



COLÉGIO

**Santa Maria
Minas**

Apostila de

INGLÊS

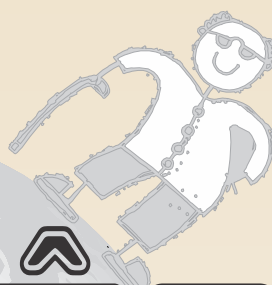
Ensino Médio

**Questões de
Vestibulares e ENEM**

Pyly

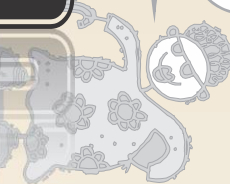


Coziz



Zoyu

Aalyt



Wm+

Vtiti



zndd

INGLÊS

EXERCÍCIOS DE VESTIBULARES E ENEM

3.º ANO DO ENSINO MÉDIO

GERALDO VIEIRA JÚNIOR

COORDENADOR DE ÁREA EM INGLÊS

2019

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ENEM – 2014

QUESTION 01

English | Español | Français | Italiano

wefeedback
sharing food, changing lives

meals fed to 354,774 children

ABOUT GLOBAL FEEDBACK CALCULATOR BLOG

Already a member? | Join

What is WeFeedback all about?

In the developed world, life puts tasty food on our plates all the time. French sausage, avocado or chocolate cake — we all have our favorites. If we take just one of these things and give it back, or feed it back, we can help change the lives of hungry school children around the world.

My name is... Kate Watts

I want to share... a sushi platter

I usually pay... 20 \$ (USD)

More servings will feed more children...

3

\$60.00

If you share, you will feed 240 children

Feed them now

Disponível em: <http://wefeedback.org>. Acesso em: 30 jul. 2012.

A internet tem servido a diferentes interesses, ampliando, muitas vezes, o contato entre pessoas e instituições. Um exemplo disso é o site WeFeedback, no qual a internauta Kate Watts

- A) comprou comida em promoção.
- B) inscreveu-se em concurso.
- C) fez doação para caridade.
- D) participou de pesquisa de opinião.
- E) voluntariou-se para trabalho social.

QUESTION 02

If You Can't Master English, Try Globish

PARIS — It happens all the time: during an airport delay the man to the left, a Korean perhaps, starts talking to the man opposite, who might be Colombian, and soon they are chatting away in what seems to be English. But the native English speaker sitting between them cannot understand a word.

They don't know it, but the Korean and the Colombian are speaking Globish, the latest addition to the 6,800 languages that are said to be spoken across the world. Not that its inventor, Jean-Paul Nerrière, considers it a proper language.

"It is not a language, it is a tool," he says. "A language is the vehicle of a culture. Globish doesn't want to be that at all. It is a means of communication."

Nerrière doesn't see Globish in the same light as utopian efforts such as Kosmos, Volapuk, Novial or staunch Esperanto. Nor should it be confused with barbaric Algol (for Algorithmic language). It is a sort of English lite: a means of simplifying the language and giving it rules so it can be understood by all.

BLUME, M. Disponível em: www.nytimes.com. Acesso em: 28 out. 2013 (fragmento).

Considerando as ideias apresentadas no texto, o *Globish (Global English)* é uma variedade da língua inglesa que

- A) tem *status* de língua por refletir uma cultura global.
- B) facilita o entendimento entre o falante nativo e o não nativo.
- C) tem as mesmas características de projetos utópicos como o esperanto.
- D) altera a estrutura do idioma para possibilitar a comunicação internacional.
- E) apresenta padrões de fala idênticos aos da variedade usada pelos falantes nativos.

QUESTION 03

A Tall Order

The sky isn't the limit for an architect building the world's first invisible skyscraper

Charles Wee, one of the world's leading high-rise architects, has a confession to make: he's bored with skyscrapers. After designing more than 30, most of which punctuate the skylines of rapidly expanding Asian cities, he has struck upon a novel concept: the first invisible skyscraper.

As the tallest structure in South Korea, his infinity Tower will loom over Seoul until somebody pushes a button and it completely disappears.

When he entered a 2004 competition to design a landmark tower, the Korean-American architect rejected the notion of competing with Dubai, Toronto, and Shanghai to reach the summit of man-made summits. "I thought, let's not jump into this stupid race to build another 'tallest' tower," he says in a phone conversation. "Let's take an opposite approach — let's make an anti-tower."

The result will be a 150-story building that fades from view at the flick of a switch. The tower will effectively function as an enormous television screen, being able to project an exact replica of whatever is happening behind it onto its façade. To the human eye, the building will appear to have melted away.

It will be the most extraordinary achievement of Wee's stellar architectural career. After graduating from UCLA, he worked under Anthony Lumsden, a prolific Californian architect who helped devise the modern technique of wrapping buildings inside smooth glass skins.

HINES, N. Disponível em: <http://mag.newsweek.com>. Acesso em: 13 out. 2013 (adaptado).

No título e no subtítulo desse texto, as expressões *A Tall Order* e *The sky isn't the limit* são usadas para apresentar uma matéria cujo tema é:

- A) Inovações tecnológicas usadas para a construção de um novo arranha-céu em Seul.
- B) Confissões de um arquiteto que busca se destacar na construção de arranha-céus.
- C) Técnicas a serem estabelecidas para a construção de edifícios altos na Califórnia.
- D) Competição entre arquitetos para a construção do edifício mais alto do mundo.
- E) Construção de altas torres de apartamentos nas grandes metrópoles da Ásia.

QUESTION 04

Masters of War

Come you masters of war
You that build all the guns
You that build the death planes
You that build all the bombs
You that hide behind walls
You that hide behind desks
I just want you to know
I can see through your masks.
You that never done nothin'
But build to destroy
You play with my world
Like it's your little toy

You put a gun in my hand
And you hide from my eyes
And you turn and run farther
When the fast bullets fly.
Like Judas of old
You lie and deceive
A world war can be won
You want me to believe
But I see through your eyes
And I see through your brain
Like I see through the water
That runs down my drain.

BOB DYLAN. The Freewheelin' Bob Dylan. Nova York: Columbia Records, 1963 (fragmento).

Na letra da canção *Masters of War*, há questionamentos e reflexões que aparecem em forma de protesto contra

- A) o envio de jovens à guerra para promover a expansão territorial dos Estados Unidos.
- B) o comportamento dos soldados norte-americanos nas guerras de que participaram.
- C) o sistema que recruta soldados para guerras motivadas por interesses econômicos.
- D) o desinteresse do governo pelas famílias dos soldados mortos em campos de batalha.
- E) as Forças Armadas norte-americanas, que enviavam homens despreparados para as guerras.

QUESTION 05

The Road Not Taken (by Robert Frost)

Two roads diverged in a wood, and I —
I took the one less traveled by,
And that has made all the difference.

Disponível em: www.poetryfoundation.org. Acesso em: 29 nov. 2011 (fragmento).

Estes são os versos finais do famoso poema *The Road Not Taken*, do poeta americano Robert Frost. Levando-se em consideração que a vida é comumente metaforizada como uma viagem, esses versos indicam que o autor

- A) festeja o fato de ter sido ousado na escolha que fez em sua vida.
- B) lamenta por ter sido um viajante que encontrou muitas bifurcações.
- C) viaja muito pouco e que essa escolha fez toda a diferença em sua vida.
- D) reconhece que as dificuldades em sua vida foram todas superadas.
- E) percorre várias estradas durante as diferentes fases de sua vida.

ENEM – 2015

QUESTION 01

NOTICE OF BAGGAGE INSPECTION

To protect you and your fellow passengers, the Transportation Security Administration (TSA) is required by law to inspect all checked baggage. As part of this process, some bags are opened and physically inspected. Your bag was among those selected for physical inspection.

During the inspection, your bag and its contents may have been searched for prohibited items. At the completion of the inspection, the contents were returned to your bag.

If the TSA security officer was unable to open your bag for inspection because it was locked, the officer may have been forced to break the locks on your bag. TSA sincerely regrets having to do this, however TSA is not liable for damage to your locks resulting from this necessary security precaution.

For packing tips and suggestions on how to secure your baggage during your next trip, please visit:

www.tsa.gov

Smart Security Saves Time

Transportation Security Administration.
Disponível em: <www.tsa.gov>. Acesso em: 13 jan. 2010. (Adaptado).

As instituições públicas fazem uso de avisos como instrumento de comunicação com o cidadão. Esse aviso, voltado a passageiros, tem o objetivo de

- A) solicitar que as malas sejam apresentadas para inspeção.
- B) notificar o passageiro pelo transporte de produtos proibidos.
- C) informar que a mala foi revistada pelos oficiais de segurança.
- D) dar instruções de como arrumar malas de forma a evitar inspeções.
- E) apresentar desculpas pelo dano causado à mala durante a viagem.

QUESTION 02

My brother the star, my mother the earth
my father the sun, my sister the moon,
to my life give beauty, to my
body give strength, to my corn give
goodness, to my house give peace, to
my spirit give truth, to my elders give
wisdom.

Disponível em: www.blackhawkproductions.com. Acesso em: 8 ago. 2012.

Produções artístico-culturais revelam visões de mundo próprias de um grupo social. Esse poema demonstra a estreita relação entre a tradição oral da cultura indígena norte-americana e a

- A) transmissão de hábitos alimentares entre gerações.
- B) dependência da sabedoria de seus ancestrais.
- C) representação do corpo em seus rituais.
- D) importância dos elementos da natureza.
- E) preservação da estrutura familiar.

QUESTÃO 03



RIDGWAY, L. Disponível em: <<http://fborfw.com>>. Acesso em: 23 fev. 2012.

Na tira da série *For better or for worse*, a comunicação entre as personagens fica comprometida em um determinado momento porque

- A) as duas amigas divergem de opinião sobre futebol.
- B) uma das amigas desconsidera as preferências da outra.
- C) uma das amigas ignora que o outono é temporada de futebol.
- D) uma das amigas desconhece a razão pela qual a outra a maltrata.
- E) as duas amigas atribuem sentidos diferentes à palavra *season*.

QUESTION 04

Why am I compelled to write? Because the writing saves me from this complacency I fear. Because I have no choice. Because I must keep the spirit of my revolt and myself alive. Because the world I create in the writing compensates for what the real world does not give me.

By writing I put order in the world, give it a handle so I can grasp it.

ANZALDÚA, G. E. *Speaking in tongues: a letter to third world women writers.*
In: HERNANDEZ, J. B. (Ed.). **Women writing resistance: essays on Latin America and the Caribbean.** Boston: South End, 2003.

Gloria Evangelina Anzaldúa, falecida em 2004, foi uma escritora americana de origem mexicana que escreveu sobre questões culturais e raciais. Na citação, o intuito da autora é evidenciar as

- A) razões pelas quais ela escreve.
- B) compensações advindas da escrita.
- C) possibilidades de mudar o mundo real.
- D) maneiras de ela lidar com seus medos.
- E) escolhas que ela faz para ordenar o mundo.

QUESTION 05

How fake images change our memory and behaviour

For decades, researchers have been exploring just how unreliable our own memories are. Not only is memory fickle when we access it, but it's also kit easily subverted and rewritten. Combine this susceptibility with modern image-editing software at our fingertips like Photoshop, and it's a recipe for disaster. In a world where we can witness news and world events as they unfold, fake images surround us, and our minds accept these pictures as real, and remember them later. These fake memories don't just distort how we see our past, they affect our current and future behaviour too – from what we eat, to how we protest and vote. The problem is there's virtually nothing we can do to stop it.

Old memories seem to be the easiest to manipulate. In one study, subjects were showed images from their childhood. Along with real images, researchers snuck in manipulated photographs of the subject taking a hot air balloon ride with his or her family. After seeing those images, 50% of subjects recalled some part of that hot-air balloon ride – though the event was entirely made up.

EVELETH, R. Disponível em: www.bbc.com. Acesso em: 16 jan. 2013 (adaptado).

