who are always prompt to attend our commitments.

Diane Washawsky. **Spectrum book 4**. Ana Veltford. Prentice Hall Regents. p.156 (adapted).

Based on the text, judge the following items.

- 82 Lateness can be a family tendency.
- **83** Latecomers are people who hardly ever are on time for their appointments.
- 84 Some people lose their jobs because they are habitually late.
 - One of the most important decisions in life is deciding on a job. I first came to this country without knowing any English. Therefore, I had a hard time finding a job. I applied
 - everywhere, but no one called me for a job. For that reason, I attended college and took some classes that helped me to have a good career. Now I have almost gotten my AA degree. After
 - I had attended college for one year, I applied at a shoe store and they hired me right away. My plan is to transfer to the university; after that, I can easily find a better job.

Suzanne W. Woodward. Fun with grammar. Prentice Hall Regents. p.103 (adapted).

Based on the text, judge the items that follow.

- 85 In "took some classes that helped me to have a good career" (\(\ell \).5 and 6), "that" can be correctly replaced by who.
- 86 The narrator applied for a job at a shoe store and was hired before he/she attended college.
- **87** The narrator believes that studying will give him/her more chances to achieve professional improvement.
- 88 It is correct to infer that the person who tells of his/her experience in the text is a foreigner in the country in which he/she lives.

- Cosmetic surgery is the science of changing the way a person looks by reshaping a part of his/her body. Throughout times, people have always had the desire to look more beautiful
- and fashionable. Whatever their age, size, or shape, people have followed fashion in order to look more attractive.

Cosmetic surgery is also used in many countries to improve the appearance of people who have been hurt in fires or in car accidents. Cosmetic surgery is also used to improve the appearance of children who are born with physical problems.

Like any other surgery, cosmetic surgery can be dangerous and painful. It is also somewhat expensive for the average person. But as surgeons find safer, faster and less expensive techniques, people around the world will continue their search for beauty.

Carolyn Duparequier Sardinas & Laurie Betta. North star focus on reading and writing. Intermediate Longman. p. 161 (adapted).

According to the text, judge the items below.

- 89 In "It is also somewhat expensive for the average person" $(\ell.12 \text{ and } 13)$, "average person" means the same as **ordinary person**.
- 90 The phrase "people have always had the desire to look" (\ell.3) can be correctly replaced with **people always had the desire** to look.
- **91** Physical appearance has been a concern of human beings for a long time now.
- **92** In "to improve the appearance of children" (ℓ .8 and 9), "improve" can be correctly replaced with **enhance**.

Crossing the street while listening to an MP3 player may soon be illegal in New York. A law has been proposed in response to several deaths apparently caused by pedestrians stepping into traffic listening to iPods. The ban would also extend to other electronic devices including cell phones, video games and handheld email devices, and offenders would face a \$ 100 fine.

Pedestrians are getting so involved with what they are listening on their iPods that they don't pay enough attention to the traffic, often with tragic consequences. According to some official information, many people are being killed as a result of stepping off the sidewalk in front of fast-moving vehicles. And most of the accidents can't be avoided because the victims couldn't even hear the warning because of the use of MP3.

Mark Hancock & Annie McDonald. English result upper-intermediate. Oxford University Press. p. 103 (adapted).

Judge the following items according to the text.

- **93** Most of the people who were involved in the accidents mentioned in the text couldn't hear the vehicles approaching because they were distracted by their MP3 players.
- **94** In New York, a law was proposed to forbid the use of MP3 outdoors.
- **95** It is correct to infer from the text that, if people didn't use electronic devices outside their homes, accidents wouldn't happen.

Facebook, the social network that celebrates its 10th birthday this week, has astounding statistics. In just one decade, it has signed up some 1.3 billion people, half of whom log in on any given day and spend an average of 18 minutes per visit. Facebook connects families across continents, friends across the years and people around the world.

And yet Facebook's effects on its users may not be entirely benign. Some researchers suggest that the ability to connect does not necessarily make people any happier, and it could actually reduce the satisfaction they feel about their life. Can it really be possible that Facebook makes you sad?

Until recently, few had studied this question and the little evidence that did exist actually hinted that the social network has a beneficial effect. In 2009, Sebastian Valenzuela and colleagues at the University of Texas at Austin measured how life satisfaction varied among over 2,500 students who used Facebook, and they found a small positive correlation.

Yet last summer, a team of psychologists from the University of Michigan in Ann Arbor and the University of Leuven in Belgium decided to drill a bit deeper by evaluating how life satisfaction changes over time with Facebook use. Ethan Kross and colleagues questioned a group of people five times a day over two weeks about their emotional state. They asked questions such as "how do you feel right now?", "how lonely do you feel right now?", "how much have you used Facebook since we last asked?" and so on. This gave them a snapshot of each individual's well-being and Facebook usage throughout the day.

The team found that Facebook use correlated with a low sense of well-being. "The more people used Facebook over two-weeks, the more their life satisfaction levels declined over time," they said. "Rather than enhancing well-being, these findings suggest that Facebook may undermine it."

