



**English A: language and literature – Higher level – Paper 1**  
**Anglais A : langue et littérature – Niveau supérieur – Épreuve 1**  
**Inglés A: lengua y literatura – Nivel superior – Prueba 1**

2 hours 15 minutes / 2 heures 15 minutes / 2 horas 15 minutos

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**Instructions to candidates**

- Do not open this examination paper until instructed to do so.
- Answer both questions.
- The maximum mark for this examination paper is **[40 marks]**.

**Instructions destinées aux candidats**

- N'ouvrez pas cette épreuve avant d'y être autorisé(e).
- Répondez aux deux questions.
- Le nombre maximum de points pour cette épreuve d'examen est de **[40 points]**.

**Instrucciones para los alumnos**

- No abra esta prueba hasta que se lo autoricen.
- Responda ambas preguntas.
- La puntuación máxima para esta prueba de examen es **[40 puntos]**.



Write an analysis on each of the texts. It is not compulsory for you to address the guiding questions in your answers.

TEXT A

[20 marks]

The screenshot shows the Nature journal homepage. The header includes the 'nature' logo, the tagline 'International weekly journal of science', and a search bar. Navigation links include Home, News & Comment, Research, Careers & Jobs, Current Issue, Archive, Audio & Video, and For Authors. Below the header, there are links for Archive, Volume 505, Issue 7484, Editorial, and Article. Social media links for E-alert, RSS, Facebook, and Twitter are also present. The main article title 'A question of time' is displayed, along with the date '22 January 2014' and buttons for 'PDF' and 'Rights & Permissions'.

# A question of time

Timekeeping is boosted by the advent of an optical clock based on strontium atoms.

22 January 2014

PDF

Rights & Permissions

When the history of the twenty-first century comes to be written, one of the most puzzling questions asked will be why, well into the information age, millions of people still paid to dial a number on their phone to find out the time. Almost 80 years after its formation, the UK speaking clock, the world's original telephone time service, remains an essential part of British life. This is despite the near ubiquity of time displays — not least on the mobile phones that people discard to call 123 from a fixed line.

For some people, at some times, accuracy matters. Peaks in the use of the speaking clock come, for instance, on New Year's Eve, or when the clocks are put forward and back by an hour to mark, respectively, the start and end of British Summer Time.

## Related stories

- An optical lattice clock with accuracy and stability at the 10<sup>-18</sup> level
- Precise atomic clock may redefine time
- Atomic clocks use quantum timekeeping

There is another way, at least in Britain. BBC Radio regularly broadcasts the same time signal used to set the speaking clock — affectionately known as the pips. Indeed, it has become as much a feature of some shows as the content planned around it. Time is more than a British institution; it is woven into the cultural fabric of everyday life.

The pips are drawn from an atomic clock held at the National Physical Laboratory (NPL) in Teddington, near London. One of the most accurate in the world, the NPL clock is tuned to the regular bursts of light emitted by caesium atoms when they are excited by microwaves. The clock would lose roughly one second every 138 million years — a sufficient degree of accuracy for a bleary-eyed hour-late commuter who forgot to set their clock the night before but not accurate enough for some.

In a paper published on *Nature's* website this week, time lords in the United States describe the latest

advance in chronometry, and one that is as superior to the atomic pips as those pips were to the mechanical devices they replaced (B. J. Bloom *et al.* *Nature* <http://dx.doi.org/10.1038/nature12941>; 2014).

25 The researchers have built a timepiece based not on caesium but on strontium. More importantly, it uses much higher, optical frequencies. This gives such devices, called optical clocks, greater accuracy than those that rely on microwaves. The new optical clock, for example, would not lose one second even if it were to run for 5 billion years. *Comparison*

It is also extremely stable — another key measure of timekeeping. (Accuracy defines how closely a clock's output matches the desired time signal, whereas stability is a measure of how steady that output is. A clock that loses precisely one second each day is inaccurate but stable, for example.) *explanation*

30 The unveiling of the super-accurate strontium optical clock comes just a few months after a related group revealed a device based on ytterbium. Other laboratories across the world have their own designs. Inevitably, the increased precision and reliability of optical clocks are fuelling debate about whether they could be used to set the ultimate time, and redefine the second. (There are no official plans to do so, but plans are afoot to redefine other SI units.) These are heady times for metrology: a World View on [page 455](#) describes attempts to measure another fundamental constant: Big G.

*Nature* has a particular stake in the race to develop new atomic clocks. Back in January 2003, we published a News Feature that surveyed the scene and tried to predict what would happen (D. Adam *Nature* **421**, 207–208; 2003). Within a decade, the piece suggested, optical clocks could rise to prominence and raise fresh debate about the definition of the second. A ten-year event horizon is a staple of scientific journalism, and most promised breakthroughs fail to materialize on deadline. The latest development in atomic timekeeping, by contrast, has arrived bang on time. Well, almost.) *FI*

From the academic journal *Nature* Vol 505  
(22 January 2014)

In what ways does the use of language in this article help to interest and entertain the reader?

