

第6問 (配点 24)

- A Your study group is learning about “false memories.” One group member has made partial notes. Read this article to complete the notes for your next study meeting.

False Memories

What are memories? Most people imagine them to be something like video recordings of events in our minds. Whether it is a memory of love that we treasure or something more like failure that we fear, most of us believe our memories are a permanent record of what happened. We may agree that they get harder to recall as time goes on, but we think we remember the truth. Psychologists now tell us that this is not the case. Our memories can change or even be changed. They can move anywhere from slightly incorrect to absolutely false! According to well-known researcher Elizabeth Loftus, rather than being a complete, correct, unchanging recording, “Memory works a little bit more like a Wikipedia page.” Anyone, including the original author, can edit the information.

Serious research investigating “false memories” is relatively new. Scholars Hyman and Billings worked with a group of college students. For this experiment, first, the students’ parents sent stories about some eventful episodes from their child’s youth to the interviewers. Using this family information, they interviewed each student twice. They mentioned some actual experiences from the person’s childhood; but, for their experiment, they added a made-up story about an eventful wedding, encouraging the student to believe the fake wedding had really happened. The following two sections contain actual conversations from the interviews of one student. Missing words are indicated by “...”; author’s comments by “().”

Interviewer: I Student: S

First Interview

I: ...looks like an eventful wedding...you were five years old...playing with some other kids...

(The interviewer, referring to the false event as if the information came from the student’s parent, goes on to say that while playing with friends the student caused an accident and the bride’s parents got all wet.)

S: I don't remember...that's pretty funny...

I: ...seems that would be kind of eventful...

S: ...a wedding. I wonder whose wedding...a wedding reception? I can totally see myself like running around with other kids...

I: You could see yourself doing that?

S: ...bumping into a table? Oh yeah, I would do that...maybe not a wedding... like a big picnic...

(The student is starting to believe that bumping into the table sounds familiar. As they finish, the student is asked to think over the conversation they had before the next session.)

Second Interview

(The interviewer has just asked about some real events from the student's childhood and once again returns to the wedding discussed in the previous session.)

I: The next one I have is an eventful wedding reception at age five.

S: Yeah, I thought about this one...

(The student goes on to describe the people he got wet.)

S: ...I picture him having a dark suit on...tall and big...square face...I see her in a light-colored dress...

(The student has new images in mind and can tell this story as if it were an actual memory.)

S: ...near a tree...drinks on the table...I bumped the glasses or something...

(This student then provides more information on the couple's clothing.)

The students participating in this experiment came to believe that the false experiences the interviewers planted were absolutely true. By the second interview some students thought everything previously discussed was based on information from their parents about real events. This suggests that, when

talking about memories, word choice makes a big difference in responses. Certain words lead us to recall a situation differently. Because the interviewer mentioned an “eventful” wedding several times, the student started having a false memory of this wedding.

Since the time of Sigmund Freud, called “the father of modern psychology,” mental therapy has asked people to think back to their childhood to understand their problems. In the late 20th century, people believed that recalling old memories was a good way to heal the mind, so there were exercises and interviewing techniques encouraging patients to imagine various old family situations. Now, we realize that such activities may lead to false memories because our memories are affected by many factors. It is not just what we remember, but when we remember, where we are when we remember, who is asking, and how they are asking. We may, therefore, believe something that comes from our imagination is actually true. Perhaps experts should start researching whether there is such a thing as “true memories.”

Summary notes:

☐	FALSE MEMORIES
☐	
☐	Introduction
☐	When she says “Memory works a little bit more like a Wikipedia page,” Elizabeth Loftus means that memories 39 .
☐	
☐	Research by Hyman & Billings
☐	- The first interview indicates that the student 40 . - The results of their study suggest that 41 and 42 .
☐	
☐	Conclusions
☐	People believe that memory is something exact, but our memories
☐	are affected by many things. While focusing on old events was a
☐	technique adapted to heal our minds, we must consider that 43 .
☐	

問 1 Choose the best option to complete statement 39.

- ① are an account of one's true experiences
- ② can be modified by oneself or others
- ③ may get harder to remember as time goes by
- ④ should be shared with others freely

問 2 Choose the best option to complete statement 40.

- ① described all the wedding details to the interviewer
- ② knew about an accident at a wedding from childhood
- ③ was asked to create a false story about a wedding
- ④ was unsure about something the interviewer said

問 3 Choose the two best statements for 41 and 42. (The order does not matter.)