Justin Mullins. Can Facebook make you sad? February 6, 2014. Internet: www.bbc.co.uk (adapted).

Based on the text above, judge the following items.

- **96** In the sentence "these findings suggest that Facebook may undermine it" (ℓ .32 and 33), the verb "undermine" means the opposite of the verb **to mine**.
- **97** The text above was written especially for psychologists and other experts.
- 98 In the sentence "it could actually reduce the satisfaction" (ℓ .9 and 10), the expression "actually" can correctly be replaced with today.
- **99** The author mentions the study by Kross and colleagues to reinforce the findings of Valenzuela and colleagues.
- **100** In the phrase "their emotional state" (ℓ .23), the word "their" refers to "Ethan Kross and colleagues" (ℓ .22).
- **101** In the phrase "Rather than enhancing well-being" (*l*.32), the expression "Rather than" introduces a contrast between the two ideas that follow it.

The biology of human sleep timing, like that of other mammals, changes as we age. As puberty begins, bedtimes and waking times get later. This trend continues until 19.5 years in women and 21 in men. Then it reverses. At 55 we wake at about the time we woke before puberty. On average this is two

hours earlier than adolescents. This means that for a teenager, a 7 am alarm call is the equivalent of a 5 am start for a person in their 50s.

However, biology is only part of the problem. Additional factors include a more relaxed attitude to bedtimes by parents, a general disregard for the importance of sleep, and access to TVs, DVDs, PCs, gaming devices, cellphones and so on, which promote alertness.

Researchers at Brown University in Providence have shown that teenagers need about 9 hours of sleep per night. Observations at a school in Liverpool suggested many were getting just 5 hours on a school night. Unsurprisingly, teachers reported students falling asleep in class.

Evidence that sleep is important is overwhelming. Research has demonstrated its critical role in memory consolidation and our ability to generate innovative solutions to complex problems. Similar studies have shown that long-term sleep deprivation might be an important factor in predisposing people to diabetes, obesity and hypertension. Adolescents are increasingly using stimulants to compensate for sleep loss, and caffeinated and/or sugary drinks are the usual choice. The half-life of caffeine is 5 to 9 hours. So a caffeinated drink late in the day delays sleep at night. Tiredness also increases the possibility of taking up smoking.

In the US, the observation that teenagers have biologically delayed sleep patterns compared to adults has led several schools to start the school day at a later time. An analysis of the impact of this decision by the University of Minnesota found that academic performance was enhanced, as was attendance. Sleeping in class declined, as did self-reported depression.

In the UK, a specific high school instituted a 10 am start in 2009 and saw an improvement in academic performance. However, a later start by itself is not enough. Society in general, and teenagers in particular, must start to take sleep seriously. Sleep is not a luxury or an indulgence but a fundamental biological need.

Russell Foster. Why teenagers really do need an extra hour in bed. April 22, 2013. Internet: www.newscientist.com (adapted).

Judge the following items according to the text.

- **102** In "Tiredness also increases the possibility" (ℓ.28 and 29), the word "Tiredness" can be correctly replaced with **Fatigued**.
- 103 In the sentence "Sleeping in class declined, as did self-reported depression" (ℓ .35 and 36), the word "as" indicates that depression also declined.
- 104 In the sentence "Society in general, and teenagers in particular, must start to take sleep seriously" (ℓ .40 and 41), the verb "must" can be correctly replaced with **should** without changing in the meaning of the text.
- **105** The author's intention is to explain the benefits of sleep for teenagers.
- 106 In the sentence "Unsurprisingly, teachers reported students falling asleep in class" (ℓ .17 and 18), the words "Unsurprisingly, teachers" can be correctly replaced with Teachers who had no surprises.
- 107 In the sentence "Research has demonstrated its critical role in memory consolidation" (ℓ .20 and 21), the pronoun "its" refers to "Research".

When babies learn to talk, they pay close attention to grammar. Specifically verbs. A new study shows that hearing what an object does is how they learn what an object is.

Researchers showed infants between 15 and 19 months of age pairs of images on a screen. Each pair included an animal and a non-living object. Then the screen went dark and the infants overheard a conversation that included a nonsense word: "blick." Some babies heard a sentence with an action verb like "The blick eats." Others heard a sentence like "The blick is over here," with no action verb.

The infants then again saw the screen with an animal and an inanimate object. And a researcher said, "Look at the blick." Infants who had heard the active sentence looked more often and longer at the animal, compared with those who had heard the sentence lacking any action. Because if all the babies know is that "the blick is over here," it could be any object, alive or not. The study is in the journal *Cognition*. The researchers say that learning language requires the infant to listen to natural conversations and to analyze the complex situations being discussed.

Christie Nicholson. **Infants use verbs they know to learn new nouns** March 10, 2014. Internet: www.scientificamerican.com (adapted).

According to the text, judge the following items.