A reportagem apresenta consequências do uso de novas tecnologias para a mente humana. Nesse contexto, a memória das pessoas é influenciada pelo(a)

- A) alteração de imagens.
- B) exposição ao mundo virtual.
- C) acesso a novas informações.
- D) fascínio por *softwares* inovadores.
- E) interferência dos meios de comunicação.

ENEM 2016

QUESTION 01

EBONY AND IVORY

Ebony and ivory live together in perfect harmony
Side by side on my piano keyboard, oh Lord, why don't we?
We all know that people are the same wherever we go
There is good and bad in ev'ryone,
We learn to live, we learn to give Each other what we need to survive together alive

McCARTNEY, P. Disponível em: www.paulmccartney.com. Acesso em: 30 maio 2016.

Em diferentes épocas e lugares, compositores têm utilizado seu espaço de produção musical para expressar e problematizar perspectivas de mundo. Paul McCartney, na letra dessa canção, defende

- A) o aprendizado compartilhado.
- B) a necessidade de donativos.
- C) as manifestações culturais.
- D) o bem em relação ao mal.
- E) o respeito étnico.

QUESTION 02

ITALIAN UNIVERSITY SWITCHES TO ENGLISH

By Sean Coughlan, BBC News education correspondent 16 May 2012 Last updated at 09:49 GMT

Milan is crowded with Italian icons, which makes it even more of a cultural earthquake that one of Italy's leading universities — the Politecnico di Milano — is going to switch to the English language. The university has announced that from 2014 most of its degree courses — including all its graduate courses — will be taught and assessed entirely in English rather than Italian. The waters of globalisation are rising around higher education — and the university believes that if it remains Italian-speaking it risks isolation and will be unable to compete as an international institution. "We strongly believe our classes should be international classes — and the only way to have international classes is to use the English language", says the university's rector, Giovanni Azzone.

COUGHLAN, S. Disponível em: www.bbc.co.uk. Acesso em: 31 jul. 2012.

As línguas têm um papel importante na comunicação entre pessoas de diferentes culturas. Diante do movimento de internacionalização no ensino superior, a universidade Politecnico di Milano decidiu

- A) elaborar exames em língua inglesa para o ingresso na universidade.
- B) ampliar a oferta de vagas na graduação para alunos estrangeiros.
- C) investir na divulgação da universidade no mercado internacional.
- D) substituir a língua nacional para se inserir no contexto da globalização.
- E) estabelecer metas para melhorar a qualidade do ensino de italiano.

QUESTION 03

The advertisement features a black background with white text listing various disasters: GlobalFlu Pandemic, 9/11 Terrorism, Earthquake Haiti, Katrina Hurricane, and Chernobyl Nuclear. Below this list, it asks 'Connecticut?' and 'Would you know what to do if disaster struck here? Learn to live prepared.' It provides a URL 'ct.gov/dph/prepare' and shows a small image of the 'CONNECTICUT GUIDE TO EMERGENCY' booklet.

Orientações à população são encontradas também em Sites oficiais. Ao clicar no endereço eletrônico mencionado no cartaz disponível na internet, o leitor tem acesso aos(às)

- A) ações do governo local referentes a calamidades.
- B) relatos de sobreviventes em tragédias marcantes.
- C) tipos de desastres naturais possíveis de acontecer.
- D) informações sobre acidentes ocorridos em Connecticut.
- E) medidas de emergência a serem tomadas em catástrofes.

QUESTION 04

FRANKENTISSUE: PRINTABLE CELL TECHNOLOGY

In November, researchers from the University of Wollongong in Australia announced a new bio-ink that is a step toward really printing living human tissue on an inkjet printer. It is like printing tissue dot-by-dot. A drop of bioink contains 10,000 to 30,000 cells. The focus of much of this research is the eventual production of tailored tissues suitable for surgery, like living Band-Aids, which could be printed on the inkjet. However, it is still nearly impossible to effectively replicate nature's ingenious patterns on a home office accessory. Consider that the liver is a series of globules, the kidney a set of pyramids. Those kinds of structures demand 3D printers that can build them up, layer by layer. At the moment, skin and other flat tissues are most promising for the inkjet.

Disponível em: <http://discovermagazine.com>. Acesso em: 02 dez. 2012.

O texto relata perspectivas no campo da tecnologia para cirurgias em geral, e a mais promissora para este momento enfoca o(a)

- A) uso de um produto natural com milhares de células para reparar tecidos humanos.
- B) criação de uma impressora especial para traçar mapas cirúrgicos detalhados.
- C) desenvolvimento de uma tinta para produzir pele e tecidos humanos finos
- D) reprodução de células em 3D para ajudar nas cirurgias de recuperação dos rins.
- E) extração de glóbulos do fígado para serem reproduzidos em laboratório.

QUESTION 05

BOGOF, is used as a noun as in 'There are some great bogofs on at the supermarket' or an adjective, usually with a word such as offer or 'deal — 'there' are some great bogof offers in store'. When you combine the first letters of the words in a phrase or the name of an organisation, you have an acronym. Acronyms are spoken as a word so NATO (North Atlantic Treaty Organisation) is not pronounced N-A-T-O. We say NATO. Bogof, when said out loud, is quite comical For a native speaker, as it sounds like an insult, 'Bog off' meaning go away, leave me alone, slightly childish and a little old-fashioned. BOGOF is the best-known of the supermarket Marketing strategies. The concept was first imported from the USA during the 1970s recession, when food prices were very high. It came back into fashion in the late 1990s, led by big supermarket chains trying to gain a competitive advantage over each other. Consumers were attracted by the idea that they could get something for nothing. Who could possibly say 'no'.

Disponível em: www.bbc.co.uk. Acesso em: 2 ago. 2012 (adaptado).

Considerando-se as informações do texto, a expressão 'bogof' é usada para

- A) anunciar mercadorias em promoção.
- B) pedir para uma pessoa se retirar.
- C) comprar produtos fora de moda.
- D) indicar recessão na economia.
- E) chamar alguém em voz alta.

ENEM 2017

QUESTION 01

ISRAEL TRAVEL GUIDE

Israel has always been a standout destination. From the days of prophets to the modern day nomad this tiny slice of land on the eastern Mediterranean has long attracted visitors. While some arrive in the 'Holy Land' on a spiritual quest, many others are on cultural tours, beach holidays and eco-tourism trips. Weeding through Israel's convoluted history is both exhilarating and exhausting. There are crumbling temples, ruined cities, abandoned forts and hundreds of places associated with the Bible. And while a sense of adventure is required, most sites are safe and easily accessible. Most of all, Israel is about its incredibly diverse population. Jews come from all over the world to live here, while about 20% of the population is Muslim. Politics are hard to get away from in Israel as everyone has an opinion on how to move the country forward – with a ready ear you're sure to hear opinions from every side of the political spectrum.

Disponível em: www.worldtravelguide.net. Acesso em: 15 jun. 2012.

Antes de viajar, turistas geralmente buscam informações sobre o local para onde pretendem ir. O trecho do guia de viagens de Israel

- A) descreve a história desse local para que turistas valorizem seus costumes milenares.
- B) informa hábitos religiosos para auxiliar turistas a entenderem as diferenças culturais.
- C) divulga os principais pontos turísticos para ajudar turistas a planejarem sua viagem.
- D) recomenda medidas de segurança para alertar turistas sobre possíveis riscos locais.
- E) apresenta aspectos gerais da cultura do país para continuar a atrair turistas estrangeiros.

QUESTION 02

One of the things that made an incredible impression on me in the film was Frida's comfort in and celebration of her own unique beauty. She didn't try to fit into conventional ideas or images about womanhood or what makes someone or something beautiful. Instead, she fully inhabited her own unique gifts, not particularly caring what other people thought. She was magnetic and beautiful in her own right. She painted for years, not to be a commercial success or to be discovered, but to express her own inner pain, joy, family, love and culture. She absolutely and resolutely was who she was. The trueness of her own unique vision and her ability to stand firmly in her own truth was what made her successful in the end.

HUTZLER, L. Disponível em: www.etbscreenwriting.com. Acesso em: 6 maio 2013.

A autora desse comentário sobre o filme *Frida* mostra-se impressionada com o fato de a pintora

- A) ter uma aparência exótica.
- B) vender bem a sua imagem.
- C) ter grande poder de sedução.
- D) assumir sua beleza singular.
- E) recriar-se por meio da pintura.

QUESTION 03

Letters

Children and Guns

Published: May 7, 2013

To the Editor: Re "Girl's Death by Gunshot Is Rejected as Symbol" (news article, May 6):

I find it abhorrent that the people of Burkesville, Ky., are not willing to learn a lesson from the tragic shooting of a 2-year-old girl by her 5-year-old brother. I am not judging their lifestyle of introducing guns to children at a young age, but I do feel that it's irresponsible not to practice basic safety with anything potentially lethal - guns, knives, fire and so on. How can anyone justify leaving guns lying around, unlocked and possibly loaded, in a home with two young children? I wish the family of the victim comfort during this difficult time, but to dismiss this as a simple accident leaves open the potential for many more such "accidents" to occur. I hope this doesn't have to happen several more times for legislators to realize that something needs to be changed.

EMILY LOUBATON

Brooklyn, May 6, 2013

Disponível em: www.nytimes.com. Acesso em: 10 maio 2013.

No que diz respeito à tragédia ocorrida em Burkesville, a autora da carta enviada ao *The New York Times* busca

- A) responsabilizar o irmão da vítima pelo incidente ocorrido.
- B) reconhecer o acidente noticiado como um fato isolado.
- C) apresentar versão diferente da notícia publicada pelo jornal.
- D) expor sua indignação com a negligência de portadores de armas.
- E) reforçar a necessidade de proibição do uso de armas por crianças.

QUESTION 04



Nesse texto publicitário são utilizados recursos verbais e não verbais para transmitir a mensagem. Ao associar os termos *anyplace* e *regret* à imagem do texto, constata-se que o tema da propaganda é a importância da

- A) preservação do meio ambiente.
- B) manutenção do motor.
- C) escolha da empresa certa.
- D) consistência do produto.
- E) conservação do carro.

QUESTION 05

British Government to Recruit Teens as Next Generation of Spies

In the 50 years since the first James Bond movie created a lasting impression of a British secret agent, a completely different character is about to emerge. Britain's intelligence agencies are to recruit their next generation of cyber spies by harnessing the talents of the "Xbox generation".

In an expansion of a pilot program, Foreign Secretary William Hague announced Thursday that up to 100 18-year-olds will be given the chance to train for a career in Britain's secret services. The move to recruit school-leavers marks a break with the past, when agencies mainly drew their staff from among university graduates.

"Young people are the key to our country's future success, just as they were during the War", Hague said. "Today we are not at war, but I see evidence every day of deliberate, organized attacks against intellectual property and government networks in the United Kingdom."

The new recruitment program, called the Single Intelligence Account apprenticeship scheme will enable students with suitable qualifications in science, technology or engineering, to spend two years learning about communications, security and engineering through formal education, technical training and work placements.

JEARY, P. Disponível em: <http://worldnews.nbcnews.com>. Acesso em: 19 nov. 2012.

Segundo informações veiculadas pela *NBC News*, a geração digital já tem seu espaço conquistado nas agências britânicas de inteligência. O governo britânico decidiu que

- A) enfrentará a guerra vigente e deliberada contra a propriedade intelectual no Reino Unido.
- B) abandonará a política de contratação de universitários como agentes secretos.
- C) recrutará jovens jogadores de **Xbox** como ciberespões das agências de inteligência.
- D) implantará um esquema de capacitação de adolescentes para atuarem como agentes secretos.
- E) anunciará os nomes dos jovens a serem contratados pelas agências de inteligência.

ENEM 2018

QUESTÃO 01 QUESTÃO 01

Lava Mae: Creating Showers on Wheels for the Homeless

San Francisco, according to recent city numbers, has 4,300 people living on the streets. Among the many problems the homeless face is little or no access to showers.

San Francisco only has about 16 to 20 shower stalls to accommodate them.

