



ITA
Inglês

10

Actinídeos
Outros metais
Não-Metais
Casos novos

6 7 8
MIL

Elemento	Símbolo	Número atómico	Peso atómico	Propriedades
Manganés	Mn	25	54,938349	Actinídeo
Ferro	Fe	26	55,8457	Outro metal
Cromo	Co	27	55,933200	Sólidos
Níquel	Ni	28	58,6934	Outro metal
Titânio	Ti	29	47,867	Outro metal
Rúdio	Ru	44	101,07	Outro metal
Ródio	Rh	45	102,90560	Outro metal
Pádio	Pd	46	106,42	Outro metal
Prata	Ag	47	107,8682	Outro metal
Estanho	Sn	50	118,712	Outro metal
Chumbo	Pb	82	207,2	Outro metal
Urânio	U	92	231,03	Actinídeo
Thorano	Th	90	232,03	Actinídeo
Actinídeo	Kr	36	83,804	Actinídeo
Actinídeo	Ra	88	226,02533	Actinídeo
Actinídeo	Ba	56	137,34	Actinídeo
Actinídeo	La	57	138,9065	Actinídeo
Actinídeo	Hf	72	178,49	Actinídeo
Actinídeo	Ta	73	180,9558	Actinídeo
Actinídeo	Ru	74	191,9642	Actinídeo
Actinídeo	Os	76	190,9642	Actinídeo
Actinídeo	Ir	77	192,9629	Actinídeo
Actinídeo	Pt	78	195,0784	Actinídeo
Actinídeo	Au	79	196,9665	Actinídeo
Actinídeo	Pb	82	207,2	Actinídeo
Actinídeo	Bi	83	208,9804	Actinídeo
Actinídeo	At	85	210,0163	Actinídeo



MÓDULO 19**Reading and writing tips**

Using transitional words and phrases helps papers read more smoothly.

They provide logical organization and understandability and improve the connections and transitions between thoughts. A coherent paper allows the reader to flow from the first supporting point to the last. Transitions indicate relations, whether within a sentence, paragraph, or paper.

Addition:

also, again, as well as, besides, coupled with, furthermore, in addition, likewise, moreover, similarly

Consequence:

accordingly, as a result, consequently, for this reason, for this purpose, hence, otherwise, so then, subsequently, therefore, thus, thereupon, wherefore

Generalizing:

as a rule, as usual, for the most part, generally, generally speaking, ordinarily, usually

Exemplifying:

chiefly, especially, for instance, in particular, markedly, namely, particularly, including, specifically, such as

Illustration:

for example, for instance, for one thing, as an illustration, illustrated with, as an example, in this case

Emphasis

above all, chiefly, with attention to, especially, particularly, singularly

Similarity:

comparatively, coupled with, correspondingly, identically, likewise, similar, moreover, together with

Exception:

aside from, barring, besides, except, excepting, excluding, exclusive of, other than, outside of, save

Restatement:

in essence, in other words, namely, that is, that is to say, in short, in brief, to put it differently

Contrast and Comparison:

contrast, by the same token, conversely, instead, likewise, on one hand, on the other hand, on the contrary, rather, similarly, yet, but, however, still, nevertheless, in contrast

Sequence:

at first, first of all, to begin with, in the first place, at the same time, for now, for the time being, the next step, in time, in turn, later on, meanwhile, next, then, soon, the meantime, later, while, earlier, simultaneously, afterward, in conclusion, with this in mind,

Summarizing:

after all, all in all, all things considered, briefly, by and large, in any case, in any event, in brief, in conclusion, on the whole, in short, in summary, in the final analysis, in the long run, on balance, to sum up, to summarize, finally

Diversion:

by the way, incidentally

Direction:

here, there, over there, beyond, nearly, opposite, under, above, to the left, to the right, in the distance

America receives more immigrants than any other country. But its system for dealing with them is a model of dysfunctionality, with 11.9m illegally present in 2008, up 42% since 2000. Past efforts at reform have failed dismally.

In 2006 protesters filled city streets after the House of Representatives passed a bill making illegal immigration a felony; but the proposal failed to pass muster in the Senate.