- figurative  
- humorous  
- invitive

TEXT B

[20 marks]



LifeWear

# THE UNIQLO SELFLESS SELFIE PROJECT.

I give my #3DSelfie to...  
*solving homelessness.*

#UNIQLOLon



**GIVE YOUR SELFIE, IMPACT LIVES & YOU COULD GET A #3DSELFIE**

In the spirit of UNIQLO clothing—LifeWear, which aims to support everyday life in a positive way—we're searching the world for the most innovative people who are positively impacting everyday life. Show us how you're doing it. It's simple. Snap, pledge and post a selfless selfie.

Lucky participants become part of our global #3DSelfie Exhibition in Berlin, New York, Paris, San Francisco and London — in celebration of your pledges to make the world a better place.

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**Snap.**

Snap a selfie. Make it unique, interesting and not just about you. Show us how you'll do a little good to make everyday life a little better



**Pledge.**

Pledge your selfie to doing some everyday good. For whatever or whomever you want. Donate to a favorite cause, visit your grandmother, or be nice to a stranger, every day.



**Post.**

Post your selfie like this:

I give my #3DSelfie to \_\_\_\_\_ #UNIQLOCity

Post to your favorite social network



**Get.**

Select selfies from around the world will be chosen to become part of our 3D Selfless Selfie Exhibition and will receive a one-of-a-kind #3DSelfie



**Celebrate.**

Participants will be invited to attend the opening 3D Selfless Selfie Exhibition in their city.

Advertisements for The Uniqlo Selfless Selfie Project (2014)

Image 1: [www.psfk.com](http://www.psfk.com)

Image 2: [meetsobsession.com](http://meetsobsession.com)

How are formal features such as layout, fonts and visuals used to create an effect in these advertisements?





it is dedicated to everyday cultures all over (line 4). It gives ~~clear~~ examples of large and popular events such as "New Year's Eve" and known businesses such as the BBC Radio. This targets familiarity with such brands and ~~also~~ allows the reader to feel understood ~~and~~ like this article was made for them. This attracts a wide range of audiences specially since such ideas are known all over the world. ~~The website's color is the red & white~~

The details of the content ~~is~~ <sup>are</sup> ~~organised~~ listed in a way to build the argument. Starting off with a calm ~~color~~ maroon color on the display for the website's title. The color is earthy showing how grounded and comforting the website is. ~~the~~ ~~the~~ ~~is~~ If bright colors were used the reader will be overwhelmed by the appearance specially since there are a lot of words displayed on the page. The title is bolded and wide ~~for~~ (almost as wide as the website title) to capture the attention of the reader first. Followed with a very short description on what the article will be discussing to inform the reader what to expect. ~~The~~ The article starts with a time lapse from a point in history up till now. The use of short paragraphs allow the reader to enjoy and not to rush reading them, specially with the short sentences used. A related stories' options box is placed next to the paragraphs that contain famous and known examples to show the reader that "there is more if you want". This excites the reader and drives them into reading the rest. In addition to the ~~articles~~ <sup>articles</sup> by "Nature" that were referenced for readers to go to ~~state~~ as reading they read the text. All of these are used to

Moreover, the listing of 3's. This is used to grasp on the reader by giving evidence in the list of 3s and by showing the wide variety of choices ~~choices~~ (line 6).

-3-

Knowledge the readers into ~~the text~~

The main topic this text is about. ~~Which is~~ described clearly and effectively. The audience are not lost and their reactions build up as the argument and the facts build up.

The tone ~~and~~ ~~used~~ is gentle yet informative. Easy language the reader doesn't have to think too much about and can continue reading. In addition to the use of words that link ideas together including sentence starters such as "More importantly" (line 23) that not only indicates that the previous information is important but there is even more important information. Specially when the voice of the article is an educated, well-informed ~~person~~. The excitement comes from the words that the audience are used to. The use of the word indeed to not only assure the reader of the information but also to keep them reading on what is it that is "indeed" since it's placed at the start of the sentence. In addition, the use of generalisation to make the reader feel ~~more~~ the importance of the article such as when mentioning "one of the most puzzling questions asked" (line 1) ~~and~~. Including the audience on a global scale is also a form of entertainment. Not only because it includes everyone from everywhere but also because ~~no one~~ ~~wants~~ to be kept left out since humans are social creatures that ~~work~~ the best in packs and being discluded from ~~a~~ the world would be a nightmare for some.



