

# 英 語

## 問題冊子 2

注 意

「問題冊子 2」に印刷されている問題は、**2** から **4** までで、2 ページから 13 ページまであります。

問題は次のページからです。

2

次の対話の文章を読んで、あとの各問に答えよ。

(\*印のついている単語・語句には、本文のあとに〔注〕がある。)

*Riku and Liam are high school students. Liam is from the U.S. and he is doing a homestay with Riku's family. They are on summer vacation, and Riku's family and Liam are visiting Mt. Fuji. They reached the top and walked down to \*the 5th Station.*

*Riku:* We've finally come back.

*Liam:* Yeah. It was a long way.

*Riku:* The sunrise was very beautiful.

*Liam:* I was so excited to see it.

*Riku:* Hey, Liam, there's a \*rest house over there. Do you want to \*take a rest there?

*Liam:* Yeah. I'm very tired. Let's go.

(They go into the rest house with Riku's parents and take a rest)

*Riku:* Liam, why don't we get something for our friends?

*Liam:* Sounds good. <sup>(1)</sup> Although we sent postcards from the post office at the top, we should buy something like cookies, candies, or shirts for them, too.

(Riku and Liam walk around the rest house)

*Riku:* Liam, look. There's another post office over there.

*Liam:* Wow. Oh, Riku. What's that? It looks like a mailbox, but its color is different from Japan's red mailboxes.

*Riku:* Yeah. I don't think this yellow box is used in Japan. Oh, it says this is from \*Switzerland.

*Liam:* Switzerland? In Europe? Why? Why is it here?

*Riku:* Well...

(Emma and Mia from Switzerland are coming near to the yellow mailbox)

*Emma:* Mia, look there. That's a \*Swiss mailbox.

*Mia:* Yeah. This is the one introduced at the Jungfrauoch.

*Emma:* It must be. (2-a)

*Mia:* Me, too. This box is here because of the \*partnership between Swiss and Japanese people. This makes me happy.

*Liam:* Excuse me. I'm Liam, and this is Riku. We are wondering why this (3-a) mailbox is here. Do you know something about it?

*Emma:* Oh, hi. I'm Emma, and this is Mia. Yes. This mailbox was sent as a present from our country (3-b) to (3-c).

*Riku:* Oh, really? But why?

*Mia:* Among the post offices that are open all year, this is Japan's highest post office. And our highest post office is at a place called the Jungfrauoch.

*Riku:* What? What did you say? The Jung...

*Mia:* The Jungfrauoch. It's a famous tourist spot and it stands between two famous Swiss mountains, the Jungfrau and the Mönch. The highest train station in Europe is also there. Around the station, we also have a gift shop, restaurants, an \*observation deck, and some exhibitions.

*Liam:* I see, but <sup>(4)</sup> I still don't understand why this mailbox was sent here.

*Emma:* In fact, these two post offices \*signed a mountain post office \*alliance in 1993. They promised to \*promote cultural \*exchange to bring Japanese and Swiss people who love mountains together.

*Mia:* As a sign of their partnership, a Japan's red mailbox was sent to the post office at the Jungfrauoch, and this Swiss mailbox was sent here in 1993. And in 2013 the 20th \*anniversary of the partnership was celebrated in Switzerland.

*Riku:* In 2013? I believe Mt. Fuji was selected as a World Heritage site that year.

*Mia:* Yes. And 12 years before, the Jungfrau and its beautiful nearby area also became a World Heritage site.

*Liam:* Wow. (2-b) But I think it's not used here.

*Riku:* Yeah, Liam, you're right. The sign says so. But how about the one in Switzerland? Is it used?

*Emma:* Actually, yes. Last year, Mia and I went to the Jungfrau area and \*happened to find it. Some people were putting postcards into the box.

*Liam:* It's cool to send a postcard from such a special place.

*Mia:* That's right. Postcards sold there have many kinds of mountain pictures. They are all beautiful.

*Riku:* Emma, you said you happened to find the box. So <sup>(5)</sup> what was your main reason for going to that area?

*Emma:* If you want to see the mailbox, you can take a train to the Jungfrauoch. And we also took a train to go there. But we had a plan to visit the Jungfrau area later to enjoy hiking and we went there. Switzerland is famous for its many hiking courses. Can you believe the \*total distance is more than 65,000 km?

*Liam:* That's great. I love hiking, so I hope to go and hike there someday.

*Emma:* (2-c) It'll be a great experience especially for people who love nature.

*Riku:* I want to hike there, too. I didn't know there's such a partnership between Switzerland and Japan. Like this mailbox, a lot of things around us may have ties to different countries.

*Liam:* There should be something that connects Japan and my country the U.S., too.

*Mia:* The same is true for the U.S. and Switzerland.

*Emma:* If we think that way, we can feel closer to different countries.

*Riku:* Great. Thank you so much for sharing your experience. Are you going to hike now?

*Mia:* Yes. I've been looking forward to it.

*Emma:* Me, too. Did you see the sunrise from the top?