But Doniece Sandoval has made it her mission to change that. The 51-year-old former marketing executive started Lava Mae, a sort of showers on wheels, a new project that aims to turn decommissioned city buses into shower stations for the homeless. Each bus will have two shower stations and Sandoval expects that they'll be able to provide 2,000 showers a week.

ANDREANO, C. Disponível em: <http://abcnews.go.com>. Acesso em: 26 jun. 2015 (adaptado).

A relação dos vocábulos *shower*, *bus* e *homeless*, no texto, refere-se a

- A) empregar moradores de rua em lava a jatos para ônibus.
- B) criar acesso a banhos gratuitos para moradores de rua.
- C) comissionar sem-teto para dirigir os ônibus da cidade.
- D) exigir das autoridades que os ônibus municipais tenham banheiros.
- E) abrigar dois mil moradores de rua em ônibus que foram adaptados.

QUESTÃO 02



"WHEN I WAS 5 EVERYONE TOLD ME TO BE A BIG BOY.
WHEN I WAS 10 THEY TOLD ME I SHOULD BE MORE MATURE.
NOW THEY SAY IT'S TIME TO START ACTING LIKE AN ADULT.
AT THIS RATE, I'LL BE ELIGIBLE FOR SOCIAL SECURITY
BEFORE I GRADUATE FROM HIGH SCHOOL!"

GLASBERGEN, R. Disponível em: www.glasbergen.com. Acesso em: 3 jul. 2015 (adaptado).

No cartum, a crítica está no fato de a sociedade exigir do adolescente que

- A) se aposente prematuramente.
- B) amadureça precocemente.
- C) estude aplicadamente.
- D) se forme rapidamente.
- E) ouça atentamente.

QUESTÃO 03

Don't write in English, they said,
English is not your mother tongue...
...The language I speak
Becomes mine, its distortions, its queerness
All mine, mine alone, it is half English, half
Indian, funny perhaps, but it is honest,
It is as human as I am human...
...It voices my joys, my longings my
Hopes...
(Kamala Das, 1965:10)

GARGESH, R. South Asian Englishes. In: KACHRU, B. B.; KACHRU, Y.; NELSON, C. L. (Eds.).
The Handbook of World Englishes. Singapore: Blackwell, 2006.

A poetisa Kamala Das, como muitos escritores indianos, escreve suas obras em inglês, apesar de essa não ser sua primeira língua. Nesses versos, ela

- A) usa a língua inglesa com efeito humorístico.
- B) recorre a vozes de vários escritores ingleses.
- C) adverte sobre o uso distorcido da língua inglesa.
- D) demonstra consciência de sua identidade linguística.
- E) reconhece a incompreensão na sua maneira de falar inglês.

QUESTÃO 04

TEXTO I

A Free World-class Education for Anyone Anywhere

The Khan Academy is an organization on a mission. We're a not-for-profit with the goal of changing education for the better by providing a free world-class education to anyone anywhere. All of the site's resources are available to anyone. The Khan Academy's materials and resources are available to you completely free of charge.

Disponível em: www.khanacademy.org. Acesso em: 24 fev. 2012 (adaptado).

TEXTO II

I didn't have a problem with Khan Academy site until very recently. For me, the problem is the way Khan Academy is being promoted. The way the media sees it as "revolutionizing education". The way people with power and money view education as simply "sit-and-get". If your philosophy of education is "sit-and-get", i.e., teaching is telling and learning is listening, then Khan Academy is way more efficient than classroom lecturing. Khan Academy does it better. But TRUE progressive educators, TRUE education visionaries and revolutionaries don't want to do these things better. We want to DO BETTER THINGS.

Disponível em: <http://fnoschese.wordpress.com>. Acesso em: 2 mar. 2012.

Com o impacto das tecnologias e a ampliação das redes sociais, consumidores encontram na internet possibilidades de opinar sobre serviços oferecidos. Nesse sentido, o segundo texto, que é um comentário sobre o *site* divulgado no primeiro, apresenta a intenção do autor de

- A) elogiar o trabalho proposto para a educação nessa era tecnológica.
- B) reforçar como a mídia pode contribuir para revolucionar a educação.
- C) chamar a atenção das pessoas influentes para o significado da educação.
- D) destacar que o *site* tem melhores resultados do que a educação tradicional.
- E) criticar a concepção de educação em que se baseia a organização.

QUESTÃO 05

1984 (excerpt)

'Is it your opinion, Winston, that the past has real existence?' [...] O'Brien smiled faintly. 'I will put it more precisely. Does the past exist concretely, in space? Is there somewhere or other a place, a world of solid objects, where the past is still happening?'

'No.'

'Then where does the past exist, if at all?'

'In records. It is written down.'

'In records. And — —?'

'In the mind. In human memories.'

'In memory. Very well, then. We, the Party, control all records, and we control all memories. Then we control the past, do we not?'

ORWELL, G. Nineteen Eighty-Four. New York: Signet Classics, 1977.

O romance 1984 descreve os perigos de um Estado totalitário. A ideia evidenciada nessa passagem é que o controle do Estado se dá por meio do(a)

- A) boicote a ideais libertários.
- B) veto ao culto das tradições.
- C) poder sobre memórias e registros.
- D) censura a produções orais e escritas.
- E) manipulação de pensamentos individuais.

FCM-MG – 2017/2

Stem cell breakthrough may be simple, fast, cheap

- §1 We run too hard, we **fall down**, we're sick -- all of this puts stress on the cells in our bodies. But in what's being called a breakthrough in regenerative medicine, researchers have found a way to make stem cells by purposely putting mature cells under stress.
- §2 Two new studies published Wednesday in the journal Nature describe a method of taking mature cells from mice and turning them into embryonic-like stem cells, which can be coaxed into becoming any other kind of cell possible. One method effectively **boils down to** this: put the cells in an acidic environment.
- §3 "I think the process we've described mimics Mother Nature," said Dr. Charles Vacanti, director of the laboratory for Tissue Engineering and Regenerative Medicine at Brigham & Women's Hospital in Boston and senior author on one of the studies. "It's a natural process that cells normally respond to."
- §4 Both studies represent a new step in the thriving science of stem cell research, which seeks to develop therapies to repair bodily damage and cure disease by being able to insert cells that can grow into whatever tissues or organs are needed. If you take an organ that's functioning at 10% of normal and **bring it up** to 25% of functionality, that could greatly reduce the likelihood of fatality in that particular disease, Vacanti said.
- §5 This method by Vacanti and his colleagues "is truly the simplest, cheapest, fastest method ever achieved for reprogramming cells," said Jeff Karp, associate professor of medicine at the Brigham & Women's Hospital and principal faculty member at the Harvard Stem Cell Institute. He was not involved in the study.
- §6 Before the technique described in Nature, the leading candidates for creating stem cells artificially were those derived from embryos and stem cells from adult cells that require the insertion of DNA to become reprogrammable.
- §7 Stem cells are created the natural way every time an egg that is fertilized begins to divide. During the first four to five days of cell division, so-called pluripotent stem cells develop. They have the ability to turn into any cell in the body. Removing stem cells from the embryo destroys it, which is why this type of research is controversial.
- §8 Researchers have also developed a method of producing embryonic-like stem cells by taking a skin cell from a patient, for example, and adding a few bits of foreign DNA to reprogram the skin cell to become like an embryo and produce pluripotent cells, too. However, these cells are usually used for research because researchers do not want to give patients cells with extra DNA.
- §9 The new method does not involve the destruction of embryos or inserting new genetic material into cells, Vacanti said. It also avoids the problem of rejection: The body may reject stem cells that came from other people, but this method uses an individual's own mature cells.
- §10 "It was really surprising to see that such a remarkable transformation could be triggered simply by stimuli from outside of the cell," said Haruko Obokata of the Riken Center for Developmental Biology in Japan in a news conference this week.
- §11 The process is called STAP, which stands for "stimulus-triggered acquisition of pluripotency." Karp estimates that the method is five to 10 times faster than other means of reprogramming cells.
- §12 Researchers used mice to study the STAP cell phenomenon. They genetically altered the mice donating stem cells to "label" those cells with the color green. For instance, they modified mice such that their cells would light up green in response to a particular wavelength of light.
- §13 The scientists exposed blood cells from these genetically altered mice to an acidic environment. A few days later, they saw that these cells turned into the embryonic-like state and grew in spherical clusters.
- §14 Scientists put the cell clusters into a mouse embryo that had not been genetically modified. It **turned out**, the implanted clusters could form tissues in all of the organs that the researchers tested. The scientists knew that the cells came from the original mouse because they turned green when exposed to a particular light.
- §15 Besides modifying acidity, researchers also stressed the cells in other ways, such as lowering the oxygen environment and disrupting the cell membrane. Increasing acidity was one of the most effective methods of turning mouse blood cells into STAP cells.
- §16 There are, of course, some caveats.
- §17 For now, the STAP cell procedure has only been demonstrated in cells from young mice. Its effectiveness in humans, and the risks, are unknown.
- §18 Researchers have not yet shown how STAP embryonic-like stem cells compare with bona fide embryonic stem cells or induced pluripotent stem cells, Karp said. Also, although the study was "rigorous" and "well-controlled," it did not demonstrate exactly why the stress on the cells caused them to become STAP cells, Karp said.
- §19 As with everything in science, more research is required to confirm the findings and learn more about the

implications. Vacanti hopes the process could get tested clinically in humans within three years. He noted that induced pluripotent stem cells are already being explored in Japan in humans and the same “platforms” could be utilized for STAP cells.

- §20 STAP cells also have an additional property that embryonic stem cells and induced pluripotent stem cells do not: They can become placental cells. Scientists can manipulate them to contribute to tissues of either the embryo or the placenta.
- §21 What therapeutic purpose growing more placenta could serve, Vacanti isn't sure -- unless, that is, you wanted to create an embryo and bring it to term. But that's not the goal of this research. Vacanti and colleagues want to explore possible ties to cancer from the STAP cell process; it could potentially help to model the process by which cells become cancerous and explore if there is a way to reverse the process.
- §22 Stem cell research as a field has been growing at “lightning speed,” Karp said. New reprogramming approaches to stem cells are emerging all the time, he said, and this one in particular “looks incredibly promising.”

<http://edition.cnn.com/2014/01/29/health/stem-cell-discovery/>

QUESTION 01

We **CANNOT** say, after reading the text above, that

- A) more research is required to confirm the findings of STAP cell procedure.
- B) STAP is estimated five to ten times faster than other means of reprogramming cells.
- C) the STAP cell procedure has been demonstrated in cells its effectiveness and the risks in humans have already been known.
- D) this method by Vacanti and his colleagues is really the simplest, cheapest, and fastest method ever achieved for reprogramming cells

QUESTION 02

According to the text, what can we not say about stem cells?

- A) Embryonic-like stem cells developed by researchers are usually used for research.
- B) Stem cells are created the natural way every time an egg is fertilized.
- C) Pluripotent stem cells can turn into any cell in the body.
- D) Stem cells can be created naturally or not.

QUESTION 03

Mark the option below which shows the incorrect correspondence between the words and the idea they represent, according to the text. The words are in bold along the article.

- A) fall down = to fall
- B) bring it up = to increase something
- C) turned out = it didn't work as predicted before
- D) boils down to = to be the main reason for something or the most basic part of something

QUESTION 04

The word *its* in the following sentence “Its effectiveness in humans, and the risks, are unknown.” (paragraph 17) refers to

- A) STAP cell procedure.
- B) young mice.
- C) humans.
- D) cells.

QUESTION 05

According to the text, all the sentences below are correct about the new method, according to Vacanti, **EXCEPT**

- A) it does not involve the insertion [of] new genetic material into cells.
- B) it does not involve the destruction of embryos.
- C) it uses an individual's own mature cells.
- D) it cannot avoid the problem of rejection.

FCMMG (MEDICINA 2019)

Vitamin D is hot! Here's how to get it.

