

[問題 I] 次の英文を読んで、下の設問に答えなさい。

In 1977, Irene Pepperberg, a recent graduate of Harvard University, did something very unusual. Pepperberg was interested in learning if animals could think, and the best way to do this, she reasoned, was to talk to them. To test her theory, she bought an African gray parrot she named Alex and taught him to reproduce the sounds of the English language. “I thought if he learned to communicate, I could ask him questions about how he sees the world,” she explains.

When Pepperberg began her research with Alex, very few scientists acknowledged that animals were capable of thought. The general belief was that animals reacted to things in their environment but lacked the ability to think or feel. How, then, could a scientist demonstrate that animals might, in fact, possess intelligence? “That’s why I started my studies with Alex,” Pepperberg says.

Certain skills are considered key signs of higher mental abilities: a good memory, an understanding of symbols, self-awareness, understanding of others’ motives, and creativity. Little by little, researchers have documented these abilities in other species. Sheep and elephants can recognize faces. Chimpanzees—who are genetically similar to humans—use a variety of primitive tools for eating, drinking, and hunting; they also laugh when pleased and spit to show they dislike something. Octopuses in captivity are known to amuse themselves by shooting water at laboratory staff. They may even exhibit basic emotions by changing color.

Alex the parrot was a surprisingly good talker. He learned how to use his voice to imitate almost 100 English words, including those for foods, colors, shapes, and numbers. Although imitation was once considered a simple skill, in recent years, scientists have revealed that it’s an extremely difficult ability. Because Alex had mastered many English words, Pepperberg could ask him questions about a bird’s basic understanding of the world. Alex could count, as well as describe shapes, colors, and sizes for Pepperberg; he even had an

elementary understanding of the abstract concept of zero.

Many of Alex's cognitive skills, such as his ability to understand the concepts of "same" and "different," are generally attributed only to higher mammals, particularly primates such as humans and apes. But parrots, like great apes (and humans), live a long time in complex societies. And like primates these birds must monitor the changing relationship within the group. This may explain Alex's ability to learn a human language. "When we take [parrots] into captivity, what they start to do is treat us as their flock," explains Pepperberg. Parrots learn to pronounce and use our words so they can become a part of our group.

Researchers in Germany and Austria have also been studying language ability in dogs. One named Betsy has shown that she is able to learn and remember words as quickly as a two-year-old child. She has a vocabulary of over 340 words, knows at least 15 people by name, and can link photographs with the objects they represent. (1) \_\_\_\_\_ Alex, she's pretty smart.

[A] This is a larger lesson of animal cognition research: [B] We are not alone in our ability to invent, communicate, demonstrate emotions, or think about ourselves. Still, humans remain the creative species. [C] In fact, a number of critics dismiss animals' ability to use tools or understand human language. They believe animals are just copying human behavior. [D]

Yet many researchers say that creativity and language in animals, like other forms of intelligence, have evolved. "People were surprised to discover that chimpanzees make tools," says Alex Kacelnik, an animal researcher at Oxford University. "But people also thought, 'Well, they share our ancestry—of course they're smart.' Now we're finding these kinds of behaviors in some species of birds. But we don't have a recently shared ancestry with birds...It means that (2) \_\_\_\_\_—that it's not something reserved only for primates or mammals."

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[注]      captivity = とらわれの身      cognitive = 認知  
         attribute = (特質) ～に起因すると考える  
         ancestry = 祖先

1. Pepperberg がオウムを買ったことが述べられているが、その理由は次のうちどれか。その番号をマークしなさい。

1

- (1) She believed that parrots were the smartest animals and wanted to prove it.
- (2) She needed a bird to complete her research project for Harvard University.
- (3) She was looking for an unusual pet and decided to get a parrot for companionship.
- (4) She was very curious if animals could think and wanted to find out by communicating with them.

