英 語(リーディング)

各大問の英文や図表を読み、解答番号 1 ~ 48 にあてはまるものとして 最も適当な選択肢を選びなさい。

第1間 (配点 10)

A You are studying at a senior high school in Alberta, Canada. Your classmate Bob is sending you messages about the after-school activities for this term.

Hey! How are you doing?

Hi Bob. I'm great!

Did you hear about this? We've got to choose our after-school activities for this term.

Yes! I'm going to join the volunteer program and tutor at an elementary school.

What are you going to tutor?

They need tutors for different grades and subjects. I want to help elementary school kids learn Japanese. How about you? Are you going to sign up for this program?

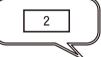
Yes, I'm really interested in the volunteer program, too.

You are good at geography and history. Why don't you tutor the first-year senior high school students?

I don't want to tutor at a senior high school. I was thinking of volunteering at an elementary school or a kindergarten, but not many students have volunteered at junior high schools. So, I think I'll tutor there.

Really? Tutoring at a junior high school sounds difficult. What would you want to teach there?

When I was in junior high school, math was really hard for me. I'd like to tutor math because I think it's difficult for students.



- 問 1 Where does Bob plan to help as a volunteer? 1
 - 1 At a junior high school
 - 2 At a kindergarten
 - 3 At a senior high school
 - 4 At an elementary school
- 問 2 What is the most appropriate response to Bob's last message? 2
 - ① My favorite subject was math, too.
 - ② We will tutor at the same school then.
 - 3 Wow, that's a great idea!
 - Wow, you really love Japanese!

B You are a senior high school student and thinking about studying abroad. You find an advertisement for an online event where you can learn about studying and working in the US.

Online Study Abroad and Career Information Sessions 2022

The American Students' Network is planning three Virtual Sessions.

Session Date/Time*	Details				
Study: Senior I	High School (for junior and senior high school students)				
Virtual Session 1 July 31 3 p.m5 p.m.	What is it like to study at an American senior high school? ➤ Classes, homework, and grades ➤ After-school activities and sports ★ You will hear from students all over the US. Take a chance to ask questions!				
Study	: University (for senior high school students)				
Virtual Session 2 August 8 9 a.m12 p.m.	What can you expect while studying at a university in the US? ➤ Advice for succeeding in classes ➤ Campus life and student associations ★ Listen to a famous professor's live talk. Feel free to ask questions!				
Work: Care	ers (for senior high school and university students)				
Virtual Session 3 August 12 1 p.m4 p.m.	 How do you find a job in the US? ➤ Job hunting and how to write a résumé ➤ Meet a wide range of professionals including a flight attendant, a chef, an actor, and many more! ☆ Ask questions about their jobs and work visas. 				

^{*}Central Standard Time (CST)

Click here to register by July 29, 2022. → Session Registration

Please provide your full name, date of birth, email address, name of your school, and indicate the virtual session(s) you're interested in.

問	1 0	on which day can you listen to a lecture? 3
	1	July 29
	2	July 31
	3	August 8
	4	August 12
問	2 Y	ou should attend Sessions 1 and 2 to 4.
	1	find out about application procedures
	2	get information about studying in the US
	3	share your study abroad experiences
	4	talk to people with different jobs
問	3 T	to register for any of these virtual sessions, you need to supply 5.
	1	questions you have
	2	your birthday
	3	your choice of career
	4	your home address

第2問 (配点 20)

A You are an exchange student in the UK. Your host family is going to take you to Hambury for a weekend to experience some culture. You are looking at the information about what you can do near the hotel and the reviews of the hotel where you will stay.

White Horse Hotel In Hambury Square

Things to do & see near the hotel:

- ♦ Hambury Church: It's only 10 minutes on foot.
- ◆ The farmers' market: It's held in the square every first and third weekend.
- ◆ The Kings Arms: Have lunch in the oldest building in Hambury (just across from the hotel).
- ◆ East Street: You can get all your gifts there (15-minute walk from the hotel).
- ◆ The Steam House: It's next to Hambury Railway Museum, by the station.
- ◆ The walking tour (90 minutes): It starts in the square at 11 am every Tuesday and Saturday.
- ◆ The stone circle: Every Tuesday lunchtime there is live music (just behind the church).
- ◆ The old castle (admission: £5): See the play *Romeo and Juliet* every Saturday night. (Get your tickets at the castle gate, across from the station, for £15.)