Vitamin D is becoming an increasingly important player in a healthful diet. Over the past 10 years, a spate of research has linked it to an impressive and diverse array of potential benefits. In addition to vitamin D's well-known function of increasing calcium absorption and **thereby** helping encourage healthy bone growth, it has shown promise in helping to prevent certain cancers, heart disease, diabetes, and osteoarthritis. Foods naturally rich in vitamin D are scarce. Fortified foods help fill the gap. However, while many in the scientific community are excited about its promise, they have yet to agree on how much you need it.

Vitamin D is unique in many ways. At the time of its discovery in 1919, vitamins A, B, and C were already identified; D was the next letter in line, **so** that was the name given to the compound. However, vitamin D behaves like a hormone in the body, relaying chemical messages -- something no other vitamin does. For example, vitamin D signals the intestines to absorb calcium from foods and to regulate its uptake by bone cells.

Some nutrients, such as vitamin C, are put to work immediately by the body in the form in which they are consumed. Vitamin D, however, requires processing. Vitamin D begins as a relative of cholesterol. Dehydrocholesterol molecules are stored in your skin, waiting to absorb sunlight. When this occurs, dehydrocholesterol can be transformed into previtamin D3 (cholecalciferol), the most readily absorbed form of vitamin D. Another form, previtamin D2 (ergocalciferol) is derived from plant sources and can only be obtained through diet. Both previtamins are processed by the liver and kidneys into a final form called calcitriol, which then travels to the vitamin D receptors that exist in almost all, if not all, cells in your body.

"Vitamin D is a key component in helping the body respond to many different kinds of assaults and stimuli," says Robert Heaney, Ph.D., professor of medicine at Creighton University in Omaha, Nebraska. "In the absence of it, you're asking the body to defend itself with one hand tied behind its back."

Most of the good news about vitamin D comes thanks to improved methods of measuring the levels of vitamin D in the body. "We didn't have a good way to measure vitamin D until 15 years ago, and the test took five to 10 years to reach widespread use," Heaney says. "Previously, the only indicator of vitamin D deficiency was rickets, a disease resulting in softened bones."

The Institute of Medicine, a group that uses scientific research to formulate public health policies, currently recommends an Adequate Intake, or AI, rather than a specific daily amount of vitamin D. The AI for vitamin D is 200 International Units for adults under age 50, 400 IU for those 51 to 70, and 600 IU for those age 71 and above. As new studies continue to showcase vitamin D's potential benefits, more scientists are calling for increased recommendations. Some suggest as much as 10,000 IU - currently the tolerable upper intake daily.

Late last year, a group of leading scientists published an editorial in the American Journal of Clinical Nutrition calling for an "urgent need" to increase the AI for vitamin D. Among them was Walter Willett, M.D., the widely respected chairperson of the Harvard School of Public Health's department of nutrition. "The range we are talking about -- 1,000 IU per day -- is still a small dose," Willett says. Consider this: A fair-skinned person can manufacture 15,000 IU or more of vitamin D in as little as 30 minutes of optimal sun exposure.

In response to the debate, the National Institutes of Health's Office of Dietary Supplements last year began an intensive effort to learn more about vitamin D, partnering with other federal agencies to assemble a panel to assess research needs and priorities.

"Scientists agree that as the DRIs are revisited, vitamin D is one of the first recommendations that should be reconsidered," says Patsy M. Brannon, Ph.D., professor of nutrition at Cornell University who coordinates the ODS' vitamin D initiative. "The current recommendation is a decade old. There's been a lot of research in the last 10 years. **Whether** there is sufficient strength of evidence to increase recommendations is where scientists disagree." Until they reach a consensus, you have three options for obtaining vitamin D: food, sunlight, or supplements.

Foods naturally rich in vitamin D are scarce. Seafood options top the list - cod liver oil, salmon, mackerel and tuna. (Bonus: they also contain heart-healthy omega-3 fatty acids.) After that, fortified foods help fill the gap. Milk is fortified with 100 IU per 8-ounce serving. Some yogurts and cheeses also contain vitamin D, as do breakfast cereals and juices.

Every time sunlight warms our skin, your body produces vitamin D. However, sunlight is unreliable and several factors influence its ability to induce vitamin D production, including: the angle of the sun, the latitude in which you live, your skin pigmentation, age, and use of skin-care products containing sun-protection factor (SPF). **Also**, there's the not-small matter of skin cancer risk, which is heightened by exposure to sunlight.

Supplements are a reliable -- and safe -- source of vitamin D. The key is buying the right type of supplement. Most multivitamins are fortified with the current AI for vitamin D; 400 IU.

(By Phillip Rhodes. Adapted from: edition.cnn.com/2008/HEALTH/diet.fitness/05/20/cl.vitamin.d/index.htm)

QUESTÃO 01

According to the text, all the sentences below are correct about vitamin D, except:

- A) the Institute of Medicine currently recommends a specific amount of vitamin D a day.
- B) the current recommendation of its intake is from ten years ago.
- C) its daily tolerable upper intake at the present time is 10,000 IU.
- D) the Adequate Intake varies according to the age of the adult.

QUESTÃO 02

Mark the option below which shows the incorrect correspondence between the words and the idea they represent, according to the text. The words are in bold along the article.

- A) also = furthermore.
- B) thereby = whatever.
- C) whether = if.
- D) so = then.

QUESTÃO 03

The word *its* in the following sentence "However, sunlight is unreliable and several factors influence its ability to induce vitamin D production, including: the angle of the sun, the latitude in which you live, your skin pigmentation, age, and use of skin-care products containing sun-protection factor (SPF)" (paragraph 11) refers to

- A) SPF.
- B) ability.
- C) sunlight.
- D) vitamin D production.

QUESTÃO 04

According to the text, we cannot say about the options for obtaining vitamin D that

- A) the exposure to sunlight can heighten the risk of skin cancer.
- B) there are many kinds of foods naturally rich in vitamin D.
- C) some fortified dairy products are sources of vitamin D.
- D) vitamin D supplements are trustful.

QUESTÃO 05

We cannot say, according to the text above, that

- A) so far, there are three options for obtaining vitamin D.
- B) after vitamin D is consumed, it requires processing to work in the body.
- C) there are methods of measuring the levels of vitamin D in the body nowadays.
- D) all scientists agree it is necessary to increase recommendations of vitamin D intake.

FUVEST – 2017

TEXTO PARA AS QUESTÕES DE 01 A 03



Plants not only remember when you touch them, but they can also make risky decisions that are as sophisticated as those made by humans, all without brains or complex nervous systems.

Researchers showed that when faced with the choice between a pot containing constant levels of nutrients or one with unpredictable levels, a plant will pick the mystery pot when conditions are sufficiently poor.

In a set of experiments, Dr. Shemesh, from Tel-Hai College in Israel, and Alex Kacelnik, from Oxford University, grew pea plants and split their roots between two pots. Both pots had the same amount of nutrients on average, but in one, the levels were constant; in the other, they varied over time. Then the researchers switched the conditions so that the average nutrients in both pots would be equally high or low, and asked: Which pot would a plant prefer?

When nutrient levels were low, the plants laid more roots in the unpredictable pot. But when nutrients were abundant, they chose the one that always had the same amount.

The New York Times, June 30, 2016. Adaptado.

QUESTION 01

Segundo uma das conclusões dos experimentos relatados no texto, as plantas de ervilha demonstraram

- A) sensibilidade aos gestos humanos agressivos.
- B) ter sistemas nervosos complexos.
- C) graus distintos de tolerância à umidade do solo.
- D) capacidade de escolhas adaptativas conforme o meio.
- E) comportamento previsível no processo de florescimento.

QUESTION 02

Conforme o texto, um dos elementos da metodologia empregada nos experimentos foi

- A) o número de mudas plantadas.
- B) a técnica de divisão de raízes.
- C) a localização dos vasos na estufa.
- D) a escolha da variedade de ervilha.
- E) o espaçamento das sementes nos vasos.

QUESTION 03

De acordo com os experimentos relatados no texto, em condições adversas, as plantas de ervilha priorizaram o crescimento de raízes nos vasos que apresentaram níveis de nutrientes

- A) abundantes.
- B) estáveis.
- C) básicos.
- D) ideais.
- E) variáveis.

TEXTO PARA AS QUESTÕES 04 E 05

A study carried out by Lauren Sherman of the University of California and her colleagues investigated how use of the “like” button in social media affects the brains of teenagers lying in body scanners. Thirty two teens who had Instagram accounts were asked to lie down in a functional magnetic resonance imaging (fMRI) scanner. This let Dr. Sherman monitor their brain activity while they were perusing both their own Instagram photos and photos that they were told had been added by other teenagers in the experiment. In reality, Dr. Sherman had collected all the other photos, which included neutral images of food and friends as well as many depicting risky behaviours like drinking, smoking and drug use, from other peoples’ Instagram accounts. The researchers told participants they were viewing photographs that 50 other teenagers had already seen and endorsed with a “like” in the laboratory. The participants were more likely themselves to “like” photos already depicted as having been “liked” a lot than they were photos depicted with fewer previous “likes”. When she looked at the fMRI results, Dr. Sherman found that activity in the nucleus accumbens, a hub of reward circuitry in the brain, increased with the number of “likes” that a photo had.

The Economist, June 13, 2016. Adaptado.

QUESTION 04

Segundo o texto, como resultado parcial da pesquisa, observou-se que

- A) fotos com imagens neutras provocaram menor impacto do que as que retratavam comportamento perigoso.
- B) os participantes mostraram tendência a “curtir” uma imagem que já havia recebido número considerável de “curtidas”.
- C) os adolescentes demonstraram certo desconforto, quando solicitados a avaliar fotos produzidas por eles próprios.
- D) as tarefas propostas aos participantes apresentaram limitações, por terem foco exclusivo na rede Instagram.
- E) a metodologia adotada no experimento confirmou conclusões de estudos anteriores sobre redes sociais.

QUESTION 05

Conforme o texto, a região do cérebro que se mostrou mais ativa, quando da análise dos resultados da ressonância, corresponde a um sistema de

- A) memória recente.
- B) defesa.
- C) recompensa.
- D) repetição.
- E) inibição.

FUVEST 2018

TEXTO PARA AS QUESTÕES DE 01 A 03



It's a perilous time to be a statue. Not that it has ever been a particularly secure occupation, exposed as statues are to the elements, bird droppings and political winds.

Just ask Queen Victoria, whose rounded frame perches atop hundreds of plinths across the Commonwealth, with an air of solemn, severe solidity. But in 1963 in Quebec, members of a separatist paramilitary group stuck dynamite under the dress of her local statue. It exploded with a force so great that her head was found 100 yards away.

Today, the head is on display in a museum, with her body preserved in a room some miles away. The art historian Vincent Giguère said that "the fact it's damaged is what makes it so important."

There's another reason to conserve the beheaded Victoria. Statues of women, standing alone and demanding attention in a public space, are extremely rare.

To be made a statue, a woman had to be a naked muse, royalty or the mother of God. Or occasionally, an icon of war, justice or virtue: Boadicea in her chariot in London, the Statue of Liberty in New York.

Still, of 925 public statues in Britain, only 158 are women standing on their own. Of those, 110 are allegorical or mythical, and 29 are of Queen Victoria.

Julia Baird, **The New York Times**. September 4, 2017. Adaptado.

QUESTION 01

Conforme o texto, o grau de importância atribuído à estátua da rainha Vitória, em Québec, reside no fato de a escultura

- A) estar em processo de restauração.
- B) ter sobrevivido às intempéries ao longo dos anos.
- C) pertencer a um grupo de réplicas idênticas.
- D) ser a primeira a retratar uma autoridade feminina.
- E) ter sofrido danos em sua estrutura.

QUESTION 02

No texto, a figura da rainha Vitória é associada ao conceito de

- A) firmeza.
- B) eloquência.
- C) longevidade.
- D) beleza.
- E) maternidade.

QUESTION 03

No texto, a referência ao número de estátuas expostas em espaços públicos na Grã-Bretanha indica

- A) ênfase em personalidades alegóricas.
- B) escassez de monumentos do gênero feminino.
- C) despreço por esculturas de corpo inteiro.
- D) falta de espaço em museus para peças de grande porte.
- E) preferência por figuras de destaque em batalhas.

