



To clone or not to clone a mammoth?

Imagine your next visit to the zoo. You are walking past the elephant enclosure when suddenly, you come across a new exhibit: a large, woolly mammoth.

1 'Impossible!' I hear you cry, but not all of today's scientists would agree with you.

Mammoths ranged from the British Isles to eastern Asia and northern America until they disappeared around 10,000 years ago. 2 Hunting by cavemen or climate change, or a combination of both, 10 are generally blamed for their demise.

Recently, however, the body of what has been called 'the best preserved mammoth in the history of palaeontology' was found in the Siberian permafrost. Each year, more and more frozen animals are being 15 revealed in the area because global warming is causing the ground to melt. This particular mammoth, whom scientists have named Yuka, was a female who was between six and eleven years old when she died. 3 Yuka's body remained in such good

20 condition because she stayed frozen for such a long, unbroken period of time – 39,000 years, to be exact. But the most exciting thing about the discovery is the fact that some of her blood has been found. Experts believe that the blood may contain cells that can be 25 used to bring the woolly mammoth back from the dead. Samples have already been sent to a laboratory in South Korea with that in mind.

However, cloning expert Sir Ian Wilmut, the stem-cell scientist whose team unveiled Dolly the sheep as the 30 first cloned mammal in 1996, regards the idea as 'wildly optimistic'. Apparently, there are formidable obstacles standing in the way of cloning the beasts.

4 In practice, the cells degenerate quickly once the snow and ice starts to melt, which is when 35 most remains are found. New cloning procedures are currently being developed but, according to Sir Ian, it could be another fifty years before these techniques are perfected.

Apart from the technical difficulties surrounding the issue of resurrecting the mammoth, there are also a number of ethical questions involved.⁵ 40
Mammoths, like elephants, are highly social, intelligent animals, and at some point they would need friends and neighbours to interact with. Due to the fact that scientists will probably only be able to create one or two examples, the mammoths would be destined to a life of solitary confinement in a zoo or a research facility. The animal is hardly likely to thrive in these conditions. Another problem is the question of expense. The World Wide Fund for Nature has suggested that 10,000 species a year are becoming extinct. Many scientists believe that resources should be used for conserving existing animals rather than trying to revive just one special-interest species. 45
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In short, despite the hopes that the discovery of Yuka 55 has aroused in the field of palaeontology, it seems unlikely that a mammoth will be cloned in the near future.⁶ 60 However, in the words of Sir Ian Wilmut, 'the world is full of surprises.'



Complete the article *To clone or not to clone a mammoth?* with sentences A–H. There are two sentences that you do not need.

- A** The difficulty of obtaining healthy cells from the preserved carcasses is sure to hold up the process.
- B** The technique requires scores of healthy mammoth cells which must have survived with their DNA intact.
- C** Now some scientists are talking openly about bringing them back to life.
- D** You stand in awe of this majestic creature, which is pacing round and round its cage.
- E** Researchers believe that she met her end when she fell into water or got trapped in a swamp and could not free herself.
- F** Elephants and mammoths each have about 4 billion DNA bases in their genes.
- G** The first of these concerns the welfare of the cloned animal.
- H** One small population was recently found to have survived to around 4,000 years ago on the Russian island of Wrangel.

2) Write sentences using the past perfect or past perfect continuous.

1 By 2011 / he / work / at the hospital for ten years.

2 I / never / visit / someone in prison before.

3 At that time / she / live / in Prague for six months.

4 He / just / start dinner / when the doorbell rang.

3) Circle the correct words to complete the sentences.

- 1 The hospital staff have bought a new X-ray machine with the money they **have raised / raised / had raised** last year.
- 2 When she left university she **studied / had studied / had been studying** for four years.
- 3 Back at work, Bill couldn't believe that the week before he **was lying / had been lying / lay** on a beach.
- 4 The school **penalized / had penalized / had been penalizing** Joe after he damaged one of the classrooms.
- 5 Zahara **overcame / was overcoming / had been overcoming** many obstacles to get to England.
- 6 His sister's mobile **has rung / rang / had been ringing** all morning, so he switched it off.
- 7 I **never saw / have never seen / have never been seeing** anyone with such a striking resemblance to my mother before.
- 8 Ari's life **has been / had been / had been being** difficult before his family left the country.

4) Choose the best future form for each sentence.

- 1 The next train **leaves / will leave** at 10:15.
- 2 That baby doesn't look happy. He'll / **'s going to** scream any minute!
- 3 We'll **eat / 're eating** at that new restaurant tonight. I've reserved a table for four.
- 4 I don't think they'll **find / 're finding** that remote church without a map.
- 5 The shop probably **won't have / isn't having** a sale before Christmas.
- 6 I'm **going to / 'll** give up meat and become vegetarian. I decided last week.
- 7 I hope we'll **see / 're seeing** some fireworks tonight.
- 8 Zoe **is going to / might** win the game, but it all depends on her fitness level.

5) Complete the sentences using the future continuous, future perfect or the future perfect continuous.

- 1 By this time next year Sarah _____ (graduate) from university.
- 2 We _____ (not finish) cooking before the guests arrive.
- 3 _____ (you / take) photos at the wedding?
- 4 How long _____ (he / travel) with the band when he finally gets home?
- 5 By the time they stop hunting gorillas, their numbers _____ (decrease) dramatically.
- 6 This time tomorrow you _____ (wake up) from your operation.
- 7 Dan _____ (complete) the repairs in the kitchen by Monday.
- 8 When she finishes the marathon she _____ (run) for three hours.
- 9 Steph _____ (not finish) her dissertation by the end of term.