Become a member* of the White Horse Hotel and get:

- a free ticket to the railway museum
- tickets to the play for only £9 per person
- ◆ a discount coupon for Memory Photo Studio (get a photo of you wearing traditional Victorian clothes). Open every day, 9.00 am-5.30 pm.

Most popular reviews:

We will be back

It's a nice hotel in the centre of the town with a great breakfast. Though the shops are limited, the town is pretty and walking to the beautiful church only took 5 minutes. The tea and cakes at the Steam House are a must. Sally

Lovely Town

Our room was very comfortable, and the staff were kind. Coming from Australia, I thought the play in the castle was great, and the walking tour was very interesting. I also recommend the stone circle (if you don't mind a 10-minute walk up a hill). Ben

^{*}Membership is free for staying guests.

問	1 [6 is the closest to the White Horse Hotel.
問	on	East Street Hambury Church The Kings Arms The stone circle 7 is one combination of activities you can do if you visit Hambury the third Saturday of the month.
	A :	go on a walking tour
	В	: have your photo taken
	C	: listen to the live music
	D	shop at the farmers' market
	1) 2) 3) 4)	A, B, and C A, B, and D A, C, and D B, C, and D
問	3 Y	You want to get cheaper tickets for <i>Romeo and Juliet</i> . You will 8.
	1	become a member of the hotel
	2	buy your tickets at the castle
	3	get free tickets from the hotel
	4	wear traditional Victorian clothes

問 4 One advantage of the hotel the reviews do <u>not</u> mention is the	9 .
① comfort② discounts③ food④ service	
問 5 Which best reflects the opinions of the reviewers?	

- 1 The activities were fun, and the shops good.
- 2 The hotel room was pretty, and the photo studio great.
- 3 The music was good, and the activities interesting.
- 4 The sightseeing was exciting, and the hotel conveniently placed.

B Your English teacher has given you this article to read to prepare for a class debate.

When I was in elementary school, my favorite time at school was when I talked and ran around with my friends during recess, the long break after lunch. Recently, I learned that some elementary schools in the US have changed the timing of recess to before lunch. In 2001, less than 5% of elementary schools had recess before lunch. By 2012, more than one-third of schools had changed to this new system. Surveys were conducted to find out more about this change. Here are the results.

It's good to have recess before lunch because:

- Students get hungrier and want to eat.
- Students don't rush meals to play outside after lunch.
- Students are calmer and focus better in the afternoon.
- Less food is wasted.
- Fewer students say they have headaches or stomachaches.
- Fewer students visit the school nurse.

However, there are some challenges to having recess before lunch:

- Students may forget to wash their hands before eating.
- Students may get too hungry as lunch time is later.
- Schools will have to change their timetables.
- Teachers and staff will have to alter their schedules.

This is an interesting idea and more schools need to consider it. As a child, I remember being very hungry before lunch. You might say having lunch later is not practical. However, some say schools can offer a small healthy morning snack. Having food more often is better for students' health, too. What about washing hands? Well, why not make it part of the schedule?

問 1 \	Which question are you debating? In schools, should 11?
0 2 3 4	break be made shorter food waste be reduced lunches be made healthier recess be rescheduled
問 2 (One advantage of having recess before lunch is: Students 12.
0	do not need morning snacks
2	have a longer break
3	study more peacefully
4	wash their hands better
問 3 (One concern with having recess before lunch is: 13.
1	Schools may need more school nurses
2	Schools may need to make new schedules
3	Students may spend more time inside
4	Students may waste more food

	Which		_	problems	could	be	solved	by	the	author's
① ②			les will nee	ed changing eat later.	ŗ.					

4 Students will leave their lunch uneaten.

Students will be less likely to wash their hands.

- 問 5 In the author's opinion, more schools should help students 15.
 - 1 adopt better eating habits
 - 2 enjoy eating lunch earlier
 - 3 not visit the school nurse
 - 4 not worry about changes in the timetable

第 3 問 (配点 15)

A Your English teacher from the UK writes a blog for her students. She has just written about an Expo that is being held in your city, and you are interested in it.