TEXTO PARA AS QUESTÕES 04 E 05

Algorithms are everywhere. They play the stockmarket, decide whether you can have a mortgage and may one day drive your car for you. They search the internet when commanded, stick carefully chosen advertisements into the sites you visit and decide what prices to show you in online shops. (...) But what exactly are algorithms, and what makes them so powerful?

An algorithm is, essentially, a brainless way of doing clever things. It is a set of precise steps that need no great mental effort to follow but which, if obeyed exactly and mechanically, will lead to some desirable outcome. Long division and column addition are examples that everyone is familiar with—if you follow the procedure, you are guaranteed to get the right answer. So is the strategy, rediscovered thousands of times every year by schoolchildren bored with learning mathematical algorithms, for playing a perfect game of noughts and crosses. The brainlessness is key: each step should be as simple and as free from ambiguity as possible. Cooking recipes and driving directions are algorithms of a sort. But instructions like “stew the meat until tender” or “it’s a few miles down the road” are too vague to follow without at least some interpretation.

(...)

The Economist, August 30, 2017.

QUESTION 04

No texto, um exemplo associado ao fato de algoritmos estarem por toda parte é

- A) o cartão de crédito.
- B) o livre mercado.
- C) a dieta.
- D) o jogo de xadrez.
- E) o comércio eletrônico.

QUESTION 05

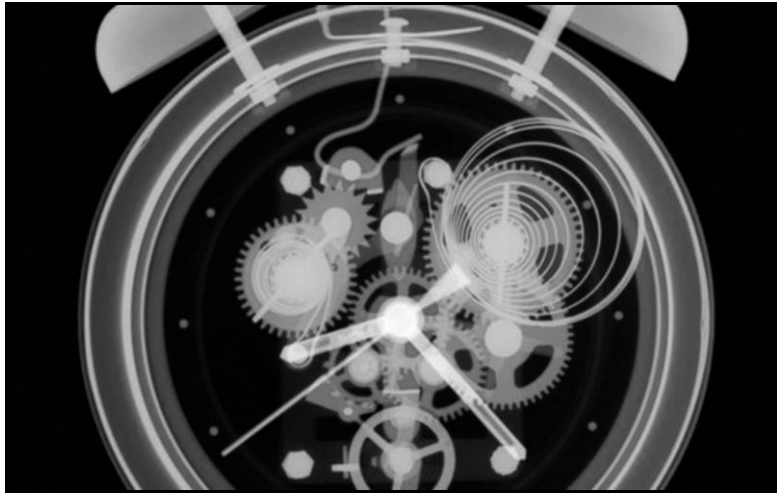
Segundo o texto, a execução de um algoritmo consiste em um processo que

- A) prevê a memorização de tabelas e fórmulas.
- B) envolve mecanismos de seleção e detecção de erros.
- C) se apoia em um número infinito de etapas.
- D) é incompatível com análises subjetivas e imprecisas.
- E) alterna níveis altos e baixos de esforço intelectual.

FUVEST 2019

(Questões 73 a 79)

Texto para as questões 01-03



What time is it? That simple question probably is asked more often today than ever. In our clock-studded, cell-phone society, the answer is never more than a glance away, and so we can blissfully partition our days into ever smaller increments for ever more tightly scheduled tasks, confident that we will always know it is 7:03 P.M. Modern scientific revelations about time, however, make the question endlessly frustrating. If we seek a precise knowledge of the time, the elusive infinitesimal of “now” dissolves into a scattering flock of nanoseconds. Bound by the speed of light and the velocity of nerve impulses, our perceptions of the present sketch the world as it was an instant ago—for all that our consciousness pretends otherwise, we can never catch up. Even in principle, perfect synchronicity escapes us. Relativity dictates that, like a strange syrup, time flows slower on moving trains than in the stations and faster in the mountains than in the valleys. The time for our wristwatch or digital screen is not exactly the same as the time for our head. Our intuitions are deeply paradoxical. Time heals all wounds, but it is also the great destroyer. Time is relative but also relentless. There is time for every purpose under heaven, but there is never enough.

Scientific American, October 24, 2014. Adaptado.

QUESTÃO 01

No texto, a pergunta “What time is it?” (L. 1), inserida no debate da ciência moderna sobre a noção de tempo,

- A) corrobora a crença de que a passagem do tempo é uma garantia de renovação para a humanidade.
- B) consiste na prova de que “o agora” é a realização de uma troca harmoniosa com o mundo.
- C) representa a obsessão dos seres humanos pelo controle da vida com auxílio do relógio.
- D) revela o esforço empreendido pelas pessoas na distribuição das tarefas ao longo do dia.
- E) mostra o descompasso e a imprecisão relativos à percepção do presente e do passado.

QUESTÃO 02

No texto, a expressão que melhor representa o caráter supostamente exato do tempo é:

- A) “In our clock-studded, cell-phone society” (L. 2).
- B) “never more than a glance away” (L. 2).
- C) “confident that we will always know it is 7:03 P.M.” (L. 4).
- D) “Bound by the speed of light” (L. 7).
- E) “like a strange syrup” (L. 10-11).

QUESTÃO 03

De acordo com o texto, considera-se contraditório, em relação à percepção humana do tempo,

- A) seu poder de cura e destruição.
- B) sua natureza pública e privada.
- C) seu caráter ordenado e irregular.
- D) seu sentido de submissão e liberdade.
- E) seu grau de abundância e desperdício.

TEXTO PARA AS QUESTÕES DE 03 A 07



For most, The Gateway International Bridge functions as it should, allowing people to get between the U.S. and Mexico. But on a hot Sunday afternoon, a dozen migrants at the mouth of the bridge weren't getting anywhere at all. They had been told, once again, to wait.

At a press conference the next day, President Trump once again touted the border wall he has promised supporters. "The wall is getting longer and taller and stronger each and every day", he said, even though construction has not begun. The President's characterization of the physical wall was false, but his Administration has effectively erected an invisible one.

It is built, in part, from situations like the one at the bridge, which illustrates the problem with this kind of barrier. The practices that Trump praises for keeping out criminals also punish those who are trying to follow the rules.

Those migrants who spoke to TIME at the bridge had varied stories but shared a determination to cross. Some understood a bit of what could happen to them next. How long could it take to get processed? And if they did ultimately apply for asylum, it remained to be seen whether their stories would qualify. The regulations governing such matters are complicated, and the vast majority who apply are rejected. But in theory, their fates would be decided at immigration courts, not at the border.

TIME, August 23, 2018. Adaptado.

QUESTÃO 04

De acordo com o texto, para ingresso nos Estados Unidos, o cruzamento da fronteira entre este país e o México, no local denominado *The Gateway International Bridge*, é

- A) dificultado para alguns migrantes.
- B) negado para casos de reincidentes.
- C) adiado para os migrantes que seguem as regras.
- D) condicionado à nacionalidade do solicitante.
- E) liberado para os migrantes com documentação válida.

QUESTÃO 05

A frase nominal “this kind of barrier” (L. 9) refere-se

- A) ao muro de Trump na fronteira com o México.
- B) à ponte The Gateway International Bridge.
- C) a protestos de migrantes na fronteira.
- D) ao muro invisível criado por práticas do governo Trump.
- E) a medidas adotadas nos tribunais de imigração.

QUESTÃO 06

Segundo o texto, após ingresso nos Estados Unidos, os migrantes que requerem asilo

- A) têm seu processo julgado com mais rapidez.
- B) precisam comprovar sua idoneidade.
- C) aguardam na fronteira, onde sua petição é avaliada.
- D) são mais determinados a permanecer no país.
- E) têm seu pedido negado com frequência.

QUESTÃO 07

Com base no texto e nos fatos que envolveram a política imigratória dos EUA em junho de 2018, é correto afirmar:

- A) O presidente Donald Trump, por pressão do Conselho de Direitos Humanos da Organização das Nações Unidas (ONU), flexibilizou a punição aos imigrantes ilegais, passando a tratar os casos em cortes de imigração e não mais por meio de indiciamento criminal.
- B) O presidente Donald Trump finalizou a construção do muro na fronteira México-EUA, desde a costa leste até a oeste, com o objetivo de conter a nova onda imigratória de venezuelanos e hondurenhos.
- C) Imigrantes mexicanos que seguiram as regras oficiais para imigração nos EUA obtiveram concessão de asilo político em curto prazo, especialmente nas cortes da Califórnia, tradicional reduto conservador e base eleitoral do presidente Donald Trump.
- D) A construção de uma barreira física entre México e EUA visa, segundo o presidente Donald Trump, consolidar um estado fronteiro, no qual os imigrantes deverão permanecer algum tempo antes de ingressarem em outras partes do país.
- E) As barreiras construídas entre México e EUA são, além de físicas, também psicológicas, como pôde ser visto no caso em que milhares de crianças imigrantes foram separadas de suas famílias.

PUCMINAS 2017

Contrary to popular belief, most people do care about the welfare of others. Empathy is a valuable impulse that helps humans survive in groups. In Denmark, a nation that has consistently been voted the happiest place in the world, children are taught about empathy from a young age both inside and outside of school.

Children in the Danish school system participate in a mandatory national program called Step by Step as early as preschool. The children are shown pictures of kids who are each exhibiting a different emotion: sadness, fear, anger, happiness, and so on. The students talk about these cards and put into words what the child is sensing, learning to conceptualize their own and others' feelings. They learn empathy, problem-solving, and how to read facial expressions. An essential part of the program is that the facilitators and children aren't judgmental of the emotions they see; instead, they simply recognize and respect those sentiments.

Another example of empathy training in Danish schools is in how they subtly mix children of different strengths and weaknesses together. Students who are stronger academically are taught alongside those who are less strong; quieter kids with more sociable ones; and so on. The goal is for the students to see that everyone has positive qualities and to support each other. The math prodigy may be terrible at soccer, and vice versa. This system promotes collaboration, teamwork, and respect.

Perhaps, then, it is no surprise that empathy is one of the most important factors in fostering successful leaders, entrepreneurs, and managers. It reduces bullying, increases one's capacity to forgive, and greatly improves relationships and social connectedness. Empathy enhances the quality of meaningful relationships, which research suggests is one of the most important factors in a person's sense of wellbeing. Research also suggests that empathetic teenagers tend to be more successful because they are more purpose-driven than their more narcissistic counterparts. Successful people don't operate alone; every human needs the support of others to achieve positive results in his or her life.

From: <http://goo.gl/Vn96DK>. Access: 09/08/2016. (Adapted).

QUESTION 01

According to the text, people tend to believe that human-beings

- A) tend to be very optimistic and understanding.
- B) are not self-centered.
- C) are not interested in other people's wellbeing.
- D) should be more selfish.

QUESTION 02

The Danish program called Step by Step is

- A) optional for schools and families in Denmark.
- B) implemented in the universities in Denmark.
- C) used by Danish teachers and parents alike.
- D) compulsory in Danish school system.

QUESTION 03

What is crucial in Step by Step is the fact that the facilitators and children

- A) are not interested in the emotions they see.
- B) cannot identify the emotions they see.
- C) will not show consideration for the emotions they see.

D) do not disapprove the emotions they see.

QUESTION 04

The word **those** in “those who are less strong” (paragraph 3) refers to

- A) schools.
- B) students.
- C) qualities.
- D) efforts.

QUESTION 05

According to research, one of the main factors in a person’s sense of wellbeing is

- A) having meaningful relationships.
- B) being a successful entrepreneur.
- C) being wealthy and well-known.
- D) having friends who are great leaders

PUCMINAS 2018

Are Our Phones Making Us Less Empathetic?

By Melissa Dahl

We already suspect cell phones are making us more distracted. But can they also turn us into terrible friends? That's what some new research led by Virginia Tech psychologist Shalini Misra suggests, anyway. Misra and her colleagues found 100 pairs of people in Washington, D.C. cafés and asked them to speak about either a meaningful or meaningless subject, and then watched the conversation, noting when one conversational partner or the other messed with his or her phone.

