

I 次の1 - 20について、空所を埋めるのに最も適切な語句をそれぞれA - Dから選び、その記号を解答欄に記入しなさい。

1. X: () have some more tea?
Y: Thank you.
A. Why do you B. Why don't you C. Shall I D. How about

2. I couldn't get a high score in English. I () studied much harder.
A. must B. must have C. should D. should have

3. Everyone () to hear the news John had brought.
A. delights B. delighted C. was delighted D. was delighting

4. The () time I saw Rose was Monday morning.
A. next B. last C. most D. other

5. He was laughed () by everyone in his class.
A. on B. of C. at D. in

6. Poor () she was, she was always cheerful and kind-hearted.
A. though B. because C. but D. as

7. I need a box () keep my keys in.
A. where B. which C. to D. for

8. She eats neither fish () meat.
A. nor B. and C. or D. for

9. Look at the person () a bicycle!
A. rode B. rides C. riding D. ridden

10. It is too expensive () me to purchase the car.
A. on B. for C. at D. in

11. I am taking lessons () sign language.
A. at B. to C. on D. of

12. You () better not eat too much chocolate.
A. had B. have C. has D. are having

13. I will () for a passport in order to study abroad next year.
A. apply B. purchase C. declare D. realize

14. Try to call before 8 o'clock. (), I'll be attending an online meeting.
A. In contrast B. After that C. Among them D. Since then

15. I walk () the police station on my way to school every morning.
A. past B. passed C. on D. passage

16. I would like to stay here () it's time to go home now.
A. and B. so C. when D. but

17. Your answer () right. Let's check on the Internet.
A. can B. could C. could be D. is to be

18. The new novel was so () that I couldn't stop reading it.
A. interesting B. awful C. boring D. unsatisfactory

19. I wonder () I should attend the party.
A. that B. what C. who D. whether

20. We used to play together when we were kids, but I don't see them ().
A. once more B. no more C. any more D. much more

II 次の英文を読んで、空所21 - 30を埋めるのに最も適切な語句をそれぞれA - Cから選び、その記号を解答欄に記入しなさい。

Walking the Goose¹

When the family decided to walk their beloved dog, Sadie, to school each morning, their pet goose, Ryan Gosling, also wanted to join them. He (21) waddled² to school with his friend Sadie and the children Finn and Mia each morning.

Finn and Mia's dad, Peter Horrigan, said Ryan Gosling had believed he was a dog (22) the family (23) the orphaned³ goose home from a farm when he was just one day old. Mr. Horrigan said the goose (24) a popular part of the family. "The original plan was to nurse, feed and raise him (25) seven weeks, and then get him back to the farm," Mr. Horrigan said. "We tried (26) him back, but he just went, had a swim and came back with us, and that was it."

After the school walk, a typical day for Ryan the goose (27) hanging out at home with best friend Sadie and chasing away any small dogs that (28) come close to the family house, in the Melbourne suburb of Edithvale⁴.

Mr. Horrigan said the five-month old goose was loved by the (29) community and children adore him. Ryan loves going to the beach to swim in the ocean or sitting in his favorite bucket and watching the children (30). "He is very sociable - if the door is open, he would poke his head right in like, 'you guys up for a chat?'" Mr. Horrigan said.

(Adapted from <https://www.kidsnews.com.au/green>)

注 1 goose ガチョウ 2 waddle (アヒル等が) よちよち歩く

3 orphaned 親のいない

4 the Melbourne suburb of Edithvale 地名。(オーストラリアの)メルボルン郊外のエディスバール。

21. A. rarely B. accurately C. happily
 22. A. before B. since C. though
 23. A. brought B. played C. made
 24. A. becoming B. had become C. become
 25. A. in B. after C. for
 26. A. take B. took C. taking
 27. A. includes B. intends C. inspire
 28. A. must B. dare C. used to
 29. A. every B. whole C. all
 30. A. play B. played C. to play

III 次の英文を読み、設問 31 - 35 に答えなさい。31 - 35 の答えはそれぞれ A - D の中から最も適切なものを選び、その記号を解答欄に記入しなさい。

Signs of Spring

Snowdrops¹ are one of the very first signs of spring. These delicate flowers emerge in the depths of winter, as early as the 1st of January. By February, snowdrops flower in woodlands, parks, and gardens all over the UK. They are just 15cm tall, but their beautiful white flowers make them easy to spot. Due to climate change, snowdrops seem to be appearing earlier and earlier every year - so keep an eye out from Christmas onwards! (Paragraph 1)

Many frogs hibernate² during the winter, but by the time spring comes around, they are awake and ready to go! Frogspawn³ starts to appear in ponds across the UK from January onwards. It usually emerges in the south west of England first, and by March frogspawn can be found all over. Only 1 in 50 of these precious eggs will survive to adulthood, which is why frogs lay so many! If they do not get gobbled up⁴ by a predator⁵, these eggs will grow into tiny tadpoles⁶ - another sign of spring. (Paragraph 2)

Blossoming trees are a sign that it is time for bees! With the return of flowering plants and trees, bees emerge (1) their winter nests and get ready for a new season. The start of spring sees the return of many other insects, too. Keep an eye out for beautiful butterflies, and check the ground for beetles. (Paragraph 3)