Tracy Pang

Monday, 10 August, 11.58 pm

Last weekend, I went to the International Save the Planet Expo held at the Convention Centre. There were a lot of creative ideas that we could try at home. No wonder there were so many people taking part.

The exhibition on remaking household items was particularly inspiring. It was amazing to see how things we normally throw away can be remade into useful and stylish items. They looked nothing like the original products. The workshops were excellent, too. Some sessions were in English, which was perfect for me (and for you, too)! I joined one of them and made a jewellery box from an egg carton. We first chose the base colour, and then decided on the materials for decoration. I had no confidence in making something usable, but it turned out lovely.

If you are interested, the Expo is on until 22 August. I strongly suggest that you avoid the weekend crowds, though. The calendar below shows the dates of the Expo and the workshops.

International Save the Planet Expo (August 4-22)										
Sunda	у	Monday		Tuesday	Wednesday		Thursday	Friday	Sa	turday
									1	
2	3	}		4	5	W★	6	7	8	W★
9 W	7 1	.0	W★	11	12	W	13	14	15	W
16 W	7]	7	W	18	19	W★	20	21	22	W★
23	2	24		25	26		27	28	29	
30	3	31								

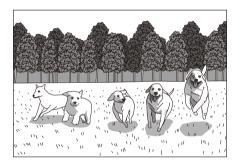
W=workshop (★ in English)

問 1 T	racy attended the workshop to learn about 16.
0 2 3 4	combining colours creatively decreasing household food waste redecorating rooms in a house transforming everyday items
問 2 B	Based on Tracy's recommendation, the best date for you to attend a
	kshop in English is on 17.
0	12 August
2	16 August
3	19 August
4	22 August

B Your British friend shows you an interesting article about dogs in the UK.

A Dog-Lover's Paradise

A visit to Robert Gray's dog rescue shelter in Greenfields will surprise you if your idea of a dog shelter is a place where dogs are often kept in crowded conditions. When I was asked to visit there last summer to take photographs for this magazine, I jumped at the chance. I will never forget how wonderful it was to see so many healthy, happy dogs running freely across the fields.



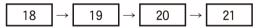
At the time of my visit, around 70 dogs were living there. Since then, the number has grown to over 100. For these dogs, the shelter is a safe place away from their past lives of neglect. The owner, Robert Gray, began taking in homeless dogs from the streets of Melchester in 2008, when dogs running wild in the city were a growing problem. Robert started the shelter in his back garden, but the number of dogs kept increasing day by day, quickly reaching 20. So, in the summer of 2009, he moved the shelter to his uncle's farm in Greenfields.

Although what I saw in Greenfields seemed like a paradise for the dogs, Robert told me that he has faced many difficulties in running the shelter. Since the very early days in Melchester, the cost of providing the dogs with food and medical treatment has been a problem. Another issue concerns the behaviour of the dogs. Some neighbouring farmers are unhappy about dogs wandering onto their land and barking loudly, which can frighten their farm animals. Most of the dogs are actually very friendly, though.

The number of dogs continues to grow, and Robert hopes that visitors will find a dog they like and give it a permanent home. One adorable dog named Muttley followed me everywhere. I was in love! I promised Muttley that I would return soon to take him home with me.

Mike Davis (January, 2022)

問 1 Put the following events ($\mathfrak{g} \sim \mathfrak{g}$) into the order they happened.



- (1) The dog shelter began having financial problems.
- 2 The dog shelter moved to a new location.
- (3) The number of dogs reached one hundred.
- The writer visited the dog shelter in Greenfields.
- 問 2 The dog shelter was started because 22
 - 1 in Melchester, there were a lot of dogs without owners
 - 2 people wanted to see dogs running freely in the streets
 - 3 the farmers in Greenfields were worried about their dogs
 - 4 there was a need for a place where people can adopt dogs
- 問 3 From this article, you learnt that 23.
 - ① Robert's uncle started rescuing dogs in 2008
 - the dogs are quiet and well behaved
 - 3 the shelter has stopped accepting more dogs
 - 4 the writer is thinking of adopting a dog

第4問 (配点 16)

To make a schedule for your homestay guest, Tom, you are reading the email exchange between your family and him.

Hi Tom.

Your arrival is just around the corner, so we are writing to check some details. First, what time will you land at Asuka International Airport? We'd like to meet you in the arrivals area.