Psychologist Christian Jarrett summarizes the findings on the British Psychology Society's Research Digest: Feelings of "interconnectedness" (rated by agreement with statements like "I felt close to my conversation partner") were reduced for pairs in which a mobile device was placed on the table or held by one of them. Similarly, "empathetic concern" (measured by items like "To what extent did your conversation partner make an effort to understand your thoughts and feelings about the topic you discussed?") was rated lower by pairs in which a mobile device was brought into view. The topic of conversation made no difference to these results, but the reduction in empathetic concern associated with the presence of a mobile device was especially pronounced for pairs of people who were in closer relationships, perhaps because their expectations about the interaction were higher.

What I was really curious about was this: How many times did each person pick up his or her phone? Unfortunately, Misra told me she and her colleagues didn't track this. But she told me in an email that her findings suggest something we all have observed in ourselves and others: Our phones make us physically present, but emotionally absent. She continued: It urges us to think deeply about how our technologies change us and the physical context of our lives. Are we devoting the time and energy needed to build and sustain our relationships? Are we losing the capacity for thoughtful reflection and empathy?

(Adapted from <https://goo.gl/7SbLKE>)

QUESTION 01

What does the word **can** in "But **can** they also turn us into terrible friends?" (paragraph 1) indicate?

- A) Obligation.
- B) Necessity.
- C) Possibility.
- D) Permission.

QUESTION 02

What does the word **them** in "and asked **them** to speak about" (paragraph 1) refer to?

- A) Washington cafés' owners.
- B) Misra and her colleagues.
- C) Virginia Tech researchers.
- D) One hundred pairs of people.

QUESTION 03

According to Christian Jarrett, the results of the research were not affected by

- A) the type of relationship the partners had.
- B) mobile devices placed on the table.
- C) the subject of the conversations.
- D) mobile phones held by one of the partners.

QUESTION 04

The word **but** in "Our phones make us physically present, **but** emotionally absent." (paragraph 3) indicates

- A) deduction.
- B) consequence.
- C) reason.
- D) contrast.

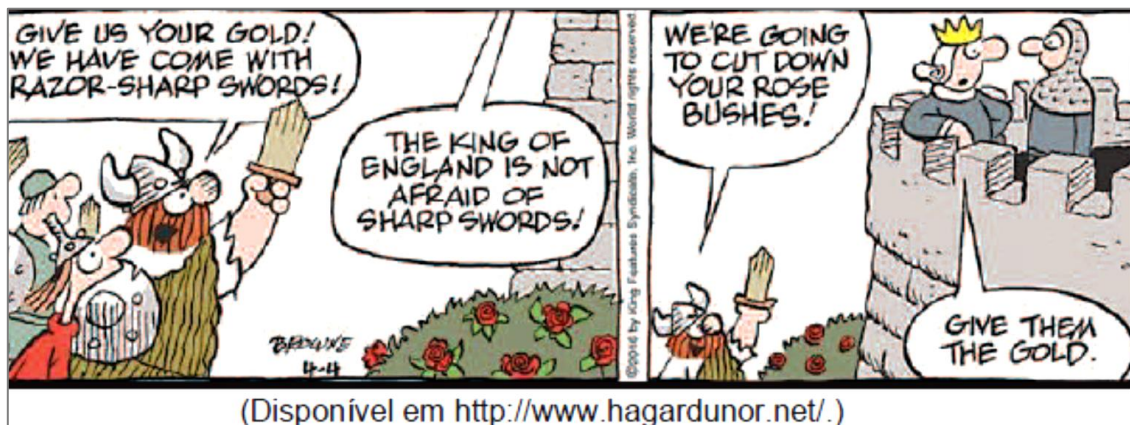
QUESTION 05

What is the main idea of this text?

- A) It is important to evaluate the use of technology in our lives.
- B) It is necessary to use meaningful subjects in conversations.
- C) The expectations we have in life should always be high.
- D) The time and energy needed to build relationships is long.

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QUESTION 01



A tirinha ironiza uma suposta característica dos ingleses:

- A) o apreço pela história das invasões bárbaras.
- B) a admiração pela família real.
- C) o valor que atribuem aos seus jardins.
- D) o cuidado com a preservação de seus edifícios históricos.

QUESTION 02

The Birth of My Kitchen-Table Fiction

By Haruki Murakami



Most people – most of us who are part of Japanese society – graduate from school, then find work, then, after some time has passed, get married. Even I originally intended to follow that pattern. Yet in reality I married, then started working, then finally managed to graduate. In other words, the order I chose was the exact opposite to what was considered normal.

Since I hated the idea of working for a company, I decided to open my own establishment, a place where people could go to listen to jazz records, have a coffee, eat snacks and drink. It was a simple, rather happy-go-lucky kind of idea: running a business like that would let me relax listening to my favorite music from morning till night.

(Adaptado de H. Murakami, *Wind and Pimba! – Two Novels*. Tradução do japonês para inglês de Ted Goossen. London: Penguin Random House, 2015, p. 5.

O autor do texto

- A) fez o que era normal para os jovens japoneses na época, abrindo uma loja de discos.
- B) fez o que era normal para os jovens japoneses, mas em uma ordem totalmente diferente.
- C) queria viver feliz ouvindo música o dia todo, sem trabalhar.
- D) queria ganhar dinheiro trabalhando só com música e viver feliz.

QUESTION 03



(Disponível em: <http://www.collegehumor.com/post/6833315/the-small-talkthermometer>.
Acessado em: 21/08/2016.)

Considerando o nome da figura - “The Small Talk Thermometer” -, pode-se depreender que a expressão “small talk” se refere a

- A) conversas casuais ou amenas, para estabelecer contato ou quebrar o gelo.
- B) conversas entre cientistas sobre mudanças climáticas.
- C) conversas entre meteorologistas sobre o tempo.
- D) conversas entre pessoas que não conseguem chegar a um consenso.

QUESTION 04

RANKING UNIVERSITIES BY ‘GREENNESS’

Universities these days are working hard to improve their sustainability credentials, with efforts that include wind power, organic food and competitions to save energy. They are also adding courses related to sustainability and energy. But which university is the greenest?

Several ranking systems have emerged to offer their take. The Princeton Review recently came out with its second annual green ratings. Fifteen colleges earned the highest possible score — including Harvard, Yale and the University of California, Berkeley.

Another group, the Sustainable Endowment Institute’s GreenReportCard.org, rates colleges on several diferente areas of green compliance, such as recycling, student involvement and green building. Its top grade for overall excellence, an A-, was earned by 15 schools.

(Adaptado de http://green.blogs.nytimes.com/2009/08/20/ranking-universities-bygreenness/?_r=0. Acessado em 31/08/2016.)

Conforme o texto, universidades norte-americanas estão se empenhando para

- A) oferecer mais cursos sobre ecologia.
- B) melhorar sua posição em um ranking que define as instituições mais “verdes”.
- C) oferecer os melhores cursos sobre preservação ambiental.
- D) participar de uma competição que define os campi com maior área verde.

QUESTION 05

Why Everyone Should Read Harry Potter

September 9, 2014

Harry Potter is the best selling book series of all time. But it's had its reproaches. Various Christian groups claimed the books promoted paganism and witchcraft to children. Washington Post book critic Ron Charles called the fact that adults were also hooked on Potter a "bad case of cultural infantilism." Charles and others also cited a certain artistic banality in massively commercial storytelling, while others criticized Hogwarts, the wizardry academy attended by Potter, for only rewarding innate talents.

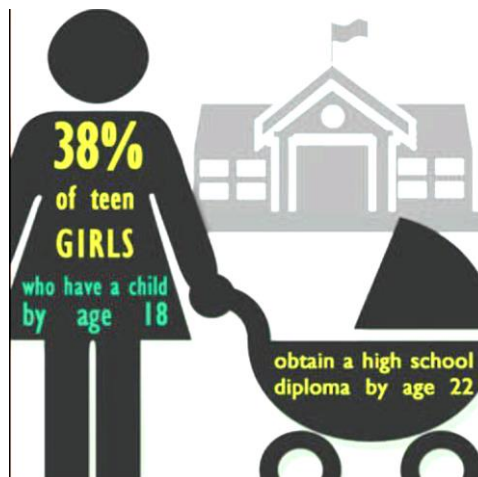
The Anglo-American writer Christopher Hitchens, on the other hand, praised J. K. Rowling for freeing English children's literature from dreams of riches and class and snobbery and giving us a world of youthful democracy and diversity. A growing body of evidence suggests that reading Rowling's work, at least as a youth, might be a good thing.

(Adaptado de <http://www.scientificamerican.com/article/why-everyone-should-read-harry-potter/>. Acessado em 02/09/2016.)

A leitura do excerto permite concluir adequadamente que:

- A) A série Harry Potter é aprovada por críticos literários e grupos religiosos com base nos mesmos argumentos.
- B) As qualidades literárias de Harry Potter justificam seu sucesso entre os adultos.
- C) A abordagem educacional de Hogwarts recompensa as habilidades desenvolvidas por meio do esforço pessoal.
- D) Para os personagens da série Harry Potter, o sonho de ascendência social e poder financeiro é pouco relevante.

QUESTION 06



(Disponível em <http://neahealthyfutures.org/the-importance-of-teen-pregnancy-prevention/>. Acessado em 04/09/2016.)

Depreende-se das informações da figura que

- A) 38% das jovens engravidam antes dos 18 anos.
- B) 38% das jovens concluem o ensino médio aos 22 anos.
- C) a gravidez na adolescência interfere na vida escolar das jovens.
- D) a gravidez após os 18 anos interfere na vida escolar das jovens.

QUESTION 07

Roman documents discovered

We often think that the best information from the Roman world comes from Egypt, where the dryness preserves papyri. However, in Britain the reverse conditions occur. At Vindolanda – a Roman fort located two miles behind Hadrian’s Wall – the humidity preserved wooden writing tablets that were thrown into a bonfire when the fort was evacuated in CE 105.

These wooden tablets were one of the most important discoveries made in Roman Britain in the 20th century. They were used not for grand writings but for memoranda and accounts, so they provide the best insight into life in the Roman army found anywhere in the world. One of the tablets says:

Octavius to Candidus: “I need money. I have bought 5,000 bushels of grain, and unless you send me some money, I shall lose my deposit and be embarrassed”.

Adaptado de <http://www.archaeology.co.uk/specials/the-timeline-of-britain/vindolanda-2.htm>.
Acesso em: 28 ago. 2016.

Os documentos descobertos em Vindolanda

- A) são papiros preservados pelo clima seco da região em que foram encontrados.
- B) contêm informações sobre a evacuação do forte no ano 105 da Era Cristã.
- C) preservam registros de disputas financeiras entre cidadãos comuns.
- D) são registros em madeira, com informações preciosas sobre a vida no exército romano.

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QUESTION 01

FIGURA 1



FIGURA 2



(Adaptado de 16 Traduções hilárias de placas e avisos em inglês feitos para a copa. Mega Curioso, 07/06/2014. Disponível em <http://www.megacurioso.com.br/copa-do-mundo-2014/44531-16-traducoes-hilarias-de-placas-e-avisos-em-ingles-feitos-para-acopa.htm>. Acessado em 10/07/2017.)

Entre as inadequações no uso do inglês observadas nas figuras 1 e 2, podemos citar

- A) erros no emprego dos tempos verbais em inglês.
- B) equívoco quanto à classe gramatical de certas palavras.
- C) desconhecimento das diferenças entre inglês oral e escrito
- D) erros de tradução causados por falsos cognatos.

QUESTION 02

Elderly flight passenger throws coins into engine for 'luck', delays take-off for hours

China Southern Airlines Flight 380 was held up at the Shanghai Pudong International Airport after an elderly woman passenger caused a disruption, according to the airline's official WeChat account. An investigation into the incident is under way.

Passengers boarding the flight reportedly saw an elderly woman throwing coins at the engine for "blessings" from the

middle of the boarding staircase and alerted the crew.