- ① false events could be planted easily in young children's memories
- ② our confidence levels must be related to the truthfulness of our memories
- ③ people sometimes appear to recall things that never happened to them
- ④ planting false memories is frequently criticized by researchers
- ⑤ the phrases used to ask about memories affect the person's response
- ⑥ when a child experiences an eventful situation, it forms stable memories

問 4 Choose the best option for 43 to complete **Conclusions**.

- ① asking about our memories will help us remember more clearly
- ② the technique focuses on who, what, when, where, and how
- ③ this mental therapy approach may be less helpful than we thought
- ④ we have to work on our ability to remember events more precisely

- B** You are in a student group preparing a poster for a presentation contest. You have been using the following passage to create the poster.

A Brief History of Units of Length

Since ancient times, people have measured things. Measuring helps humans say how long, far, big, or heavy something is with some kind of accuracy. While weight and volume are important for the exchange of food, it can be argued that one of the most useful measurements is length because it is needed to calculate area, which helps in the exchange, protection, and taxation of property.

Measuring systems would often be based on or related to the human body. One of the earliest known measuring systems was the cubit, which was created around the 3rd millennium BC in Egypt and Mesopotamia. One cubit was the length of a man's forearm from the elbow to the tip of the middle finger, which according to one royal standard was 524 millimeters (mm). In addition, the old Roman foot (296 mm), which probably came from the Egyptians, was based on a human foot.

A unit of measurement known as the yard probably originated in Britain after the Roman occupation and it is said to be based on the double cubit. Whatever its origin, there were several different yards in use in Britain. Each one was a different length until the 12th century when the yard was standardized as the length from King Henry I's nose to his thumb on his outstretched arm. But it was not until the 14th century that official documents described the yard as being divided into three equal parts — three feet — with one foot consisting of 12 inches. While this description helped standardize the inch and foot, it wasn't until the late 15th century, when King Henry VII distributed official metal samples of feet and yards, that people knew for certain their true length. Over the years, a number of small adjustments were made until the International Yard and Pound Agreement of 1959 finally defined

the standard inch, foot, and yard as 25.4 mm, 304.8 mm, and 914.4 mm respectively.

The use of the human body as a standard from which to develop a measuring system was not unique to western cultures. The traditional Chinese unit of length called *chi* — now one-third of a meter — was originally defined as the length from the tip of the thumb to the outstretched tip of the middle finger, which was around 200 mm. However, over the years it increased in length and became known as the Chinese foot. Interestingly, the Japanese *shaku*, which was based on the *chi*, is almost the same as one standard foot. It is only 1.8 mm shorter.

The connection between the human body and measurement can also be found in sailing. The fathom (6 feet), the best-known unit for measuring the depth of the sea in the English-speaking world, was historically an ancient Greek measurement. It was not a very accurate measurement as it was based on the length of rope a sailor could extend from open arm to open arm. Like many other British and American units, it was also standardized in 1959.

The metric system, first described in 1668 and officially adopted by the French government in 1799, has now become the dominant measuring system worldwide. This system has slowly been adopted by many countries as either their standard measuring system or as an alternative to their traditional system. While the metric system is mainly used by the scientific, medical, and industrial professions, traditional commercial activities still continue to use local traditional measuring systems. For example, in Japan, window widths are measured in *ken* (6 *shaku*).

Once, an understanding of the relationship between different measures was only something traders and tax officials needed to know. However, now that international online shopping has spread around the world, we all need to know a little about other countries' measuring systems so that we know how much, or how little, of something we are buying.

Your presentation poster draft:

Different Cultures, Different Measurements

1. The purposes of common units

Standard units are used for:

- A. calculating how much tax people should pay
- B. commercial purposes
- C. comparing parts of the human body
- D. measuring amounts of food
- E. protecting the property of individuals