While you are staying with us, we'll eat meals together. We usually have breakfast at 7:30 a.m. and dinner at 7 p.m. on weekdays. Do you think that will work, or would another time suit you better?

We would like to show you around Asuka. There will be a neighborhood festival on the day after you arrive from noon to 4 p.m. You can join one of the groups carrying a portable shrine, called a *mikoshi*. After the festival, at 8 p.m., there will be a fireworks display by the river until 9 p.m.

Also, we would like to take you to a restaurant one evening. Attached is some information about our favorite places. As we don't know what you like, please tell us which looks best to you.

Restaurants	Comments	Notes
Asuka Steak	A local favorite for meat lovers	Closed Tue.
Kagura Ramen	Famous for its chicken ramen	Open every day
Sushi Homban	Fresh and delicious seafood	Closed Mon.
Tempura Iroha	So delicious!	Closed Wed.

Finally, according to your profile, you collect samurai figures. Chuo Dori, the main street in our town, has many shops that sell them. There are also shops selling food, clothes, computer games, stationery, etc. You can have a great time there. What do you think? Would you like to go there?

See you soon,

Your Host Family

The email below is Tom's reply to your family.

Dear Host Family,

Thank you for your email. I'm really looking forward to my visit to Japan. You don't have to come to the airport. Hinode University is arranging transportation for us to the campus. There will be a welcome banquet till 7 p.m. in Memorial Hall. After the banquet, I will wait for you at the entrance to the building. Would that be all right?

I think I need half a day to recover from the flight, so I might like to get up late and just relax in the afternoon the next day. The fireworks at night sound exciting.

Starting Monday, my language lessons are from 8 a.m., so could we eat breakfast 30 minutes earlier? My afternoon activities finish at 5 p.m. Dinner at 7 p.m. would be perfect.

Thank you for the list of restaurants with comments. To tell you the truth, I'm not fond of seafood, and I don't eat red meat. I have no afternoon activities on the 10th, so could we go out to eat on that day?

As for shopping, Chuo Dori sounds like a great place. While we're there I'd like to buy some Japanese snacks for my family, too. Since my language classes finish at noon on the 12th, could we go shopping on that afternoon?

Can't wait to meet you!

Tom

[Your notes for Tom's schedule]

Day/Date	With Family	School
Sat. 6th	Arrival & pick up at 24	Reception
Sun. 7th	25	
Mon. 8th		· Language classes
Tue. 9th		8 a.m. – 3 p.m.
Wed. 10th	Dinner at 26	(until noon on Fri.)
Thurs. 11th		• Afternoon activities until 5 p.m.
Fri. 12th	Shopping for 27 & 28	(except Wed. & Fri.)
Sat. 13th	Departure	
*Mon. – Fri.	Breakfast 29 Dinner 7 p.m.	

BB.	1	7771 311 6 31 4 7D 3	0.4
问	ı	Where will your family meet Tom?	24

- ① Asuka International Airport
- 2 the Banquet Room
- 3 the entrance to Memorial Hall
- 4 the main gate of Hinode University
- 問 2 Choose what Tom will do on Sunday. 25
 - ① Attend a welcome banquet
 - 2 Carry a portable shrine
 - 3 Go to a festival
 - Watch fireworks

問3 (Choose the restaurant where your family will take Tom. 26
0 2 3 4	Asuka Steak Kagura Ramen Sushi Homban Tempura Iroha
	Choose what Tom will shop for. 27 · 28 (The order does not tter.)
1	Action figures
2	Clothes
3	Computer games
4	Food
6	Stationery
問 5 Y	ou will have breakfast with Tom at 29
1	6:30 a.m.
2	7:00 a.m.
3	7:30 a.m.
4	8:00 a.m.

第5間 (配点 15)

You are applying for a scholarship to attend an international summer program. As part of the application process, you need to make a presentation about a famous person from another country. Complete your presentation slides based on the article below.

During his 87 years of life, both above and below the waves, Jacques Cousteau did many great things. He was an officer in the French navy, an explorer, an environmentalist, a filmmaker, a scientist, an author, and a researcher who studied all forms of underwater life.

Born in France in 1910, he went to school in Paris and then entered the French naval academy in 1930. After graduating in 1933, he was training to become a pilot, when he was involved in a car accident and was badly injured. This put an end to his flying career. To help recover from his injuries, Cousteau began swimming in the Mediterranean, which increased his interest in life underwater. Around this time, he carried out his first underwater research. Cousteau remained in the navy until 1949, even though he could no longer follow his dream of becoming a pilot.

