

1 Answer questions (1) ~ (5).

(1) Choose the topic sentence that best fits the blank.

[] The small pieces of plastic are called microplastics. They are tiny pieces of plastic from the waste and garbage that are in the seas and oceans. They are usually less than a millimeter wide. They are becoming more and more common in seafood such as oysters and mussels as well as other kinds of shellfish. Scientists say there are more than five trillion pieces of microplastic in our oceans. More and more are being added every day. Professor Richard Thompson, a marine biologist at Exeter University, said: “Hundreds of marine organisms encounter plastic at the sea surface or in the water ... and many of those encounters are harmful if not fatal.”

Researchers from the University of Ghent in Belgium conducted a study into microplastics and marine life. They believe people eat up to 11,000 pieces of plastic in their food each year. The researchers said that only around 60 of these pieces stay in our body and the rest will disappear down the toilet. Sixty pieces of microplastic may not seem a lot but it will build up over time. They could eventually be bad for our health. Things are likely to get worse. The researchers added that, by the end of the century, seafood eaters could consume as many as 780,000 pieces of plastic a year. That is likely to cause many health problems. Scientists say we need to recycle more and find alternatives to plastic.

- a . People should not be overly concerned about microplastics in seafood.
- b . People who consume seafood have a healthier diet.
- c . People who eat seafood may be also eating tiny pieces of plastic.
- d . People who eat shellfish are usually not eating plastic.

(2) Choose the word that is most similar in meaning to the underlined word.

Manchester in England has an ambitious plan to plant three million trees. The project is called the “City of Trees”. The director said it has three aims: “One is to plant three million trees — a tree for every man, woman and child — over the next 25 years. Next, we are ... bringing existing woodland into management because there is no point in planting new woodland if you can't manage what you've got already. Finally, we want to engage people a lot more in their natural environment — in planting trees and understanding more about the benefits that trees and woodlands bring to our society.”

The director explained more about the environmental project. He said: “Manchester wants to be a world-class city region. We have a lot of fantastic development ... but the natural environment needs to keep up with that.” He said it will reconnect people with trees and the natural world, provide health benefits and reduce stress. He said trees would reduce air and noise pollution. He also said: “They can also help cities and towns become more resilient* to climate change both in terms of things like reducing the urban heat island effect and also reducing ... flooding.”

注) *resilient: quick to recover

- a . change
- b . involve
- c . keep
- d . understand

- (3) Choose the word that is most similar in meaning to the underlined phrase.

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注) *dehydrate: cause an animal, plant or insect to lose too much water

- a. donate
- b. inject
- c. prepare
- d. seek

- (4) Choose the sentence that is true according to the following passage.

The world's first robot police officer has started working. Its name is 'RoboCop' and it went into service for the Dubai Police earlier this week. RoboCop's first official duty was to greet guests at the opening of a security conference in Dubai. Apart from greeting visitors, its job was to answer questions and give directions. RoboCop has a built-in tablet for people to interact with. People can use the tablet to pay traffic fines and use other smart police services. The tablet is linked to a police station, so people can talk to human police officers. In addition, RoboCop can speak six languages, including English and Arabic. The 170-centimetre-tall robot can also shake hands, salute people and recognize people's emotions and facial expressions.

- a. RoboCop asked questions to the general public.
- b. RoboCop can speak only English and Arabic.
- c. RoboCop can tell how you feel just by looking at you.
- d. RoboCop was a guest at a conference in Dubai.

- (5) Choose the title that best represents the main idea of the following passage.

Finland wants more than always being at the top of the world's education tables. It is planning to reform its education system to better prepare students for the digital age. A key part of this is to put more emphasis on digital and workplace skills. An example of this would be to use 3D printers in history classes for students to make models of ancient buildings. There will also be vocational training in real-life work settings. Students' performance would be judged both by a teacher and by an official from the company helping the student.

One teacher explained why a change was necessary. She said school is usually divided into subjects and facts that students must learn. She said real life is not like that because our brain is not divided into topics. She added that students need to think in a broader way. They must think about the problems in the world, like migration, the economy, the post-truth era. She questioned whether today's children get the tools to deal with such an inter-cultural world. She warned it would be a big mistake to let children believe that the world is simple, and that all they need is facts.