6) Complete the sentences with the time words below and the correct form of the verbs in brackets.

as soon as by the time while unless until as long as in case

- 1 _____ they _____ (clean) the windows, we'll be washing the car.
- 2 Scientists will continue research _____ they _____ (find) a cure for cancer.
- 3 _____ he _____ (get) home, we'll start dinner immediately.
- 4 _____ she _____ (arrive), the concert will have finished.
- 5 I'll wait at home _____ she _____ (come) to collect her books.
- 6 _____ it _____ (stop) raining, we can't have a picnic in the park.
- 7 _____ we _____ (catch) the train, we'll get to the cinema on time.

7) Circle the correct article to complete the sentences.

- 1 Peter Higgs is **a** / **the** / – British scientist who has won the Nobel Prize.
- 2 Once **a** / **the** / – year contemporary artists compete to win the Turner Prize.
- 3 The poem says that **a** / **the** / – love is more important than anything else.
- 4 **A** / **The** / – sculpture in your garden is very striking.
- 5 **A** / **The** / – poor are more likely to suffer from hunger and disease.
- 6 Some people still doubt that the Americans landed on **a** / **the** / – moon.
- 7 That is **a** / **the** / – woman I told you about this morning.
- 8 She's taken **a** / **the** / – beautiful photograph of our baby daughter.
- 9 I haven't eaten **a** / **the** / – meat since I was sixteen years old.

8) Complete the text with the determiners below.

too many almost all some few most almost none

Recent research shows that far 1_____ museums (91%) are failing to attract teenagers. Only a 2_____ young people (8%) visit museums on a regular basis and 3_____ teenagers (over half) have not been to a museum for many years. 4_____ of them (2%) said they would use a museum for research, preferring to use the internet instead. 5_____ museums (less than half) are trying to attract young people, however it seems that 6_____ of them are for the older generation.

9) Complete the sentences with the infinitive or -ing form of the verbs in brackets.

- 1 I'll never forget _____ (get) lost in a cave when I was a child.
- 2 On her way to the hotel, Lucy stopped _____ (visit) an old church.
- 3 The website recommends _____ (see) the museum of natural history.
- 4 Matt can't afford _____ (buy) a car yet.
- 5 The TV programme inspired people _____ (try) a new sport.
- 6 I enjoyed _____ (meet) your brother yesterday.
- 7 You need _____ (persevere) and not give up immediately.
- 8 I must remember _____ (go) to the Berlin Wall before I leave Germany.
- 9 He went on _____ (talk) and didn't see that almost everyone had fallen asleep.

10) Circle the correct words to complete the sentences.

- 1 My grandmother **used to** / **would** be lonely until we moved to the same town as her.
- 2 I **used to begin** / **began** playing the piano when I was four.
- 3 Jack **would** / **used to** be able to ski.
- 4 Her phone **will** / **would** keep on ringing during the night. It woke me up.
- 5 He **would** / **used to** have curly brown hair, but he went bald when he was thirty.
- 6 Nowadays the train **used to be** / **is** an expensive way to travel.
- 7 She's **spending** / **would spend** a lot of time with David these days.
- 8 We **usually take** / **would take** the bus to school every day before my brother learned to drive.

11) Complete the sentences with the correct forms of *used to*, *be used to* or *get used to* and the verbs in brackets.

- 1 She _____ (have) self-esteem problems, but now she's more confident.
- 2 I can't _____ (carry) an umbrella all the time now I live in London.
- 3 In the past people _____ (travel) by horse and cart.
- 4 He _____ (drink) six soft drinks a day, but his dentist made him stop.
- 5 Students need time to _____ (work) collaboratively online.
- 6 I _____ (feel) pain. I get football injuries all the time.
- 7 Consumers _____ (buy) clothes online nowadays.
- 8 She _____ (not eat) meat, but then she stopped being vegetarian.

12) Complete the sentences with the future in the past tense. Use no more than three words, including the word in brackets.

- 1 They _____ (going) have a picnic, but then it started to rain.
- 2 Steve _____ (become) the first professional tennis player in his club.
- 3 The debate _____ (decide) the ethics of genetic screening.
- 4 He thought he _____ (about) lose his job, but they gave him a promotion!
- 5 At first people believed computers _____ (increase) unemployment.
- 6 Sarah _____ (going) travel round the world, but then she got sick.
- 7 The teacher _____ (about) speak when one of the students interrupted.
- 8 Her actions _____ (transform) the lives of people all over the world.

13) WRITING: Choose the option you prefer and write

A) An online magazine has stated that people nowadays are only interested in themselves and that there are no role models any more. Write an article describing someone you admire. This could be a friend or family member. You should describe this person and give examples of why you admire them.

Follow the plan:

Paragraph 1: Introduce your friend or family member and say why you disagree with the magazine.

Paragraph 2: Say why you admire this person.

Paragraph 3: Describe events in their life to support this.

Paragraph 4: Sum up how this person has changed your life for the better.

B) Write a story about someone who has lost an important possession. Where did they last have it? What were they doing when they lost it? Why is it so important to them? Did they ever find it again? What happened in the end?

Follow the plan:

Paragraph 1: Describe the possession and say why it is important to the main character of the story.

Paragraph 2: Describe how the possession was lost.

Paragraph 3: Develop the story. Describe what happened next.

Paragraph 4: End the story. Say whether the possession was ever found again.

C) Read the extract from a magazine article and write a letter to the magazine giving your opinion.

These days, everyone wants to fight the ageing process rather than grow old gracefully. There is too much emphasis on looking young. People believe that, by looking younger than they are, they will improve their self-esteem and other people will admire them.

Follow the plan:

Paragraph 1: Give your reasons for writing, including your personal situation if relevant.

Paragraph 2: Present your first idea, with supporting arguments and examples.

Paragraph 3: Present your second idea, with supporting arguments and examples.

Paragraph 4: Write a conclusion, summing up your point of view.