- 108 In the phrase "an action verb like" (0.8 and 9), the word "like" can be correctly replaced with such as without changing in the meaning of the text.
- 109 The text above is an academic article.
- 110 The adjective "non-living" (ℓ .6) is synonymous with **unliving**.
- 111 In the sentence "the infants overheard a conversation" (\ell.7), the prefix "over" is added to the verb form "heard" to emphasize the act of hearing.

- On June 6, the Guardian and the Washington Post broke the first stories in a series that would expose extraordinary surveillance at home and abroad by the U.S.
- 4 National Security Agency in arguably the most important leak of classified intelligence ever. The stories initially detailed the NSA's program of bulk data collection of Americans' phone
- and internet records, but soon exposed U.S. spying against allies and other more traditional espionage targets abroad. NSA-contractor Edward Snowden revealed from Hong Kong
- that he had handed over hundreds of thousands of documents to reporters, and said he was doing so to prevent the establishment of "turn-key tyranny" in America.
- The ensuing revelations and Snowden's flight to Russia infuriated the Obama administration, which sought his extradition on criminal charges. They also embarrassed the intelligence community and initiated an international discussion on the boundaries of surveillance in this age of instant communication.

The Snowden leaks. Internet: <www.nation.time.com>(adapted)

Judge if the translation suggested in each of the following items is grammatically correct and maintains the meaning of the original text.

- 112 "They also embarrassed the intelligence community and initiated an international discussion on the boundaries of surveillance in this age of instant communication" (l.15 to 18) = Eles também envergonharam a comunidade ligada aos serviços de inteligência e deram início a uma discussão internacional sobre os limites da vigilância nesta era de comunicação instantânea.
- 113 "On June 6, the Guardian and the Washington Post broke the first stories in a series that would expose extraordinary surveillance at home and abroad by the U.S. National Security Agency in arguably the most important leak of classified intelligence ever" (l.1 to 5) = Em 6 de junho, o Guardian e o Washington Post quebraram os primeiros casos de uma série que exporia a extraordinária vigilância doméstica e internacional pela Agência de Segurança Nacional dos E.U.A. no mais importante vazamento de inteligência já visto.
- 114 "The ensuing revelations and Snowden's flight to Russia infuriated the Obama administration" (l.13 and 14) = As revelações subsequentes e o vôo de Snowden para a Rússia deixou Obama furioso.

Something about my mother attracts ornithologists. It all started years ago when a couple of them discovered she had a rare species of woodpecker* coming to her bird feeder. They came in the house and sat around the window, exclaiming and taking pictures with big cameras.

There always seemed to be three or four of them wandering around our place, discussing the body fat of hummingbirds**.

In those days, wild turkey were rare, and the
pure-strain wild turkeys had begun to interbreed with farmers'
domestic stock. It was extinction by dilution.

One ornithologist had devised a method to compute
the ratio of domestic to pure-strain wild turkey in an individual
bird by comparing the angle of flight at takeoff and the rate of
acceleration. By then, the turkeys were flying low and slow.

It was during that time, when I was six years old, that I caught the measles. I had a high fever, and my mother was worried about me.

Even the ornithologists stayed away — but not out of fear of the measles or respect for a household with sickness.

The fact was, they had discovered a wild turkey nest.

According to the formula, the hen was pure-strain wild — not a little bit of the sluggish domestic bird in her blood — and the ornithologists were camping in the woods, protecting her nest from predators and taking pictures.

One night our phone rang. It was one of the ornithologists. "Does your little girl still have measles?" he asked.

"Yes", said my mother. "She's very sick. Her temperature is 39 $^{\circ}$ C."

"I'll be right over", said the man.

In five minutes a whole carload of them arrived.

"thirty-nine, did you say? Where is she?" they asked my

mother. They went into my room and set a box down on the
bed. I was barely conscious, and when I opened my eyes, their
worried faces seemed to float out of the darkness like giant,
glowing eggs. They removed the cover off me and felt me all
over. They consulted in whispers.

"Feels just right, I'd say."

"Thirty-nine — can't miss if we tuck them up close and she lies still."

I closed my eyes then, and after a while the ornithologists disappeared.

The next morning I was better. For the first time in days I could think. The memory of the scientists with their whispered voices and their cool hands was like a dream from another life. But when I pulled down the covers, there staring up at me with wide mouths, were sixteen baby turkeys and the broken pieces of sixteen brown eggs.

Turkeys. In: Internet: <www.tacoma.k12.us> (adapted)

Glossary

- * woodpecker = pica-pau
- ** hummingbirds = beija-flor

Based on the text above, judge the following items.

- 115 There is a significant difference in meaning between "body fat" $(\ell.7)$ and fat body.
- 116 In "then, the turkeys were flying low and slow" (ℓ .15) "then" refers to "In those days" (ℓ .9).
- 117 The expression "sluggish domestic bird" (ℓ .23) refers to "hummingbirds" (ℓ .8).
- 118 In order for you to catch "the measles" (ℓ .17), you have to go out in the woods with all the necessary hunting equipment.
- 119 In terms of text typology, this is a narrative text.
- **120** In "tuck them up close" $(\ell.40)$, "them" refers to "sixteen brown eggs" $(\ell.49)$.