- a . Finland tops world tables for digital education
- b . Finland to reform education for the digital age
- c . Finnish companies to help with digital education
- d . Finnish students reproduce ancient buildings digitally

[出典]

- (1) Banville,Sean. "Worries about microplastics in our seafood" *BREAKING NEWS ENGLISH*.26 January 2017.Copyright©2017 Sean Banville.Used with permission
- (2) Banville,Sean. "City plans to plant 3 million trees" *BREAKING NEWS ENGLISH*.24 January 2017.Copyright©2017 Sean Banville.Used with permission
- (3) "Where Do Mosquitoes Go During The Daytime?", Ashish, April 2017, scienceABC, <https://www.scienceabc.com/nature/animals/where-do-mosquitoes-go-during-the-daytime.html>
- (4) Banville,Sean. "Robocop' – first robot police officer starts work" *BREAKING NEWS ENGLISH*.30 May 2017.Copyright©2017 Sean Banville.Used with permission
- (5) Banville,Sean. "Finland to reform education for the digital age" *BREAKING NEWS ENGLISH*.1 June 2017.Copyright©2017 Sean Banville.Used with permission

2 Read the following article and answer questions (1)~(5).

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[出典]

“Scientists Working To Save Arctic Ice Cap”, Monique Conrod, March 5, 2017,
<http://teachingkidsnews.com/2017/03/05/scientists-working-save-arctic-ice-cap/>

注) *erosion: gradual destruction by natural forces

- (1) Which paragraph explains how the sea ice changes in a typical year?
- a . Paragraph 1
 - b . Paragraph 2
 - c . Paragraph 3
 - d . Paragraph 4
- (2) Which paragraph gives examples of the effects of losing sea ice?
- a . Paragraph 5
 - b . Paragraph 6
 - c . Paragraph 7
 - d . Paragraph 8
- (3) Which paragraph describes possible problems with Dr. Desch's plan to regenerate sea ice?
- a . Paragraph 5
 - b . Paragraph 6
 - c . Paragraph 7
 - d . Paragraph 8
- (4) According to this article, what has been unusual about the Arctic this winter?
- a . The ice cap has grown to its largest size in 38 years.
 - b . The melting point of ice has been higher than usual.
 - c . There has been much less snow than during previous winters.
 - d . There have been several days that have been much warmer than normal.
- (5) According to this article, how long would it take for a system of wind-powered pumps to add an extra metre of ice to the Arctic ice cap?
- a . A century
 - b . A decade
 - c . One year
 - d . Two years

3 Follow the directions and write sentences in English.

(1) Write a question to complete the conversation below.

A : I'm going to Ehime Prefecture next weekend. _____

B : There are many places to see. You could visit Matsuyama Castle. It is pretty spectacular.

A : Really? What about a place to stay?

B : Well, Dogo Onsen is very atmospheric and relaxing.

(2) Write a question to complete the conversation below.

A : How long have you lived in Kochi?

B : Since April. I'm a freshman at university.

A : Oh, really? _____

B : It's great. I've made lots of friends and joined the cycling club.

(3) Write a question to complete the conversation below.

A : The weather has been very unusual so far this year.

B : Yes. We've had a lot of storms, and some very hot days, too.

A : _____

B : Who knows? Maybe it's caused by global warming.

(4) Write a complete sentence to answer the following question, using the information written in Japanese.

A : What's the best way to study English?

B : _____ [毎日少しずつ]

(5) Write a complete sentence to answer the following question, using the information written in Japanese.

A : How many times have you been to Tokyo?

B : _____ [行ったことがない]

英 語 $\frac{8}{10}$

- 4 次の英文の要旨を、句読点も含め 100 字以内の日本語でまとめ、解答欄に書きなさい。

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[出典]

“PASS ON THE SALT”, Brenda Iasevoli, TIME FOR KIDS, Edition 5-6, January 27, 2017,
Vol.7.No.15, PP.4-5, 一部略

注) *fare: food

*sodium: the chemical element “Na”

*culprits: the causes of a problem

*taste buds: spots on a tongue that provide the sense of taste

*cravings: powerful desires

5 次の英文を読んで、下の問いに答えなさい。

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注) *peopled by: filled with

[出典]

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- (1) 「教えること (teaching)」は、どうあるべきであると筆者は述べているか、本文に即して、句読点を含めて日本語 50 字以内で説明しなさい。
- (2) 友人が、勉強方法についてアドバイスをもとめてきました。あなたならどのようなアドバイスをするか、50 語程度の英語で書きなさい。