Ground staff said the woman, who appeared to be about 80 and had limited mobility, was accompanied by her husband, daughter and son-in-law.

The captain was quoted as saying the metal, if sucked up by the engine, could have caused serious damage, including failure.

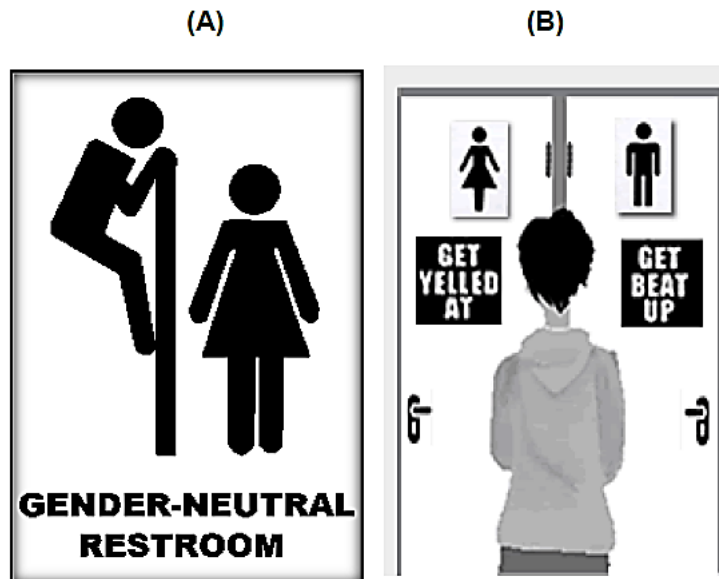
The flight was later given a green light and took off at 5.52pm, more than five hours late. It is scheduled to arrive in Guangzhou at 8.14pm.

(Adaptado de Sarah Zheng, Elderly flight passenger throws coins into engine for 'luck', delays take-off for hours. *South China Morning Post*, 27/06/2017. Disponível em <http://www.scmp.com/news/china/society/article/2100242/elderlyflight-passenger-throws-coins-engine-luck-delays-take>. Acessado em 10/07/2017.)

O que é correto afirmar sobre o incidente relatado na notícia anterior?

- A) Por causa do incidente, o avião chegou a seu destino com cinco horas de atraso, às 17h52.
- B) Segundo o piloto, moedas atiradas na turbina do avião causaram sérios danos à aeronave.
- C) Uma idosa chinesa, seu marido, sua filha e seu genro quase provocaram um acidente aéreo.
- D) A ação de alguns passageiros evitou o risco de um grave acidente aéreo.

QUESTION 03



(Adaptado de https://i0.wp.com/www.davescomputertips.com/wp-content/uploads/2014/10/gender-neutral_restroom.png. Acessado em 10/07/2017.)

(Adaptado de <http://cougarnews.org/7469/student-life/time-for-change-gender-neutral-bathrooms/>. Acessado em 10/07/2017.)

Os panfletos acima foram distribuídos na entrada de uma assembleia de estudantes universitários, reunidos para discutir um pedido de reforma nos banheiros do *campus*. Assinale a opção correta.

- A) O panfleto (A) defende, de maneira irônica, a criação de mais banheiros públicos unissex.
- B) O panfleto (B) recomenda bater na porta ou avisar verbalmente antes de entrar em um banheiro unissex.
- C) O panfleto (A) critica pessoas que se preocupam excessivamente com questões de assédio sexual.
- D) O panfleto (B) argumenta a favor de banheiros unissex ao expor um dilema de pessoas transgênero.

QUESTION 04

ZOMBIE NEUROSCIENCE

I don't know if cockroaches dream, but I imagine if they do, jewel wasps feature prominently in their nightmares. These small, solitary tropical wasps are of little concern to us humans; after all, they don't manipulate our minds so that they can serve us up as willing, living meals to their newborns, as they do to unsuspecting cockroaches. The story is simple, if grotesque: the female wasp controls the minds of the cockroaches she feeds to her offspring, taking away their sense of fear or will to escape their fate. What turns a once healthy cockroach into a mindless zombie it's venom. Not just any venom, either: a specific venom that acts like a drug, targeting the cockroach's brain.

(Adaptado de Christie Wilcox, *Zombie Neuroscience*. *Scientific American*, New York, v. 315, n. 2, p. 70–73, 2016.)

De acordo com o autor,

- A) certas baratas conseguem escapar de ataques de vespas comportando-se como zumbis.
- B) baratas são capazes de ações predatórias que mal podemos imaginar.
- C) vespas fêmeas de uma certa espécie podem controlar a mente das baratas.
- D) uma barata pode inocular um veneno que transforma uma outra barata em um zumbi.

QUESTION 05

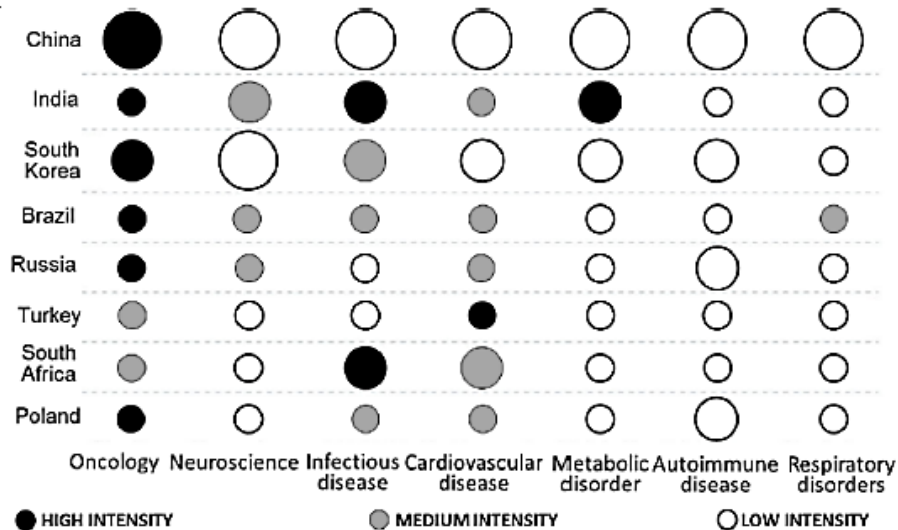


Figure 1: Therapeutic areas in emerging markets

The colour of the dots represents the relative intensity of therapeutic area research within a specific country across each row. The size of the dots represents the relative proportions of research across different countries within a specific therapeutic area in each column.

(Adaptado de Ajay Gautam, Lily Li e Kumar Srinivasan, Market watch: Therapeutic area 'heat map' for emerging markets. *Nature Reviews Drug Discovery* 14, p. 518, jul. 2015.)

De acordo com o gráfico apresentado,

- A) doença autoimune é um tema pesquisado intensamente em todos os países.
- B) a China é o país com o menor mercado potencial para tratamentos médicos, apesar de ser populosa.
- C) Índia e África do Sul dão importância semelhante às pesquisas sobre doenças infecciosas.
- D) no Brasil, na Rússia e na Índia, a quantidade de doentes de câncer é aproximadamente a mesma.

QUESTION 06

Olaudah Equiano's Biography

Olaudah Equiano (1745 –1797) foi um escritor abolicionista africano do século XVIII que viveu na pele os horrores da escravidão nas Américas. Leia o trecho abaixo, retirado da sua autobiografia.



Hitherto I had thought only slavery dreadful; but the state of a free negro appeared to me now equally so at least, and in some respects even worse, for they live in constant alarm for their liberty; and even this is but nominal, for they are universally insulted and plundered without the possibility of redress; for such is the equity of the West Indian laws, that no free negro's evidence will be admitted in their courts of justice. In this situation is it surprising that slaves, when fairly treated, should prefer even the misery of slavery to such a mockery of freedom?

(Adaptado de Olaudah Equiano, *The Interesting Narrative of the Life of Olaudah Equiano or Gustavus Vassa, the African*. Peterborough, Canada: Broadview Press, 2001, p. 250.)

Segundo o testemunho de Olaudah Equiano,

- A) embora tivessem direitos assegurados no tribunal, os ex-escravos não podiam requerer indenizações pelo tempo passado no cativeiro.
- B) os ex-escravos eram, em princípio, protegidos pelas leis das Índias Ocidentais Britânicas, que previam tratamento igualitário aos cidadãos livres.
- C) os escravos libertos dispunham de uma falsa liberdade, pois não gozavam dos mesmos direitos nos tribunais que os cidadãos nascidos livres.
- D) muitos ex-escravos preferiam voltar à antiga condição, mesmo sob patrões severos, levando em conta a maneira como viviam depois de libertos.

QUESTION 07

Should Twitter entertain millions with public arguments?

Comedian Janey Godley's tweets of a couple's train-bound row raise questions of how to protect our privacy in public places.



If the troubles of the two travellers had made it on to a newspaper first rather than a comedian's Twitter feed, would we be so relaxed about loss of privacy? I think perhaps not. Social media has done so much for freedom of expression; it would be cruel if it actually leads to less social freedom for fear of having our every misstep, angry word or misbehaviour broadcast there for all to see.

(Adaptado de David Banks, Should Twitter entertain millions with public rows? *The Guardian*, 13/07/2012. Disponível em <https://www.theguardian.com/commentisfree/2012/jul/13/twittermillions-public-rows>. Acessado em 10/07/2017.)

No artigo de opinião acima, o autor

- A) critica a perda da liberdade de expressão provocada pelo abuso nas mídias sociais por certos usuários.
- B) aponta um dilema ético suscitado pelo uso das mídias sociais, envolvendo dois tipos de liberdade.
- C) diz que a invasão de privacidade por parte de jornais é mais aceita do que aquela praticada pelo TWITTER.
- D) argumenta que a liberdade dos cidadãos é um valor mais importante do que o direito à privacidade.

QUESTION 08

Coral reefs are colorful underwater forests which teem with life and act as a natural protective barrier for coastal regions. The fishes and plants which call them home belong to some of the most diverse — and fragile — ecosystems on the planet. Higher sea temperatures from global warming have already caused major coral bleaching events. Bleaching occurs when corals respond to the stress of warmer temperatures by expelling the colorful algae that live within them. Increased levels of atmospheric carbon dioxide result in higher levels of CO² in the water, leading to ocean acidification, which is also a threat to coral. As the oceans become more acidic, the corals' ability to form skeletons through calcification is inhibited, causing their growth to slow. Increasing sea levels caused by melting sea ice could also cause problems for some reefs by making them too deep to receive adequate sunlight, another factor important for survival.

(Adaptado de Coral Reefs, The National Wildlife Federation. Disponível em <https://www.nwf.org/Wildlife/Threats-to-Wildlife/Global-Warming/Effects-on-Wildlife-and-Habitat/Coral-Reefs.aspx>. Acessado em 26/07/2017.)

Considerando o texto e seus conhecimentos, assinale a alternativa correta.

Os recifes de corais estão seriamente ameaçados pela combinação dos seguintes fatores:

- A) branqueamento das esponjas calcáreas pela exalação de suas algas simbiotes; acidificação marinha em virtude da elevação do nível do mar; e menor taxa fotossintética pelo aumento do CO² nos oceanos.
- B) bloqueio das conchas dos cnidários pela expulsão de suas algas parasíticas; acidificação marinha em virtude dos maiores níveis de CO² no ar; e maior incidência de luz solar por causa do degelo das calotas polares.
- C) branqueamento dos pólipos de cnidários pela expulsão de suas algas simbiotes; acidificação marinha em virtude dos maiores níveis de CO² no ar; e menor taxa fotossintética em razão dos níveis oceânicos elevados.
- D) bloqueio das esponjas calcáreas pela aquisição de algas comensalistas; acidificação marinha em virtude dos maiores níveis de CO² no ar; e maior incidência de luz solar por causa do degelo das calotas polares

QUESTION 09

The modern $F=ma$ form of Newton's second law occurs nowhere in any edition of the *Principia* even though he had seen his second law formulated in this way in print during the interval between the second and third editions in Jacob Hermann's *Phoronomia* of 1716. Instead, it has the following formulation in all three editions: *A change in (1) _____ is proportional to the motive (2) _____ impressed and takes place along the (3) _____ line in which that force is (4) _____.* In the body of the *Principia* this law is applied both to (5) _____ cases, in which an instantaneous impulse such as from impact is effecting the change in motion, and to cases of (6) _____ action, such as the change in motion in the continuous deceleration of a body moving in a resisting medium. Newton thus appears to have intended his second law to be neutral between discrete forces (that is, what we now call impulses) and continuous forces.