This text ~~area~~ contains stylistic features that enhances its ability to ~~grab hold~~ <sup>hook</sup> on to the reader. Some include its ~~its~~ open endings for each paragraph. This connects the reader to the next one as soon as they thought that the idea was over, such as "but not ~~quite~~ accurate enough for some" (line 19) after mentioning scientific information. ~~On this was also used~~ <sup>was</sup> hanging sentences ~~also used~~ <sup>was</sup> also used for the last sentence which contained only two words. This feeling of uncertainty leaves the reader with more questions that ~~will~~ might lead him to one of the "Related Stories" box of options or one of the articles retrieved in the text.

The use of all of these devices to inform the reader about scientific knowledge but also to entertain them. Although the use of some scientific vocabs such as elements (caesium (line 17)) might seem boring and difficult for some, the author explained them so that they can be understood for people all over the world.

Some people tend to stay away from certain subjects because of their bias perspective of how ~~hard~~ difficult it might seem. The use of an open title for the article ~~about the~~ <sup>lights</sup> lights the curiosity of the reader and once they start reading and understanding, language grabs and hold on to them till the end, especially with an earthy and cool ~~the~~ atmosphere of the world is ~~renew~~ placed on. Language can twist ~~and~~ our minds, and we fall for it.

So what's the focus of this paragraph?

not an effective conclusion!



AS

BS

C2

D4

Sample B

## TEXT A

text  
type →

The article "A question of time" from "nature", an international science journal makes use of language suitably and exceptionally to effectively convey information to the reader while keeping them interested.

awkward.

One of the key features "nature" uses is it's ~~so~~ short and catchy title "A question of time". This title both instigates <sup>an</sup> interest in the topic with its broad scope and "quirky" fashion and summarises the article meaningfully. ~~Thus~~ "A question of time" can be interpreted in different ways, ~~one~~ one being that it is only a "matter of time". This gives the title a farcical nature making the reader more likely to be attracted to it.

"Timekeeping is boosted..... "atoms"

The subtitle <sup>^</sup> supports the ~~a~~ title and balances it out with its strict, no-nonsense form. When the title was open ended and

demonstrated comical means of gaining attention, the subtitle serves to do the opposite, the one-liner <sup>narrowed down</sup> ~~summarises~~ the key points of the article ~~boasting~~ into a short sentence. This gives the reader a more specific understanding of what the article is about, now that the title has gained the reader's attention.

There are many statistical quantities scattered through-out the article, ~~like~~ "every 138 million years" (line 18), "80 years" (line 3) and "5 billion years" (line 26). These short factual snippets give the article its much needed "scientific evidence" factor which readers especially those of an academic journal would expect and enjoy. For an article that comments about ~~prec~~ precision and accuracy, evidence should be ~~made~~ ~~as~~ a requirement. There aid the reader's in their quest for enrichment of knowledge.

"Affectionately known as the pips" is a sentence that gives ~~pass~~ the article an emotional and personal touch. ~~This~~ The term "affectionately" helps ~~the~~ ~~cony~~ the cultural implications of the "speaking clock" to the Brits. This could allow the speaker to understand and empathize with the telephone service if they were

originally skeptical of it during the modern age of digital mobile phone time displays. "Pips" a rather "cute" name ~~brings it~~ ~~as~~ For a serious scientific phenomenon <sup>once again</sup> can spark feelings of interest <sup>and involvement</sup> with the ironic name choice.

The article also provides ~~for~~ vivid imagery ~~with~~ ~~one~~ ~~case~~ in certain areas, "bleary-eyed how-late commuter" (line 18) and "discard to call 123 from a fixed line" (line 5). These lines, line 18 especially ~~can~~ help provide bridge a connect between the author and the audience. When the reader's are able to see themselves and relate to the author's writings it makes the article more interesting and keeps the reader ~~entertained~~ engaged.

A line in the article ~~helps~~, "one that is superior..... replaced" (line 21 to 22) help show the enormity of the discovery to 13/178



the audience, it compares the <sup>ingenious</sup> ~~revolutionary~~ "atomic pip" in a time when time was measured with mechanical devices to the introduction of the "strontium based optical clock". This comparison marks the new clock as an evolutionary technological development.

A constant recurrence through out the article was the word "accuracy" and it's multiple synonyms being mentioned over ten times. This provides the reader with ample emphasis of the main theme, ~~as~~ the preciseness of the new optical clocks.

The article ended with a "bang" one could say. In an article ~~which~~ which emphasized so much on accuracy, with the words put in myriad of times, it was quite ironic how the article ended with almost,

A figurative antonym to the term accuracy. ~~the~~ <sup>with Nature</sup> missing the time frame by a month.

As ~~one~~ of the main methods of keeping the interest of the audience, "Nature" used simple layman's terms to describe scientific breakthroughs. The simple language allows more readers, literate and ~~the~~ illiterate.

alike to understand the enormity and inform them of the newest developments in time.

In terms of language there ~~was~~ were many techniques the journalist used to convey information while engaging the reader. With certain formal elements to statistical measures the article maintained ~~the~~ the reader's interest as well as achieved it's mandate of being a paper of academic means.