2. Origins and history of units of length

45

46

3. Comparison of units of length

Figure 1. Comparison of major units of length

47

4. Units today

48

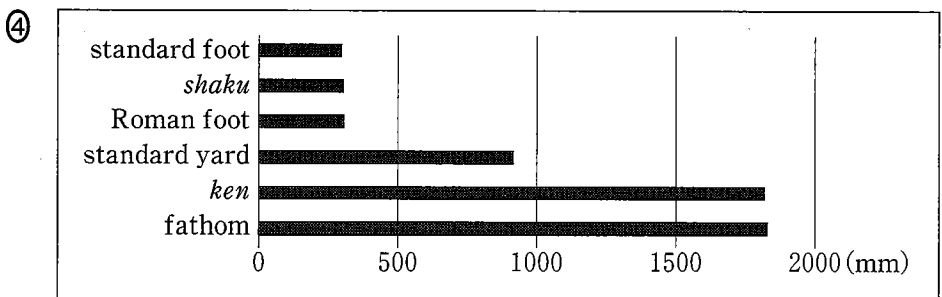
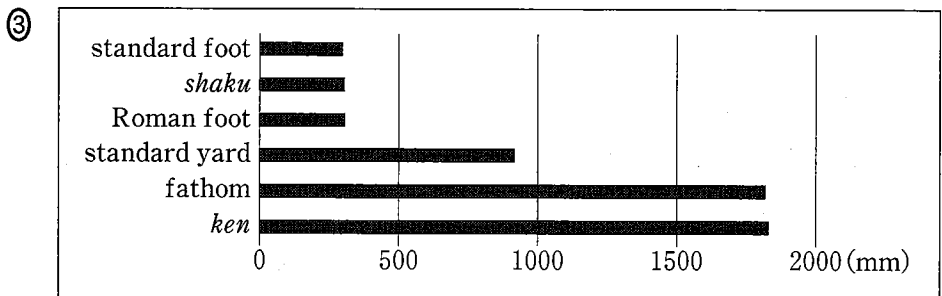
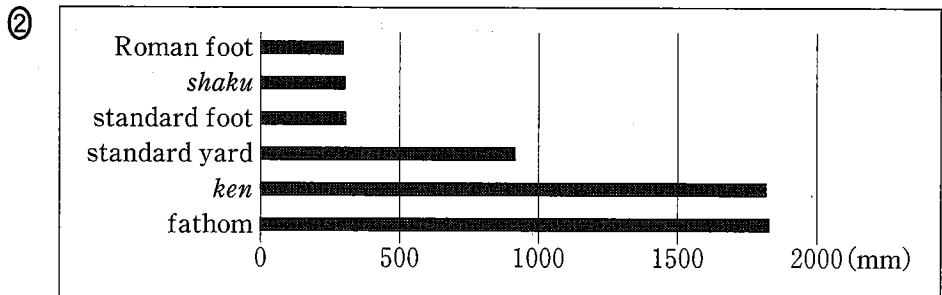
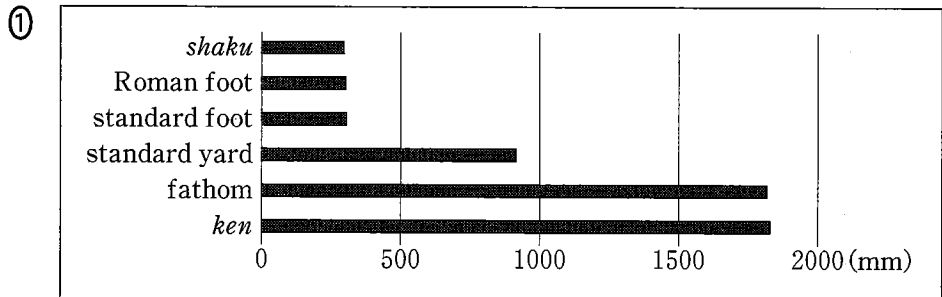
問 1 When you were checking the statements under the first poster heading, everyone in the group agreed that one suggestion did not fit well. Which of the following should you not include? 44

- ① A
- ② B
- ③ C
- ④ D
- ⑤ E

問 2 Under the second poster heading, you need to write statements concerning units of length. Choose the two below which are most accurate. (The order does not matter.) 45 • 46

- ① Inch and meter were defined by the 1959 International Yard and Pound Agreement.
- ② The *chi* began as a unit related to a hand and gradually became longer over time.
- ③ The cubit is one of the oldest units based on the length of a man's foot.
- ④ The length of the current standard yard was standardized by King Henry VII.
- ⑤ The origin of the fathom was from the distance between a man's open arms.
- ⑥ The origin of the Roman foot can be traced back to Great Britain.

問 3 Under the third poster heading, you want a graphic to visualize some of the units in the passage. Which graph best represents the different length of the units from short (at the top) to long (at the bottom)? 47



問 4 Under the last poster heading, your group wants to add a statement about today's units based on the passage. Which of the following is the most appropriate?

48

- ① Although the metric system has become dominant worldwide, traditional measuring systems continue to play certain roles in local affairs.
- ② Science and medicine use traditional units today to maintain consistency despite the acceptance of a widespread standardized measurement system.
- ③ The increase in cross-border online shopping has made the metric system the world standard.
- ④ Today's units, such as the inch, foot, and yard, are based on the *chi*, whose origin is related to a part of the human body.