2. 第 5 パラグラフにおいて説明されている Alex が人間の言語を学べた理由は、次のうちどれか。その番号をマークしなさい。

2

- (1) Because parrots live long, Alex, captured at an early age, was able to study the human language for years.
- (2) By using a new method developed by the owner, Alex focused on learning words.
- (3) Since Alex lived among people and considered himself part of the group, he learned words to communicate and interact with them.
- (4) While in captivity, Alex interacted with other trained birds which allowed him to develop his potential.

3. 第6パラグラフの下線部(1)に入れるべき最も適当なものを、下  
に与えられたものの中から選び、その番号をマークしなさい。

(1) As for

(2) Besides

3

(3) Instead of

(4) Like

4. 以下の文は、第7パラグラフの [A] [B] [C] [D] のどこに入れるのが  
最もふさわしいか。その番号をマークしなさい。

**No other animal has built cities, created music, or made a computer.**

4

(1) [A]

(2) [B]

(3) [C]

(4) [D]

5. 最終パラグラフの下線部(2)に入れるべき最も適当なものを、下  
に与えられたものの中から選び、その番号をマークしなさい。

5

(1) certain animals evolve during their lifetimes, and this speeds  
up the general advancement of intelligence

(2) evolution can invent similar forms of advanced intelligence more  
than once

(3) in some cases, ancestors, or older generations, tend to have  
higher intellectual skills

(4) the closer the animal is to humans, the faster it achieves  
advanced intelligence

6. 次の各文で本文の内容に一致しているものには 1 を、一致していないものには 2 をマークしなさい。

(1) Irene Pepperberg started her pioneering research in 1977.

6

(2) Only a small number of scientists believed that animals were able to think when Pepperberg started her research with Alex.

7

(3) In captivity, octopuses are known to spray water at people for fun.

8

(4) Having been raised with a two-year old child, Betsy was able to learn and memorize over 340 words.

9

7. 次の事例 (I) ～ (III) は、本文で述べられているどの動物の説明と一致するか。その番号をマークしなさい。

(I) This animal can identify faces.

10

(II) This animal can provide information about colors.

11

(III) This animal is capable of connecting an object with the photograph of it.

12

(1) chimpanzee

(2) dog

(3) elephant

(4) octopus

(5) parrot

8. 次の 1～5 について、本文の主要な考えを示すものには 1 を、主要な考えを支える細かな説明には 2 をマークしなさい。

(1) If an animal is capable of displaying specific skills such as a good memory and creativity, it is considered to have higher mental abilities. 13

(2) To show basic feelings, octopuses in captivity may change their color. 14

(3) Alex, the parrot, was even able to understand the concept of zero. 15

(4) At one point, the discovery that chimpanzees create tools astonished many individuals. 16

(5) Humans are not the only animals that can think.

17

[問題Ⅱ] 次の会話を読んで、下の設問に答えなさい。

A: (1)\_\_\_\_\_ to the “Koda Yoji Exhibition” at the museum near campus?

B: Definitely! I’ve heard it’s an amazing collection of works, and I’m eager to see it with you. Let’s go this Sunday.

A: Well, I was hoping we could go on Monday because (2)\_\_\_\_\_ on weekdays.

B: Great. I’m free after class next Monday. And any chance to spend less is always welcome.

A: OK, then. Let’s meet at the museum at 5:00 pm. We’ll have plenty of time to see the exhibit before the museum closes.

B: (3)\_\_\_\_\_. I’ll write that down on my calendar then. By the way, do you know if (4)\_\_\_\_\_ at the museum?

A: Well, according to the museum’s website, Koda will be there every evening for the first two weeks.

B: Oh! Fantastic. I’d love to meet him in person. I can’t (5)\_\_\_\_\_ to go.

