

TOEFL PREPARATION, LISTENING, READING AND GRAMMAR STRUCTURE

1. Listen and answer the questions.

1. What does the woman need?
 - a) A meeting with Professor Simpson
 - b) An English composition class
 - c) An appointment for tutoring
 - d) Information about the Learning Center
2. Why does the woman say this?
 - a) She is worried that she cannot afford the service
 - b) She is trying to negotiate the cost of the sessions
 - c) She is showing particular interest in the man
 - d) She is expressing surprise about the arrangement
3. Why is the man concerned about the woman's attendance?
 - a) If she is absent, her grade will be lowered
 - b) He will not get a paycheck if she is absent
 - c) She has been sick a lot during the semester
 - d) Her grades need to be improved
4. What does the man agree to do?
 - a) He will show the woman how to use the library
 - b) He will write some compositions for the woman
 - c) He will talk with the woman's English professor
 - d) He will show the woman how to improve her writing
5. What does the man imply about the woman's teacher?
 - a) The professor is very difficult to understand
 - b) He does not know where she came from
 - c) Her students seem to like her teaching style
 - d) He is familiar with her requirements

2. Read the text and choose the correct option.

The evolution of the banana, star of the Western fruit bowl" By Rosie Mestel

Did you hear? The genome of the banana has been sequenced, an important development in scientist's efforts to produce better bananas.

A look at that genome has revealed curious things, said Pat Heslop-Harrison, a plant geneticist at the University of Leicester in England who was a coauthor of the report published this week in the journal *Nature*.

For example, there are regions of the banana genome that don't seem to be involved in making proteins but are shared by many different species of plants, far beyond bananas. What, he wonders, are they doing?

There are remnants of bits of banana streak virus spliced into the banana genome (too broken-up to cause disease, however).

There are whole sets of DNA repeats that plants normally have but bananas do not. And, intriguingly, three times since this genus of giant herbs took an evolutionary turn away from its relatives -- the grasses -- it has duplicated its entire set of chromosomes.

Two of the doublings took place at the Cretaceous-Tertiary boundary 65 million years ago, back when the dinosaurs and lots of other species went extinct, Heslop-Harrison noted.

Duplications like this are known to have happened in other plant groups at this same time but haven't occurred since, Heslop-Harrison said. Scientists don't know why, but they believe having

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extra copies of genes may have imparted some stability to plants during a time of rapid climate change after an asteroid hit Earth.

Having more than one gene of each type means that if one gene of a set loses function, the plant still has another one that works. And there's more room for adaptability to new circumstances, because one gene could be altered and co-opted for new purposes and there would still be the other one left to perform the original job.

"Perhaps it's the reason [bananas have] done so well in the subsequent millions of years," Heslop-Harrison said. "One can ask, will changes occurring in the world's climate now mean there's going to be a whole set of new genome duplications that will enable plants to survive? We don't know that, but it's interesting to consider."

The banana genome sequenced by the French scientists was from the Pahang, a wild Malaysian banana of the species *Musa acuminata*. It's a key species in the complicated evolution of the bananas and plantains people eat around the world, including the Cavendish banana that we buy at the supermarket.

The sterile Cavendish is a so-called triploid: It has three sets of chromosomes instead of the normal two. One of those genomes came from Pahang. The others came from other subspecies of *Musa acuminata*.

The changes occurred stepwise, and went something like this:

- Thousands of years ago, two wild banana species from different parts of the islands of Southeast Asia were brought into the same range by people. They formed hybrids. A bit like mules, the hybrids were vigorous but fairly sterile.
- The hybrids were kept going without sex through propagation of their shoots.
- At some point, the hybrids developed the ability to set fruit without being fertilized.
- Then (for most bananas, including the Cavendish) came another chance event that caused the hybrids to end up with three sets of chromosomes. Every now and again, the few viable eggs and pollen that they made would mistakenly contain two sets of chromosomes instead of just one.

When a double-chromosome pollen combined with a single-chromosome egg (or vice versa), the result was a hopelessly sterile plant with even more vigorous fruit.