In the 1940s, Cousteau became friends with Marcel Ichac, who lived in the same village. Both men shared a desire to explore unknown and difficult-to-reach places. For Ichac this was mountain peaks, and for Cousteau it was the mysterious world under the sea. In 1943, these two neighbors became widely recognized when they won a prize for the first French underwater documentary.

Their documentary, 18 Meters Deep, had been filmed the previous year without breathing equipment. After their success they went on to make another film, Shipwrecks, using one of the very first underwater breathing devices, known as the Aqua-Lung. While filming Shipwrecks, Cousteau was not satisfied with how long he could breathe underwater, and made improvements to its design. His improved equipment enabled him to explore the wreck of the Roman ship, the Mahdia, in 1948.

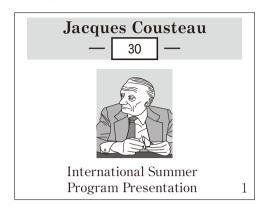
Cousteau was always watching the ocean, even from age four when he first learned how to swim. In his book, *The Silent World*, published in 1953, he describes a group of dolphins following his boat. He had long suspected that dolphins used echolocation (navigating with sound waves), so he decided to try an experiment. Cousteau changed direction by a few degrees so that the boat wasn't following the best course, according to his underwater maps. The dolphins followed for a few minutes, but then changed back to their original course. Seeing this, Cousteau confirmed his prediction about their ability, even though human use of echolocation was still relatively new.

Throughout his life, Cousteau's work would continue to be recognized internationally. He had the ability to capture the beauty of the world below the surface of the ocean with cameras, and he shared the images with ordinary people through his many publications. For this he was awarded the Special Gold Medal by *National Geographic* in 1961. Later, his lifelong passion for environmental work would help educate people on the necessity of protecting the ocean and aquatic life. For this he was honored in 1977 with the United Nations International Environment Prize.

Jacques Cousteau's life has inspired writers, filmmakers, and even musicians. In 2010, Brad Matsen published *Jacques Cousteau: The Sea King*. This was followed by the film *The Odyssey* in 2016, which shows his time as the captain of the research boat *Calypso*. When Cousteau was at the peak of his career, the American musician John Denver used the research boat as the title for a piece on his album *Windsong*.

Cousteau himself produced more than 50 books and 120 television documentaries. His first documentary series, *The Undersea World of Jacques Cousteau*, ran for ten years. His style of presentation made these programs very popular, and a second documentary series, *The Cousteau Odyssey*, was aired for another five years. Thanks to the life and work of Jacques Cousteau, we have a better understanding of what is going on under the waves.

Your presentation slides:



Early Career (before 1940)

- Graduated from the naval academy
- 31
- Started to conduct underwater research
- Continued working in the navy

2

In the 1940s	
Desired to reveal the underwater world 32 4 33 4 34 4 35	

Some N	Some Major Works	
<u>Title</u>	<u>Description</u>	
18 Meters Deep	An early prize-winning documentary	
36 (A)	A book mentioning his scientific experiment	
(B)	A documentary series that lasted a decade 4	

Contributions

- Developed diving equipment
- Confirmed dolphins use echolocation
- Made attractive documentaries about aquatic life
- 37
- 38

5

問 1 Which is the best subtitle for your presentation?

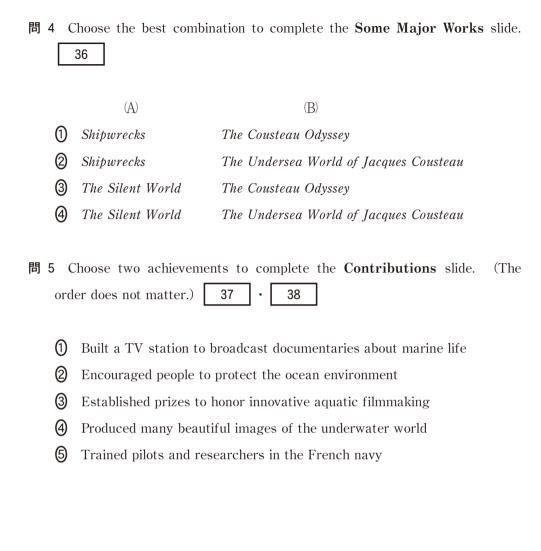
30

- ① Capturing the Beauty of Nature in Photographs
- 2 Discovering the Mysteries of Intelligent Creatures
- 3 Exploring the Top and Bottom of the World
- (4) Making the Unknown Undersea World Known
- 問 2 Choose the best option to complete the Early Career (before 1940) slide.

