

〔問題 I〕 次の英文を読んで、下の設問に答えなさい。

It can be hard to know what newborns want. They can't talk, walk, or even point at what they're thinking about. Yet babies begin to develop language skills long before they begin speaking, according to recent research. And, compared to adults, they develop these skills quickly. People have a tough time learning new languages as they grow older, but infants have the ability to learn any language, even fake ones, easily.

For a long time scientists have struggled to explain how such young children can learn the complicated grammatical rules and sounds required to communicate in words. Now, researchers are getting a better idea of what's happening in the brains of society's tiniest language learners. The insights might eventually help kids with learning disabilities as well as adults who want to learn new languages. The work might even help scientists who are trying to design computers that can communicate like people do. "The brain of the baby is a new frontier," says Patricia Kuhl, co-director of the University of Washington's Institute for Learning and Brain Sciences.

### The Learning Process

For decades scientists have debated how the brains of young children figure out how to communicate using language. With help from new technologies and research strategies, scientists are now finding that babies begin life with the ability to learn any language. By interacting with people and using (1)their superb listening and watching skills, they master the specific languages they hear most often.

"The [baby] brain is really flexible," says Rebecca Gomez, an experimental psychologist at the University of Arizona, Tucson. Babies "can't say much, but they're learning a lot." Kuhl's research, for example, suggests that the progression from babbles like "gaga" to actual words like "good morning" begins with the ability to tell the difference between simple sounds, such as "ga," "ba," and "da." Such

studies show that, up to about six months of age, babies can (2)\_\_\_\_\_. “Their ability to do that shows that [babies] are prepared to learn any language,” Kuhl says. “That’s why we call them ‘citizens of the world.’”

About 6,000 sounds make up the languages spoken around the globe, but not every language uses every sound. For example, while the Swedish language distinguishes among 16 vowel sounds, English uses only eight vowel sounds, and Japanese uses just five. Adults can hear only the sounds used in the languages they speak fluently. To a native Japanese speaker, (3)\_\_\_\_\_, the letters “R” and “L” sound identical. So, unlike someone whose native language is English, a Japanese speaker cannot tell “row” from “low” or “rake” from “lake.”

Starting at around six months old, Kuhl says, a baby’s brain focuses on the most common sounds it hears. Then, children begin responding only to the sounds of the language they hear the most. In a similar way, Gomez has found, slightly older babies start recognizing the patterns that make up the rules of their native language. In English, for example, kids who are about 18 months old start to figure out that words ending in “-ing” or “-ed” are usually verbs, and that verbs are action words.

### Language on the Brain

Scientists are particularly interested in the brains of people who speak more than one language fluently because that skill is hard to acquire after about age seven. In one of Kuhl’s studies, for example, native Mandarin Chinese speakers spoke Chinese to nine-month-old American babies for twelve sessions over four weeks. Each session lasted about 25 minutes. At the end of the study, the American babies responded to Mandarin sounds just as well as did Chinese babies who had been hearing the language their entire lives. (English-speaking teenagers and adults would not perform nearly as well.)

If a child regularly hears two languages, her brain forms a different pathway for each language. However, once the brain

solidifies those electrical language pathways by around age seven, it gets harder to form new ones. By then, a baby's brain has disposed of, or pruned, all the unnecessary connections that the infant was born with. So, if you don't start studying Spanish or Russian until middle school, you must struggle against years of brain development, and progress can be frustrating. A twelve-year-old's brain has to work much harder to (4)forge language connections than an infant's brain does. "We ought to be learning new languages between ages zero and seven, when the brain does it naturally," Kuhl says.

### Learning from the Baby Brain

For teenagers and adults who want to learn new languages, baby studies may offer some useful tips. For one thing, researchers have found that it is far better for a language learner to talk with people who speak the language than to rely on educational CDs and DVDs with recorded conversations. [A] When infants watched someone speaking a foreign language on TV, Kuhl found, they had a completely different experience than they did if they watched the same speaker in real life. [B] With real speakers, the babies' brains lit up with electrical activity when they heard the sounds they had learned. "The babies were looking at the TV, and they seemed mesmerized," Kuhl says. [C] "There was nothing going on in their brains," she says. "Absolutely nothing." [D]

Emily Sohn from *Science News* in Linda Lee and Erik Gundersen (Eds.) *Select Readings: Teacher-approved readings for today's students*. Oxford University Press, 2011.

[注]     frontier = 未開拓の領域     babble = 赤ちゃん言葉  
         vowel = 母音                     rake = くま手  
         solidify = 固める               middle school = 中学校  
         mesmerize = 魅了する

1. 第3パラグラフの下線部(1)の **their** は、次のうちのどの単語の所有格に相当するか。その番号をマークしなさい。

1

- (1) people (2) babies  
(3) scientists (4) computers

2. 第4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。

2

- (1) recognize all the sounds that make up all the languages in the world  
(2) distinguish their mother's voice from that of other people  
(3) easily memorize and copy all the sounds they hear around them  
(4) process sounds and continue to learn even while they are sleeping

3. 第5パラグラフにおいてスウェーデン語、英語、日本語の違いについて論じられている理由を、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。

3

- (1) To show why babies learn how to speak at different rates depending on the language.  
(2) To illustrate why Japanese speakers may have difficulty pronouncing some Swedish and English words.  
(3) To indicate why bilingual speakers are able to speak more than one language fluently.  
(4) To demonstrate why babies are considered 'citizens of the world.'