The Senate's own effort in 2007 fared even worse. Police clashed with a crowd in Los Angeles. Opponents of reform barraged senators with so many calls that their phone system crashed. The Senate's bill, designed to please all sides, ended up pleasing no one.

Now Washington may try again. With a wretched economy and long to-do list, it hardly seems an opportune moment. Advocates contend that bringing immigrants' shadow economy into the light will fatten tax rolls, end the abuse of illegal workers, improve wages for all and spur economic growth. Historically, however, downturns have prompted Americans to shun foreigners, not welcome them.

The Economist, April 18th - 24th, 2009, p. 27. Adaptado.

1. O texto informa que

- a) a imigração ilegal tem sido tema de discussão no Senado e na Câmara americana nos últimos anos.
- b) os Estados Unidos recebem um número grande de imigrantes, sobretudo em Los Angeles.
- c) alguns países possuem modelos de imigração mais funcionais do que os Estados Unidos.
- d) as reformas relativas à imigração nos Estados Unidos têm sido apresentadas em número suficiente.
- e) os pedidos de imigração para os Estados Unidos ultrapassam o máximo oficialmente autorizado pelo Senado.

2. Segundo o texto, a proposta de controle de imigração ilegal apresentada pelo Senado em 2007

- a) não foi aprovada pela Câmara dos Deputados.
- b) foi questionada por órgãos públicos, como a polícia.
- c) não foi aprovada por qualificar como crime a imigração ilegal.
- d) foi rejeitada por todos, reformistas, opositores e outras autoridades.
- e) teve apoio de vários políticos do partido no poder, mas não dos opositores.

3. De acordo com o texto, discutir a questão da imigração agora

- a) limita a possibilidade de propostas oportunistas.
- b) é uma boa tentativa para resolver o problema.

c) não parece muito oportunista.

- d) não impede que discussões mais detalhadas ocorram no futuro.
- e) minimiza as críticas que Washington teme receber.

4. De acordo com o texto, para os defensores da reforma,

- a) os Estados Unidos só têm a ganhar em termos políticos, econômicos e sociais com a regulamentação da imigração.
- b) as perdas possíveis com a reforma limitam-se ao aumento de pedidos de imigração.
- c) a regularização dos imigrantes ajudará os Estados Unidos a enfrentar a crise econômica porque mais impostos serão pagos.
- d) o crescimento econômico do país depende, na atual conjuntura, do trabalho dos imigrantes.
- e) a legalização dos imigrantes já contribuiu para a melhoria de salários e de condições trabalhistas para todos.

5. O pronome "their", na sentença "Opponents of reform barraged senators with so many calls that their phone system crashed." refere-se a

- a) policiais.
- b) senadores.
- c) opositores da reforma.
- d) reformistas.
- e) deputados.

Has the U.S. awakened a sleeping giant or stood up, at long last, to a local bully? President Obama's decision last weekend to authorize force against the Somali pirates holding Captain Richard Phillips brought the end of a crisis, but it may be the beginning of a longer military effort. This year pirates have attacked dozens of vessels in the Indian Ocean and the Gulf of Aden, which leads into the Red Sea and the Suez Canal. Egged on by generous ransom payments, they're holding more than 300 sailors hostage. Phillips, captain of the *Maersk Alabama*, was the first one taken off a U.S. vessel. A Red Sox fan, a family man, a good-humoured snowboarder, a pillar of his Vermont village who had the courage to offer himself as a hostage in exchange for the safety of his unarmed crew, Phillips is not the sort of person Americans are content to see bound, mocked and threatened in the most lawless corner of the planet. This was a hostage crisis. Had the kidnappers made it to shore with Phillips, they would have taken a large part of Obama's presidential authority and poll ratings with them.

Time Magazine, April 27, 2009, p.27. Adaptado.