Events like this happened more than once and sometimes included other types of ancestral banana species.

Some scientists, in fact, have made a whole study of banana domestication and movement around the world. They've pieced the story together using quite different strands of information, including the genomes of wild and cultivated bananas, the microscopic relics of banana leaf material found at archaeological sites, and even the word for "banana" in different languages.

1. In paragraph 2, the word "curious" is closest in meaning to

- A) inquisitive
- B) peculiar
- C) nosy
- D) intricate

2. What does paragraph 5 suggest about bananas?

- A) The banana genus may not yet be classifiable into a traditional category
- B) Bananas are actually a species of grass
- C) Bananas may now be categorized as "herbs" in supermarkets
- D) Because banana chromosomes duplicate themselves, they have better potential for successful cloning

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3. Why does the author use "intriguingly" to describe the phenomenon in paragraph 5?
- A) To imply that bananas are far more interesting than other fruits
 - B) To make readers doubt the claims scientists are making about bananas
 - C) To suggest that duplication of chromosomes is a rare and interesting occurrence in the plant world
 - D) To encourage questions about whether bananas are grasses or herbs
4. Why is the observation in paragraph 6 important?
- A) It suggests that the banana mutated its genetic structure for survival
 - B) It shows that bananas can be traced as far back as dinosaurs
 - C) It suggests that bananas were fatal to dinosaurs and other species
 - D) It proves that bananas are immune to atmospheric changes
5. The word "co-opted" in paragraph 8 is closest in meaning to
- A) decided upon together
 - B) argued against
 - C) removed from the study
 - D) adopted

3. Questions 1–4 are incomplete sentences. Below each sentence you will see 4 words or phrases marked A, B, C and D. Choose the 1 word or phrase that best completes the sentence.

1. Refrigerating meats _____ the spread of bacteria.
 - A. A. slows
 - B. B. slowing
 - C. C. to slow
 - D. D. is slowed
2. Throughout the animal kingdom, _____ bigger than the elephant.
 - A. A. whale is only the
 - B. B. is the whale only
 - C. C. only whale is the
 - D. D. only the whale is
3. The fact _____ credit cards are widely available has made them a popular form of payment.
 - A. A. of
 - B. B. that
 - C. C. is that
 - D. D. which is
4. The Constitution gave the legislative branch of government _____ to pass laws.
 - A. A. the power
 - B. B. has the power
 - C. C. the power is
 - D. D. of the power

3.1 Directions

In questions 5–10, each sentence has 4 highlighted words or phrases. The 4 highlighted parts of the sentence are marked A, B, C and D. Identify the 1 highlighted word or phrase that must be changed in order for the sentence to be correct.

Examples

1. Guppies are sometimes (A) call rainbow fish (B) due to the (C) bright colors of (D) the males.

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The sentence should read, "Guppies are sometimes called rainbow fish due to the bright colors of the males." **Therefore, you should choose A.**

1. (A) Serving several (B) term in the Congress, Shirley Chisholm (C) became a (D) respected political figure.

The sentence should read, "Serving several terms in the Congress, Shirley Chisholm became a respected political figure." **Therefore, you should choose B.**

As you're going through the questions below, select the appropriate answer for each by clicking on it. When you have answered all the questions, click "Show all answers" at the end of the page to highlight the correct answer for each question.

Now continue to work on the questions.

5. The gopher (A) digs not only with the (B) claws strong of its two front feet (C) but also with its (D) overhanging front teeth.
6. Granville Woods is (A) credited with (B) inventing a steam boiler (C) furnaces in (D) the 1880s.
7. A (A) deficient of folic acid is (B) rarely a problem in humans (C) because the vitamin is present in a (D) wide variety of foods.
8. (A) Electrical disturbances on Earth (B) are frequently caused (C) for storms (D) on the surface of the Sun.
9. The (A) internationally famous dancer Maria Tallchief (B) demonstrate that (C) the quality of ballet in North America could equal (D) that of the ballet in Europe.
10. (A) As two nuclei move closer together, (B) their mutual electrostatic potential energy (C) becomes (D) more large and more positive.

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