4. 第5パラグラフの下線部(3)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) unfortunately (2) nevertheless  
(3) for instance (4) subsequently

4

5. 第 8 パラグラフの下線部 (4) の **forge** と同じ意味として最も適当なものは、次のうちどれか。その番号をマークしなさい。

(1) stimulate

(2) relate

5

(3) imitate

(4) create

6. 以下の文は、第 9 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。

**Learning, however, did not happen.**

(1) [A]

(2) [B]

6

(3) [C]

(4) [D]

7. 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) The development of language skills in babies starts when they begin saying simple words.

7

(2) There are approximately 6,000 languages spoken around the world.

8

(3) In the case of the English language, babies aged around a year and a half start understanding basic grammatical rules.

9

(4) Research has shown that it is not possible to speak a foreign language fluently if you start learning it after age seven.

10

(5) Recorded conversations on educational CDs and DVDs have been found not to be effective learning tools for speaking.

11

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) How babies learn complex grammar has puzzled scientists for many years. 12

(2) Having a good understanding of how babies learn language may help in the development of computers that are able to communicate.

13

(3) Swedish has more than double the number of vowel sounds as Japanese.

14

(4) Humans are born with the ability to learn any language.

15

(5) For a bilingual child, the brain forms separate pathways for each language, and these pathways harden by the time the child is in early elementary school.

16

9. 本文のタイトルとしてふさわしいものは、次のうちどれか。その番号をマークしなさい。

17

- (1) Babies Prove Sound Learners
- (2) The Importance of Direct Communication in Language Learning
- (3) How the Brain Processes Languages
- (4) Effective Methods to Achieve Language Fluency

[問題Ⅱ] 次の会話を読んで、下の設問に答えなさい。

A: Thank you for coming all the way. Did you have trouble finding the place?

B: (1)\_\_\_\_\_. I used Google Maps, and it told me the exact route! It's so amazing.

A: In any case, I'm glad you were able to (2)\_\_\_\_\_ it!

B: I love your new apartment. It seems much larger than your old place!

A: Thank you. That's right. At last I (3)\_\_\_\_\_. I've always wanted to invite my friends over and have a small dinner party.

B: I brought you a small housewarming gift.

A: Oh, you (4)\_\_\_\_\_ have. But thank you. Can I open it?

B: Please. It's just something I came (5)\_\_\_\_\_ at a small shop nearby. I hope you like it.

A: What a lovely vase! It's perfect for my new living room.

1. 下線部 (1) 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) Not a bit

(2) Not in the least

18

(3) Not at all

(4) Not again

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) take

(2) make

(3) give

(4) leave

3. 下線部 (3) 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。

20

(1) can receive guests

(2) have larger closet space for all my clothes

(3) can get to the station easily

(4) have a nice view

4. 下線部（4）に入れるべき最も適切なものを、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) wouldn't

(2) shouldn't

(3) couldn't

(4) mustn't

5. 下線部（5）に入れるべき最も適切なものを、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) about

(2) along

(3) across

(4) after



〔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. It was (            ) that I took a long walk yesterday. 23

- (1) a so pleasant day
- (2) so pleasant a day
- (3) a such pleasant day
- (4) such pleasant a day

2. Not only Taro but his brother (            ) to the sales department.

- (1) belong 24
- (2) belongs
- (3) are belonging
- (4) is belonging

3. The books I ordered last week should (            ) yesterday. Did you receive them, Mom? 25

- (1) deliver
- (2) have delivered
- (3) have been delivered
- (4) be delivering

4. The schoolhouse, (            ) 50 years ago, needs to be rebuilt in preparation for earthquakes. 26

- (1) construct
- (2) being constructed
- (3) having constructed
- (4) having been constructed

5. The woman ( ) grandmother I take care at the nursing home is a high school music teacher. 27

- (1) of whose
- (2) of which
- (3) whose
- (4) whom

6. He kindly drove me to the station. Otherwise, I ( ) the last train. 28

- (1) missed
- (2) would miss
- (3) would have been missed
- (4) would have missed

7. Since I prefer to own a house ( ) rent an apartment, I am now trying to save as much money as I can. 29

- (1) to
- (2) rather to
- (3) would rather
- (4) rather than to

8. It has been raining so much that we cannot ( ) the possibility of landslides. 30

- (1) get in
- (2) rule out
- (3) take in
- (4) put out

[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) 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. 会議に参加した人の 4 分の 1 は支配人からの提案に反対しました。  
One fourth (        ) (        ) (        ) ( A ) (        ) (        )  
the proposal made by the manager.

A - 

31
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- |              |                    |
|--------------|--------------------|
| (1) those    | (2) the conference |
| (3) attended | (4) opposed        |
| (5) of       | (6) who            |

2. よい指導者になるには何が必要だと思いますか。  
(        ) ( B ) (        ) (        ) ( C ) (        ) a good  
leader?

B - 

32
----

    C - 

33
----

- |           |            |
|-----------|------------|
| (1) it    | (2) do you |
| (3) what  | (4) takes  |
| (5) think | (6) to be  |

3. その映画は予想以上に感動的でした。  
The movie was (        ) ( D ) (        ) (        ) (        )  
( E ).

D - 

34
----

    E - 

35
----

- |                  |            |
|------------------|------------|
| (1) I            | (2) moving |
| (3) more         | (4) much   |
| (5) had expected | (6) than   |

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

III	正解
23	②
24	②
25	③
26	④
27	①
28	④
29	④
30	②

IV	正解
31	③
32	②
33	④
34	③
35	⑤

II	正解
18	④
19	②
20	①
21	②
22	③