1. 下線部 (1) に入れるべき最も適当なものを、下に与えられたものの中から選び、その番号をマークしなさい。

18

- (1) Are you interested in going with me
- (2) Did you know that I took a class trip
- (3) Will you show my friend how to get
- (4) Did you enjoy going

2. 下線部 (2) に入れるべき最も適当なものを、下に与えられたものの中から選び、その番号をマークしなさい。

19

- (1) it’ll be less crowded
- (2) the waiting list is shorter
- (3) tickets are discounted
- (4) opening hours are longer

3. 下線部 (3) に入れるべきものとして最もふさわしくないものを、下に与えられたものの中から選び、その番号をマークしなさい。

(1) Got it

20

(2) My pleasure

(3) That sounds good

(4) Perfect

4. 下線部 (4) に入れるべき最も適当なものを、下に与えられたものの中から選び、その番号をマークしなさい。

21

(1) the artist's past interview will be shown

(2) the artist will be present

(3) the artist has previously shown his work

(4) the artist's works will be sold

5. 下線部 (5) に入れるべき最も適当なものを、下に与えられたものの中から選び、その番号をマークしなさい。

22

(1) bear

(2) help

(3) take

(4) wait

〔問題Ⅲ〕 次の各文の空所に入れるべき最も適当なものを、それぞれに与えられたものの中から選び、その番号をマークしなさい。

1. Let's talk about the plan to visit Kyoto (            ) a cup of coffee in the cafeteria. 23

- (1) by
- (2) on
- (3) over
- (4) with

2. Please excuse me for not (            ) to your e-mail sooner.

- (1) reply 24
- (2) replied
- (3) have replied
- (4) having replied

3. I (            ) anything since yesterday, so I am very hungry.

- (1) don't eat 25
- (2) didn't eat
- (3) haven't eaten
- (4) hadn't eaten

4. She seldom studied hard even before exams when she was in high school, (            ) she? 26

- (1) was
- (2) wasn't
- (3) did
- (4) didn't

5. I've decided to quit my part-time job, so that I can (            ) myself  
to completing my final project for graduation. 27

- (1) confess
- (2) help
- (3) behave
- (4) devote

6. (            ) I had practiced the piano harder when I was young, I  
would be a great pianist by now. 28

- (1) If only
- (2) Only if
- (3) What if
- (4) If not

7. It is often said that we should use more (            ) paper to utilize  
resources effectively. 29

- (1) recycle
- (2) recycling
- (3) recycled
- (4) to recycle

8. I couldn't find her even though she was within about 10 meters of  
(            ) I was standing. 30

- (1) where
- (2) wherever
- (3) the place of
- (4) at the place

〔問題 IV〕日本語と同じ内容の英文になるように、下に与えられたものを並べかえたときに (A) (B) (C) (D) (E) (F) に入るものの番号をマークしなさい。ただし、文頭の語も小文字で示されている。

1. あんな印象深い絵を描いたのは誰ですか。

(        )( A )(        )( B )(        )(        ) picture like that?  
A - 

31
----

 B - 

32
----

- |          |                        |
|----------|------------------------|
| (1) that | (2) who                |
| (3) was  | (4) drew               |
| (5) it   | (6) such an impressive |

2. 授業中に居眠りをしているところを見られたら、私は恥ずかしく思うでしょう。

I (        )( C )(        )(        )( D )(        ) in class.  
C - 

33
----

 D - 

34
----

- |              |                 |
|--------------|-----------------|
| (1) to       | (2) sleeping    |
| (3) would be | (4) seen        |
| (5) be       | (6) embarrassed |

3. 私は両親としばしば行った公園をはっきりと覚えています。

I clearly (        )( E )(        )( F )(        )(        ).  
E - 

35
----

 F - 

36
----

- |                 |                     |
|-----------------|---------------------|
| (1) I           | (2) go to           |
| (3) would often | (4) the park        |
| (5) remember    | (6) with my parents |

英語

I	解答
1	④
2	③
3	④
4	③
5	②
6	①
7	①
8	①
9	②
10	③
11	⑤
12	②
13	①
14	②
15	②
16	②
17	①

II	解答
18	①
19	③
20	②
21	②
22	④

III	解答
23	③
24	④
25	③
26	③
27	④
28	①
29	③
30	①

IV	解答
31	③
32	①
33	⑥
34	④
35	④
36	③