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6. De acordo com o texto, a pirataria na costa da Somália
- a) reaqueceu as discussões sobre o papel de Barack Obama e dos americanos em regiões pobres.
 - b) é resultante da crise social vivida na Somália.
 - c) tomou rumos que deixaram as autoridades internacionais desarmadas.
 - d) é estimulada pelo alto valor dos resgates pagos.
 - e) provocou uma crise gigantesca entre os Estados Unidos e a Somália.
7. O texto informa que o Capitão Richard Phillips
- a) foi o responsável pelo fim da crise entre americanos e somalianos.
 - b) foi o primeiro refém retirado de um navio americano.
 - c) foi condecorado por sua coragem.
 - d) escapou dos piratas, utilizando os recursos de segurança que conhecia.
 - e) escapou da emboscada, apesar de estar desarmado.
8. Segundo o texto, para os americanos, o Capitão Phillips
- a) respeita a família e os marinheiros sob seu comando, portanto, não deveria ser exposto como foi.
 - b) não é o tipo de pessoa passível de ser enganada com facilidade.
 - c) exemplifica a alegria de viver e o espírito esportivo de todo americano.
 - d) deve ter seu trabalho reconhecido por prestar serviços em locais onde não há lei.
 - e) merece todo respeito por representar os ideais americanos em sua vida pessoal e profissional.
9. De acordo com o texto, se os piratas tivessem sido bem sucedidos,
- a) a opinião pública sobre o governo americano e a autoridade do presidente teriam sido abaladas.
 - b) o acordo entre o governo americano e o governo da Somália seria quebrado.
 - c) a crise diplomática entre os países próximos ao Oceano Índico teria se intensificado.
 - d) o uso de força bélica por parte de americanos e somalianos teria aumentado.
 - e) um grande esforço político dos americanos seria necessário para iniciar uma longa negociação.

MÓDULO 20

Orthodox teaching and practice on nutrition and health almost always focuses on nutrients, or else on foods and drinks. Thus, diets that are high in folate and in green leafy vegetables are recommended, whereas diets high in saturated fat and in full-fat milk and other dairy products are not recommended. Food guides such as the US Food Guide Pyramid are designed to encourage consumption of healthier foods, by which is usually meant those higher in vitamins, minerals and other nutrients seen as desirable.

What is generally overlooked in such approaches, which currently dominate official and other authoritative information and education programmes, and also food and nutrition public health policies, is food processing. It is now generally acknowledged that the current pandemic of obesity and related chronic diseases has as one of its important causes increased consumption of convenience, including pre-prepared, foods. *However*, the issue of food processing is largely ignored or minimized in education and information about food, nutrition and health, and also in public health policies.

A short commentary cannot be comprehensive, and a general proposal such as that made here is bound to have some problems and exceptions. Also, the social, cultural, economic and environmental consequences of food processing are not discussed here. Readers' comments and queries are invited.

Public Health Nutrition 12(5), 2009.

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1. De acordo com o texto, a maioria das atuais abordagens sobre nutrição e saúde pública
 - a) não recomenda o consumo de alimentos processados por estes não serem saudáveis.
 - b) recomenda o consumo diário de leite desnatado.
 - c) enfatiza, em demasia, os malefícios do consumo de alimentos processados.
 - d) se concentra mais na questão dos nutrientes do que na dos alimentos e bebidas.
 - e) reconhece a influência do consumo de alimentos processados na atual pandemia de obesidade.

 2. O texto sugere que guias tais como o “US Food Guide Pyramid”, de um modo geral,
 - a) não estimulam o consumo de complementos vitamínicos.
 - b) são seguidos por apenas uma pequena parcela da população norte-americana.

 3. O conectivo “However” (sublinhado no texto) pode ser substituído,
com sentido equivalente, por
 - a) moreover.
 - b) indeed.
 - c) likewise.
 - d) yet.
 - e) therefore.

□ Módulo 19

One reason that tissues such as skin and cartilage were among the first to be ready for human testing is that they do not require internal vasculature. But most tissues do, and the difficulty of providing a blood supply has always limited the size of engineered tissues. Consequently, many scientists are focusing on designing blood vessels and incorporating them in engineered tissues.

Any tissue that is more than a few 100 microns thick needs a vascular system because every cell in a tissue needs to be close enough to capillaries to absorb the oxygen and nutrients that diffuse constantly out of those tiny vessels. When deprived of these fuels, cells quickly become irreparably damaged.

In the past few years a number of new approaches to building blood vessels – both outside tissues and within them – have been devised. Many techniques rely on an improved understanding of the environmental needs of endothelial cells (which form capillaries and line larger vessels), as well as an advanced ability to sculpt materials at extremely small scales.