31

- 1 Developed underwater breathing equipment
- 2 Forced to give up his dream of becoming a pilot
- 3 Shifted his focus from the ocean to the air
- 4 Suffered severe injuries while underwater
- 問 3 Choose <u>four</u> out of the five events (①~⑤) in the order they happened to complete the **In the 1940s** slide.

- ① Dived to the Mahdia using improved equipment
- 2 Filmed a documentary without breathing equipment
- 3 Helped one of his neighbors explore high places
- 4 Left the French navy
- 6 Won an award and became famous



第6間 (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...

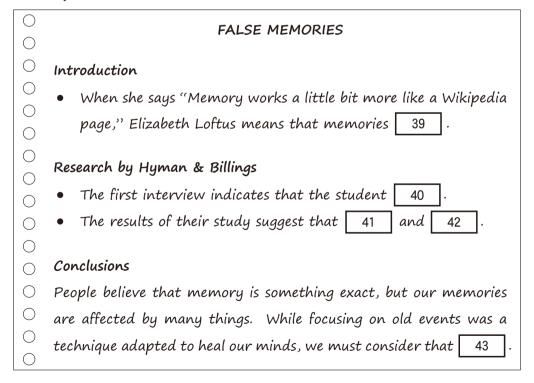
(This student then provides more information on the couple's clothing.)

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:



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		Choose the two best statements for 41 and 42. (Topes not matter.)	he order
	(1)	false events could be planted easily in young children's memories	3
	2		
	:	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 resp	onse
	6	when a child experiences an eventful situation, it forms stable m	emories
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 though	ht
	4	we have to work on our ability to remember events more precise	ly
		— 33 —	(2210—33)

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.

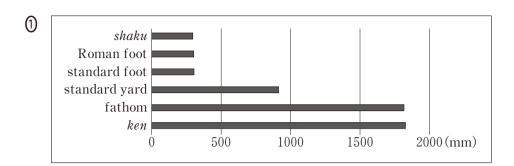
The metric system, first described in 1668 and officially adopted by the French government in 1799, has now become the dominant measuring system worldwide. This system has slowly been adopted by many countries as either their standard measuring system or as an alternative to their traditional system. 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*).

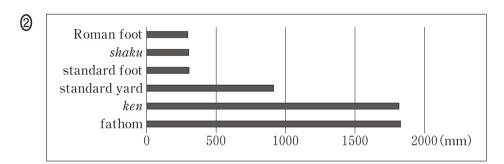
Once, an understanding of the relationship between different measures was only something traders and tax officials needed to know. However, now that international online shopping has spread around the world, we all need to know a little about other countries' measuring systems so that we know how much,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

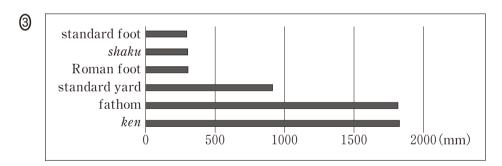
Your presentation poster draft:
Different Cultures, Different Measurements
1. The purposes of common units
Standard units are used for: A. calculating how much tax people should pay B. commercial purposes C. comparing parts of the human body D. measuring amounts of food E. protecting the property of 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

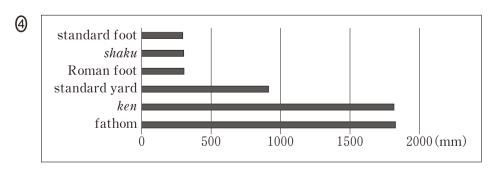
問 1 When you were checking the statements under the first poster heading, everyone in the group agreed that one suggestion did not fit well. Which of the following should you <u>not</u> include? 44
① A
② B
3 C
4 D
⑤ E
問 2 Under the second poster heading, you need to write statements concerning units 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.
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 WI.
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.
 - ① 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.