

1ª QUESTÃO**Valor: 3,2 (0,8 cada item)**

Leia o texto “New planet definition sparks furore” e responda, EM PORTUGUÊS, as perguntas que se seguem.

New planet definition sparks furore

The new planet definition that relegates Pluto to "dwarf planet" status is drawing intense criticism from astronomers. It appears likely that the definition will not be widely adopted by astronomers for everyday use, even though it is the International Astronomical Union's (IAU) official position.

On Thursday, astronomers at the IAU meeting in Prague approved a resolution that says *the solar system has only eight planets, with Pluto excluded*. Pluto is considered a "dwarf planet" instead.

But the new definition has provoked a backlash. Alan Stern, who heads NASA's New Horizons mission to Pluto and works at the Southwest Research Institute in Boulder, Colorado, US, says the new definition is "awful".

"The definition introduced is fundamentally flawed," he told **New Scientist**. "As a scientist, I'm embarrassed."

Four planets

He says only four of the eight objects mentioned in the IAU definition actually meet the definition's criteria – and Earth, Mars, Jupiter and Neptune do not.

That is because the definition stipulates that to be a planet, an object must have cleared the neighbourhood around its orbit. But Earth's orbital neighbourhood is filled with thousands of near-Earth asteroids, Stern says.

And Mars, Jupiter and Neptune have so-called "Trojan" asteroids sharing their orbits. "This is a half-baked criterion for planethood," he says.

He says the new definition was pushed by people who are unhappy with having large numbers of planets (an earlier proposal, which was abandoned after heavy criticism at the meeting, would have potentially allowed *hundreds of new planets into the fold*).

"It's just people that say things like, 'School kids will have to memorise too many names.' Do we limit the number of stars because children have to think of too many names? Or rivers on the Earth? It's just crazy," Stern told **New Scientist**.

Minority report

Stern is also critical of the fact that only astronomers present for the vote, which occurred at the end of the two-week meeting, were allowed to have their say on the matter. No email voting was allowed for the decision – it was made by a show of

1ª QUESTÃO

Continuação

hands – and that meant that less than 5% of the nearly 9000 IAU members actually voted.

"You're going to see a real backlash in the coming weeks," he says. "I know there is a petition among planetary scientists that's getting a lot of support."

In any case, he says, astronomers are not obligated to use the new definition, since the IAU does not have the power to enforce it. "I don't think it's going to be very widely followed," he says.

David Weintraub, author of the upcoming book *Is Pluto a Planet?* and a researcher at Vanderbilt University in Nashville, Tennessee, US, says he thinks Pluto is still a planet – even under the new definition.

Grammar issue

"As best I can tell, 'dwarf' is an adjective and 'planet' is a noun," he told **New Scientist**. "I think the IAU thinks they defined Pluto to not be a planet. But they in fact have defined Pluto to be a planet – a particular kind of planet."

Astronomers who proposed the new definition respond that the term "dwarf planet" is meant to be thought of as a single concept. And others point out that "minor planets" – asteroids and other small bodies – are not considered planets.

But he agrees with Stern that the stipulation that a planet clears out its neighbourhood is flawed. A better definition would say a planet is an object that orbits a star and is large enough to be spherical, but is not large enough to be a brown dwarf – a "failed" star with between about 13 and 75 times the mass of Jupiter – or a star, he says.

'This is crazy'

"Everyone agrees on those criteria," he says. "The question is, can we agree on additional criteria to refine the definition further? I think the answer is no."

"Everybody who has communicated with me is saying, 'This is crazy and we don't agree with it,'" he adds. "I'm not convinced that the folks who were at the meeting represented well the larger community."

But not everyone is unhappy with the decision. Richard Conn Henry of Johns Hopkins University in Baltimore, Maryland, US, says he is pleased with the outcome. "As far as I'm concerned, the right decision was made," he told **New Scientist**. "I know a planet when I see it and there are eight of them."

He says it makes no sense to call Pluto a planet because it is just one of huge numbers of objects in the Kuiper Belt beyond Neptune.

(Adaptado de **New Scientist Space**, August 2006)

1ª QUESTÃO**Continuação**

1.1. Considering the content of the text, why is the title “New planet definition sparks furore” appropriate?

1.2. Alan Stern, of Southwest Research Institute, states, “The definition is fundamentally flawed”. Find in the text one argument that can be used to support his opinion.

1.3. The scientist Alan Stern states that according to the criterion established by the resolution, Earth shouldn't be considered a planet. Why wouldn't Earth be considered a planet?

1.4. Richard Conn Henry, of Johns Hopkins University, says he is pleased with the outcome. Find in the text one argument that supports his position.

2ª QUESTÃO**Valor: 2,8 (0,7 cada item)**

Considere as informações contidas no texto “New planet definition sparks furore” e marque a alternativa correta em cada item seguinte.

2.1. What resolution was approved at the IAU meeting in Prague?

- (A) One that redefines what a planet is.
- (B) One that states Earth, Mars, Jupiter and Neptune are not planets.
- (C) One that sends a mission headed by Alan Stern to Pluto.
- (D) One that considers Trojan asteroids in Mars, Jupiter and Neptune orbits.