Scientific American, May 2009, p. 52 – 54. Adaptado.

1. O texto discute

- a) a importância de pesquisas na área da engenharia genética.
- b) a necessidade e as limitações da produção de tecido humano vascularizado.
- c) o comportamento das células quando da recomposição de tecidos.
- d) a proximidade dos capilares nos tecidos humanos superficiais.
- e) os níveis de absorção de nutrientes pelas células presentes no tecido humano.

2. Segundo o texto,

- a) há muitas dificuldades para reprodução de veias em laboratório.
- b) os laboratórios concentram-se na produção de alguns tipos de tecido humano.
- c) há limitações éticas com relação às pesquisas com tecidos humanos.
- d) a produção de tecido humano em laboratórios é questionada por alguns cientistas.
- e) grande parte dos tecidos humanos possui alta vascularização.

- 3. A partir do texto, conclui-se que os tecidos humanos, produzidos em laboratório,
 - a) poderão ser utilizados com parcimônia em alguns pacientes.
 - b) estão em fase final de testes em seres humanos.
 - c) têm que mimetizar a troca de nutrientes e de oxigênio que os tecidos naturais realizam em nosso corpo.
 - d) ainda necessitam de tecnologia mais avançada para, efetivamente, ajudarem os pacientes.
 - e) representam um avanço nas pesquisas, apesar de estarem restritos ao uso em apenas alguns pacientes.

□ Módulo 20

AFRICA

Unease About Ebola

APOLLO, THE world's best-known gorilla, is missing, and the Ebola virus may be the culprit. The alpha male of a 24-member family hasn't been seen since early December when two members of his family were found dead – along with three other endangered western lowland gorillas and several chimps – in the remote Odzala National Park of the Republic of the Congo. Less than a year ago, contact with a dead ape was blamed for an Ebola outbreak in the area that killed at least 53 people. Specialists have again found Ebola in the dead apes, NEWSWEEK has learned. Last week government officials began warning locals not to eat monkeys or to ritually wash any relatives who die of fever. So far there have been no confirmed human deaths, but keeping the epidemic at bay is a daunting challenge. Some 3,000 Pygmies and others in the area live from hunting monkeys. The area is thick with apes – as many as nine per square kilometer. That adds up to 80 percent of the world's remaining lowland gorillas. Efforts to protect the apes until recently have centered on ending the traditional trade in "bush meat." But Ebola may prove far more devastating to man's closest relatives. The Wildlife Conservation Society, based at the Bronx Zoo, suggests that huge numbers of gorillas and chimps may have died in an Ebola epidemic in the area five years ago. And the new outbreak may not be over – another chimp was found dead in the park last week, according to Jean-Marc Froment of ECOFAC, a regional conservation group. "We may be heading into a catastrophe," he says.

TOM MASLAND – *Newsweek*

1. According to the passage,
- a) Apollo is the name of a gorilla found dead in Africa.
 - b) 53 Africans who usually ate monkeys were found dead in Africa.
 - c) there is no possible link between gorillas and an Ebola outbreak.
 - d) Apollo is a 24-year male gorilla.
 - e) locals are being advised not to wash dead relatives who die of fever.
2. In “So far there have been no confirmed human deaths.”, the underlined expression means approximately the same as:
- a) up to now.
 - b) so distant.
 - c) as well.
 - d) even.
 - e) far away.
3. You may infer from the text that
- a) an Ebola outbreak is surely responsible for Apollo’s death.
 - b) 5 gorillas and many chimpanzees were found dead in December.
 - c) since December it is forbidden to hunt monkeys in the Republic of the Congo.
 - d) there has been no animal deaths since December.
 - e) Ebola is much more devastating to humans than to apes.
4. In “ — along with three other endangered western lowland gorillas...”,
endangered means:
- a) dangerous.
 - b) menaced with extinction.
 - c) docile.
 - d) woolly.
 - e) far from danger.

■ respostas dos exercícios-tarefa ■

□ Módulo 19

- 1) B 2) E 3) C

□ Módulo 20

- 1) E 2) A 3) B 4) B