(Adaptado de George Smith, "Newton's Philosophiae Naturalis Principia Mathematica", em Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2008 Edition). Disponível em <https://plato.stanford.edu/archives/win2008/entries/newton-principia/>. Acessado em 24/10/2017.)

Assinale a alternativa que apresenta a sequência adequada de palavras que preenchem as lacunas do texto acima, para que os conceitos utilizados estejam corretos.

- A) Motion, force, straight, impressed, discrete, continuous.
- B) Force, motion, impressed, straight, discrete, continuous.
- C) Motion, force, impressed, straight, continuous, discrete.
- D) Force, motion, straight, impressed, continuous, discrete.

UNICAMP 2019

(questões 82 a 90)

QUESTÃO 01

Touching thermal-paper receipts could extend BPA retention in the body

When people handle receipts printed on thermal paper containing the endocrine disruptor bisphenol A (BPA), the toxic chemical could linger in the body for a week or more. Jonathan W. Martin of Stockholm University and Jiaying Liu of the University of Alberta asked six male volunteers to handle paper containing isotopically labeled BPA for five minutes. The volunteers then put on nitrile gloves, wore them for two hours, removed them, and washed their hands with soap. Afterward, the researchers measured the labeled BPA and its metabolites in the volunteers' urine regularly for two days and then once again a week later. The study only traced the isotopically labeled (deuterated) BPA and its metabolites, so any additional BPA exposure from other sources was not monitored.



(Deirdre Lockwood, Touching thermal-paper receipts could extend BPA retention in the body. Chemical & Engineering News, 0410912017.)

O texto discorre sobre uma pesquisa cujo objetivo foi

- A) determinar como o manuseio de papel térmico pode contaminar uma pessoa com bisfenol A, considerando que a concentração foi monitorada utilizando-se um BPA em que átomos de ^1H foram substituídos por ^2H .
- B) analisar de que forma o uso de luvas nitrílicas lavadas com sabão e contendo BPA deuterado pode contaminar receitas impressas em papel térmico que contem um disruptor endócrino.
- C) monitorar, durante uma semana ou mais, a cinética de eliminação de um disruptor endócrino, bisfenol A (BPA), do corpo humano que foi contaminado pelo uso de luvas nitrílicas.
- D) verificar como um papel térmico deteriorado por átomos de ^2H poderia contaminar as mãos de uma pessoa, mesmo que ela estivesse usando luvas nitrílicas durante duas horas e depois as removesse.

QUESTÃO 02

Largest prime number discovered: with more than 23m digits

Known simply as M77232917, the figure is arrived at by calculating two to the power of 77,232,917 and subtracting one, leaving a gargantuan string of 23,249,425 digits. The result is nearly one million digits longer than the previous record holder discovered in January 2016. The number belongs to a rare group of so-called Mersenne prime numbers, named after the 17th century French monk Mahn Mersenne. Like any prime number, a Mersenne prime is divisible only by itself and one, but is derived by multiplying twos together over and over before taking away one. The previous record-holding number was the 49th Mersenne prime ever found, making the new one the 50th.

Adaptado de Ian Sample, "Largest prime number discovered: with more than 23m digits". The Guardian, 04/01/2018.

Considerando as informações contidas no excerto anterior, qual dos números a seguir é um primo de Mersenne?

- A) 23
- B) 29
- C) 31
- D) 37

QUESTÃO 03



Adaptado de <https://br.pinterest.com>. Acesso em 10 junm. 2018.

O post anterior aponta

- A) as vantagens da globalização para o consumidor e os problemas causados pela imigração.
- B) o impacto negativo dos processos migratórios no modo como as culturas vem sendo globalizadas.
- C) os efeitos da globalização no nosso cotidiano e o preconceito contra imigrantes.
- D) o consumo excessivo de produtos estrangeiros no mundo capitalista contemporâneo.

QUESTÃO 04



Disponível em <https://www.creators.com/read/bruce-beattie/01/11/70433>. Acesso em: 18 mar. 2018.

Este cartum foi criado pelo norte-americano Bruce Beattie, em 2011. Nele, o cartunista faz uso da ironia para

- A) justificar a meritocracia como principio de reconhecimento de igualdade de oportunidades.
- B) identificar a garantia do salario mínimo como condição suficiente para a proteção da classe trabalhadora.
- C) abordar os efeitos da precarização do trabalho nas sociedades contemporâneas.
- D) propor que a empregabilidade leva a recuperação da economia e a justiça social.

QUESTÃO 05

We raise girls to cater to the fragile egos of men. We teach girls to shrink themselves, to make themselves smaller. We tell girls 'You can have ambition, but not too much'. 'You should aim to be successful, but not too successful, otherwise you will threaten the man'. (...) We teach girls shame — 'Close your legs, cover yourself!'. We make them feel as though by being born female, they're already guilty of something. And so, girls grow up to be women who cannot see they have desire. They grow up to be women who silence themselves. They grow up to be women who cannot say what they truly think. And they grow up — and this is the worst thing we do to girls — to be women who turn pretense into an art form.



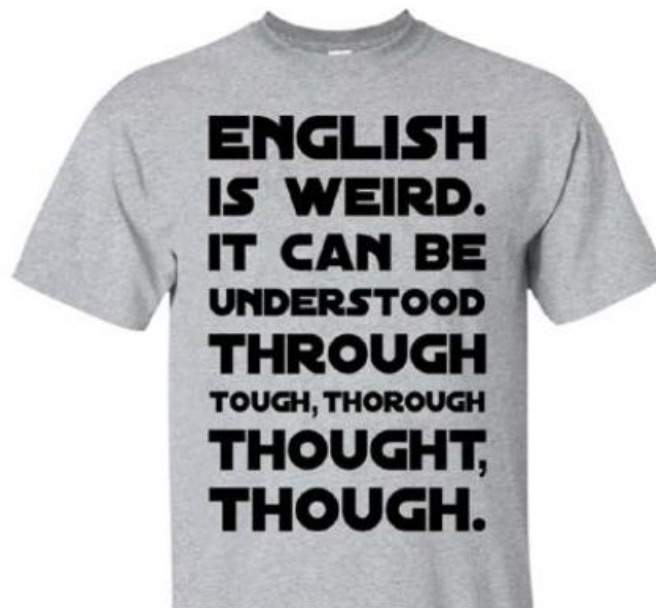
Adaptado da palestra "We should all be feminists", 15/07/2009.

Disponível em https://www.youtube.com/watch?v=hg3umXU_qWc&t=797s. Acesso em 14 maio /2018.

O texto anterior reproduz trechos de uma palestra proferida pela escritora nigeriana Chimamanda Adichie em 2009. Segundo a autora, o fato de serem criadas para agradar aos homens faz com que as mulheres

- A) valorizem sua sexualidade ao longo de suas vidas.
- B) cresçam vendo a dissimulação como algo normal.
- C) sejam ameaçadas, caso se tornem bem-sucedidas.
- D) tenham suas vozes silenciadas pelos homens.

QUESTÃO 06



Adaptado de <https://www.teacherslounge.com>. Acesso em 30 abr. 2018.

Os dizeres da camiseta

- A) brincam com palavras do inglês que tem grafias e pronúncias semelhantes.
- B) criam um efeito de humor explorando a ambiguidade de certas palavras do inglês.
- C) brincam com o fato de o inglês ser uma língua irracional e incompreensível.
- D) criam um efeito de humor a partir da complexidade do sistema ortográfico do inglês.

QUESTÃO 07

'Yes, I'm Italian — but I'm not loud, I don't gesticulate and I'm not good with pizza'

Elena Ferrante

I love my country, but I have no patriotic spirit and no national pride. What's more, I digest pizza poorly, I eat very little spaghetti, I don't speak in a loud voice, I don't gesticulate, I hate all mafias, I don't exclaim "Mamma mia!" National characteristics are simplifications that should be contested. Being Italian, for me, begins and ends with the fact that I speak and write in the Italian language. Put that way it doesn't seem like much, but really it's a lot. A language is a compendium of the history, geography, material and spiritual life, the vices and virtues, not only of those who speak it, but also of those who have spoken it through the centuries. When I say that I'm Italian because I write in Italian, I mean that I'm fully Italian in the only way that I'm willing to attribute to myself a nationality. I don't like the other ways, especially when they become nationalism, chauvinism, and imperialism.



(Adaptado de Elena Ferrante, 'Yes, I'm Italian — but I'm not loud, I don't gesticulate and I'm not good with pizza', The Guardian, 24/10/2018.)

Transcrevem-se, a seguir, versos de canções brasileiras e de um poema de Vinicius de Moraes. Assinale a alternativa que melhor exemplifica as afirmações de Elena Ferrante.

- A) "Eu me sinto um estrangeiro." (Engenheiros do Hawaii, "A revolta dos dândis".)
- B) "Pátria Amada, é pra você esta canção/Desesperada, canção de desilusão." (Inocentes, "Pátria amada".)
- C) "Minha pátria é minha língua." (Caetano Veloso, "Língua".)
- D) "Se me perguntarem o que é a minha pátria, direi:/ Não sei. De fato, não sei (...)." (Vinicius de Moraes, "Pátria minha".)

QUESTÃO 08

LOVE IS NOT ALL

By Edna St. Vincent Millay

Love is not all: It is not meat nor drink
Nor slumber nor a roof against the rain;
Nor yet a floating spar to men that sink
And rise and sink and rise and sink again;
Love cannot fill the thickened lung with breath,
Nor clean the blood, nor set the fractured bone;
Yet many a man is making friends with death
Even as I speak, for lack of love alone.
It well may be that in a difficult hour,
Pinned down by need and moaning for release,
Or nagged by want past resolution's power,
I might be driven to sell your love for peace,
Or trade the memory of this night for food.
It may well be. I do not think I would.

Disponível em <https://www.poemhunter.com/>. Acesso em 28 maio 2018.

De acordo com o poema.

- A) por falta de amor, somos derrotados pelas dificuldades da vida.
- B) há quem busque a companhia da morte por falta de amor.
- C) a rotina diária a que somos submetidos é capaz de pôr fim ao amor.
- D) é melhor trocar as incertezas do amor por paz de espírito.

QUESTÃO 09

GENETIC FORTUNE-TELLING

One day, babies will get DNA report cards at birth. These reports will offer predictions about their chances of suffering a heart attack or cancer, of getting hooked on tobacco, and of being smarter than average. Though the new DNA tests offer probabilities, not diagnoses, they could greatly benefit medicine. For example, if women at high risk for breast cancer got more mammograms and those at low risk got fewer, those exams might catch more real cancers and set off fewer false alarms. The trouble is, the predictions are far from perfect. What if someone with a low risk score for cancer puts off being screened, and then develops cancer anyway? Polygenic scores are also controversial because they can predict any trait, not only diseases. For instance, they can now forecast about 10 percent of a person's performance on IQ tests. But how will parents and educators use that information?

(Adaptado de Derek Brahney, Genetic Fortune-Telling. MIT Technology Review, Março/Abril 2018)

De acordo com o texto, um dos riscos do prognóstico genético dos indivíduos desde o nascimento seria o de

- A) empresas usarem as informações para não contratar pessoas que teriam predisposição a certas doenças ou vícios.
- B) algumas mulheres descuidarem da prevenção de problemas de saúde para os quais pareciam não estar predispostas.
- C) governos usarem as informações genéticas para negar a certos cidadãos o acesso a serviços de saúde pública.
- D) pais e educadores passarem a desconsiderar dados sobre o coeficiente de inteligência de seus filhos ou alunos.