2.2. According to the Prague resolution a planet ...

- (A) has a neighborhood of clear objects.
- (B) was included in the solar system.
- (C) must have its orbit cleared.
- (D) is a half-backed criterion.

2.3. According to the text it is correct to affirm that...

- (A) hundreds of new planets were included in the Prague resolution list of planets.
- (B) an earlier proposal for adopting a planet definition was rejected.
- (C) the Prague proposal was abandoned after heavy criticism at the meeting.
- (D) school kids will not understand the new definition.

2ª QUESTÃO**Continuação**

2.4. What can be inferred by the statement “You’re going to see a real backlash in the coming weeks. I know there is a petition among planetary scientists that’s getting a lot of support.”

- (A) Only 5% of the nearly 2000 IAU members will vote in the next meeting.
- (B) Most of the members of IAU don’t have access to emails.
- (C) The petition among scientists will be sent by email.
- (D) The resolution will probably be contested by the majority of members because they were not allowed to vote by email.

3ª QUESTÃO**Valor: 2,0 (0,2 cada item)**

Leia o texto “Relaxation” e COMPLETE CADA LACUNA NUMERADA DAS FRASES A SEGUIR COM APENAS UMA PALAVRA retirada desta passagem, mantendo a mesma idéia do texto original.

Relaxation

True relaxation is most certainly not a matter of flopping down in front of the television with a welcome drink. Nor is it about drifting into an exhausted sleep. Useful though these responses to tension and over-tiredness may be, we should distinguish between them and conscious relaxation in terms of quality and effect. Regardless of the level of tiredness, real relaxation is a state of alert yet at the same time passive awareness, in which our bodies are at rest while our minds are awake.

Moreover, it is natural for a healthy person to be relaxed when moving as resting. Being relaxed in action means we bring the appropriate energy to everything we do, so as to have a feeling of healthy tiredness by the end of the day, rather than one of exhaustion.

Unfortunately, as a result of living in today’s world, we are under constant strain and have difficulty in coping, let alone nurturing our body’s abilities. What needs to be rediscovered is conscious relaxation. With this in mind we must apply ourselves to understanding stress and the nature of its causes, however deep-seated.

- The text relates two ways of relieving from tension and over-tiredness, reinforcing the power of 3.1 relaxation over the false one, which is considered only momentary.
- The difference between these two ways of relaxing lies upon its 3.2 and 3.3.

3ª QUESTÃO**Continuação**

- In order to feel really relaxed, people should keep their _____ **3.4** _____ alert at the same time their _____ **3.5** _____ are at rest.
- Someone who is healthy is supposed to feel relaxed either moving or _____ **3.6** _____.
- It is possible to feel relaxed even when you are moving or doing any other activity, it is just a matter of devoting the right amount of _____ **3.7** _____ to the things you do, not less or more.
- If by the time you go to sleep you have a feeling of _____ **3.8** _____, you are not taking the right relaxation, for by the time your day finishes you should have a feeling of healthy _____ **3.9** _____.
- The text suggests that practicing _____ **3.10** _____ relaxation is a way of living in nowadays' stressing world paying close attention to our bodies abilities' and needs.

4ª QUESTÃO**Valor: 1,2 (0,4 cada item)**

Marque com um (X) a única alternativa correta para cada uma das perguntas abaixo.

4.1. My discovery of Tillie Olsen was a gift from a friend; years ago she gave me her copy of *Tell Me a Riddle* because she liked the stories and wanted to share the experience.

What do we know of Tillie Olsen?

- (A) She is a friend.
- (B) She likes stories.
- (C) She gives gifts.
- (D) She is an author.

4.2. The medical journal reported that heart attack victims who recover are approximately five times as likely to die within the next five years as those people without a history of heart disease.

What did this article say about people who have had a heart attack?

- (A) They are more likely to die in the near future than others.
- (B) They will die in five years.
- (C) They are less likely to die than people without a history of heart disease.
- (D) They are likely to recover.

4ª QUESTÃO**Continuação**

4.3. Thanks to the ubiquitous use of vanilla as a _____ in ice creams and cakes the world over, its taste is more _____ to the majority of people than the appearance of the plant.

Que alternativa contém as palavras que completam correta e respectivamente as lacunas da frase?

- (A) flavor – recognize
- (B) flavoring – recognizable
- (C) flavored – recognized
- (D) flavoring – recognizing

5ª QUESTÃO**Valor: 0,8 (0,4 cada item)**

Leia o período seguinte. Em cada uma das linhas pode haver uma palavra excedente que torna errada a estrutura da elocução. Caso a linha esteja correta, escreva no espaço indicado a palavra “CORRETO”; caso haja alguma palavra extra, escreva-a no espaço indicado.

Training is not a cost. It’s an investment. It really doesn’t matter what much we pay for an investment. What is really relevant is what we get in return.

5.1. linha 1 _____

5.2. linha 2 _____

RASCUNHO



**CONCURSO DE ADMISSÃO
AO
CURSO DE FORMAÇÃO E GRADUAÇÃO**

INGLÊS

FOLHA DE QUESTÕES

2006