Believe it or not, over half the world's population of bluebells live in the UK, and in spring, they're out in full force! These [ア. shady woodland floors イ. form ウ. carpets エ. flowers オ. across カ. strongly-scented] from mid-April onwards. Bluebell fields take a long time to establish, therefore they're often found (2) ancient woodland. Bluebell flowers are very delicate, so it's important not to touch them and to be careful not to step on them. If you're visiting a bluebell wood, be sure to stick to the path, to keep these flowers safe! (Paragraph 4)

(Adapted from <https://www.natgeokids.com/uk/discover/science/nature/signs-of-spring/>)

注 ¹ snowdrops マツユキソウ ² hibernate 冬眠する

³ frogspawn カエルの卵 ⁴ gobbled up が*つが*つ食べる

⁵ predator 捕食者 ⁶ tadpoles オタマジャクシ

31. 第1パラグラフによると、
 A. マツユキソウは冬の間から姿を見せる。
 B. 2月までには、イギリスの森林や公園でマツユキソウの花を見ることができる。
 C. 気候変動によって、クリスマスの時期からマツユキソウを見ることができるようになってきている。
 D. 上記 (A、B、C) のすべてが当てはまる。
32. 第2パラグラフによると、
 A. 3月には、まだイギリス中の池でカエルの卵を見ることができない。
 B. 冬の間、多くのカエルは冬眠する。
 C. ほとんど全てのオタマジャクシは成長して成体になる。
 D. 上記 (A、B、C) のすべてが当てはまる。

33. (1) に入れるのに最も適した語を選びなさい。

- A. from B. to C. with D. up

34. 第4パラグラフの下線部が「これらの強く香る花が森の木陰一面にじゅうたんの様に広がって咲く」という意味になるようにカッコ内の語句を並び替えたとき、(X) と (Y) にくる語句の組み合わせとして正しいものを選びなさい。

[ア. shady woodland floors イ. form ウ. carpets エ. flowers オ. across カ. strongly-scented]

() (X) () () (Y) ()

- A. ア・オ B. ア・ウ C. エ・オ D. エ・ウ

35. (2) に入れるのに最も適した語を選びなさい。

- A. out B. in C. down D. onto

IV 次の英文を読み、設問 36 - 40 に答えなさい。36 - 39 の答えはそれぞれ A - D の中から最も適切なものを選び、その記号を解答欄に記入しなさい。40 の答えは解答用紙の所定の欄に記述しなさい。

Can Ants Help Detect Cancer in Humans?

Ants are truly fascinating creatures. The industrious insects can lift up to 50 times their own body weight, protect themselves from floods, predict earthquakes, and even repair their damaged homes. Now, ① researchers have found that the amazing insects may even be able to help detect cancer in humans. (Paragraph 1)

For their study, the researchers turned to a type of ants found throughout Europe. They began by exposing individual ants to two tubes¹ — one empty and the other containing a solution² with cancer cells. When the insects went toward the latter tube, they were rewarded with a sugar solution. It took the clever creatures just 30 minutes to associate³ the diseased cells' distinct smell with the sugar. (Paragraph 2)

The scientists tested the insects' cancer-detecting ability by removing the sugar solution. They found that the ants continued to move towards the tube about nine times before realizing ② it was gone. (Paragraph 3)

③ [ア. could identify イ. then tested ウ. of cancer エ. if the ants オ. different types カ. the research team キ. to see] They trained two groups of ants to associate the sugar solution with the unique smells of two types of breast cancer. Once again, the insects chose the smell they had been exposed to long after the sugar solution had been removed. (Paragraph 4)

The researchers, who published their findings, hope ants could provide a possible alternative to dogs to detect diseases in humans. They could potentially also be trained to sniff out the presence of things like bombs and drugs. "Ants are equal to dogs in terms of detection abilities," the researchers wrote in their study. "In some respects, ants surpass dogs because they need an extremely shorter training time (30 minutes compared to 6-12 months for a dog) and a reduced cost of training and maintenance." (Paragraph 5)

(Adapted from <https://www.dogonews.com/2022/4/28/can-ants-help-detect-cancer-in-humans>)

注 1 tube(s) 試験管 2 solution 溶液

3 associate 関連づける

36. 下線部①と意味が最も近いものを選びなさい。
 A. there are many theories on how ants cause disease.
 B. research shows that insects play an important role in medicine.
 C. studies show that insects will save many lives by curing disease in people.
 D. scientists realized that ants might have the incredible ability to find cancer in people.

37. 第2パラグラフによれば、
 A. アリの嗅覚には個体差があるため、がん細胞を正確に嗅ぎ分けさせることは困難である。
 B. 30分以内ではアリは健康な細胞とがん細胞を嗅ぎ分けることができない。
 C. アリはがん細胞に含まれる糖質に引き寄せられ集まってくる。
 D. わずかな訓練でアリはがん細胞の匂いを砂糖の溶液と関連づけるようになる。

38. 下線部② "it" は何を指していますか。
 A. cancer B. sugar solution C. scientist D. tube

39. 下線部③が「その後、研究チームはアリが異なる種類のガンを見極められるかというテストを行った。」という意味になるようにカッコ内の語句を並べ替えたとき、(X)と(Y)に来る語句の組み合わせとして正しいものを選びなさい。

[ア. could identify イ. then tested ウ. of cancer エ. if the ants
 オ. different types カ. the research team キ. to see]
 () () (X) () (Y) () ()
 A. ア・カ B. キ・ア C. キ・オ D. ア・イ

40. 病気や危険物などの検出に関して犬よりもアリが適している可能性とその理由が、第5パラグラフに示されている。その理由を、100字以内の日本語で説明しなさい。