*Liam:* Yes. It was beautiful.  (2-d)

*Riku:* Have a nice trip.

*Mia:* Thank you. Bye.

[注] the 5th Station 5合目 rest house 休憩所 take a rest 休憩する  
Switzerland スイス Swiss スイスの partnership パートナーシップ  
observation deck 展望台 sign 調印する alliance 同盟  
promote 促進する exchange 交流 anniversary 周年  
happen to ~ たまたま~する total distance 合計距離

[問1] <sup>(1)</sup> Sounds good. とあるが, Liam のこの発言の内容について, 最も適切なものは次のうちではどれか。

- ア Liam agrees with Riku's idea, and they will try to find presents for their friends.
- イ Liam agrees with Riku's idea, and they will look for a post office in the rest house.
- ウ Liam agrees with Riku's idea, and he will continue to take a rest in the rest house.
- エ Liam agrees with Riku's idea, and he will try to find some souvenirs for himself.

[問2]  (2-a) から  (2-d) の中に, 英文を入れるとき, 最も適切なものを次の中からそれぞれ一つずつ選べ。ただし, 同じものは二度以上使えない。

- ア I hope you'll be able to see it, too.
- イ This mailbox has such a nice story.
- ウ You should come.
- エ I'm glad to find a Swiss thing in Japan.

[問3] 本文の流れに合うように,  (3-a) から  (3-c) の中に単語を入れたとき, その組み合わせとして, 最も適切なものは下のうちではどれか。

	<input type="text"/> (3-a)	<input type="text"/> (3-b)	<input type="text"/> (3-c)
ア	red	Japan	Switzerland
イ	red	Switzerland	Japan
ウ	yellow	Japan	Switzerland
エ	yellow	Switzerland	Japan

〔問4〕 I still don't understand why this mailbox was sent here. とあるが、Liam のこの疑問に対する答えの一部として  の中に入れるとき、最も適切なものは下のうちではどれか。

A mailbox of Switzerland and Japan was sent to each other .

- ア to celebrate the 20th anniversary of both countries' partnership
- イ as a sign of the partnership the two countries agreed to in 1993
- ウ because the Jungfrau area became a World Heritage site in 2001
- エ because Mt. Fuji was selected as a World Heritage site in 2013

〔問5〕 what was the main reason for going to that area? とあるが、この問いに対する Emma の発言内容として、最も適切なものは次のうちではどれか。

- ア Emma and Mia went to the Jungfrauoch to look for the red mailbox.
- イ Emma and Mia went to the Jungfrau area to enjoy shopping and food.
- ウ Emma and Mia traveled to the Jungfrau area to enjoy hiking there.
- エ Emma and Mia traveled about 65,000 kilometers by train and on foot.

〔問6〕 本文の内容と合っているものとして、最も適切なものは次のうちではどれか。

- ア There was a red Japanese mailbox in the rest house at the 5th station.
- イ The Jungfrauoch stands at the top of the Jungfrau and the Mönch.
- ウ The Japan's red mailbox at the Jungfrauoch is actually used now.
- エ Riku and Liam are going to start hiking Mt. Fuji to see the sunrise.

3 次の文章を読んで、あとの各問に答えよ。

(\*印のついている単語・語句には、本文のあとに〔注〕がある。)

\*Emperor Penguins are the largest of all kinds of penguins in the world. They are very good at swimming and they can hold their \*breath for about 30 minutes and swim about 500 meters deep in the sea.

Why are they able to be under the water for such a long time? There are two main reasons. First, they have some body parts that \*store the \*oxygen they need to live. When humans go deep into water, they carry \*cylinders for air. Emperor Penguins do not use any cylinders, but they have air bags in their bodies. (1-ア) Scientists say that 30% to 50% of the oxygen in their bodies is stored in these air bags. The oxygen goes into their \*blood. (2) 【① by ② that ③ thanks ④ is sent ⑤ the blood ⑥ to】 their hearts, oxygen stored in their air bags can reach different parts of the bodies. (1-イ)

Other parts that can store oxygen are their \*skeletal muscles and blood that runs inside their bodies. \*Neither the parts inside their bodies nor their muscles use oxygen in their blood while they are deep under water. The amount of oxygen which is carried becomes smaller, and the number of times their hearts beat in a minute goes down. The number of times Emperor Penguins' hearts beat in a minute is usually about 200 beats a minute on the ground, but when they are in water, it decreases to about 20. (1-ウ)

Second, Emperor Penguins are able to save oxygen. While they are under water, their blood almost stops running through their stomachs. And when they are in water, their stomachs get cold.

Both humans and penguins are \*homeothermic animals, and (3) they can keep their body temperature almost the same when the air or water temperature around them is very low. The body temperature of penguins is between 38 and 39 °C, but only the parts around their stomachs fall to 18 to 19 °C while they are in water. When their bodies get 20 °C colder, the energy their bodies use is about \*one-tenth. 4 When most animals use little energy, they also use little oxygen.

Also, while they are in water, their blood almost stops running through their bodies. Because of that, it is almost impossible for them to \*digest food like fish. In fact, a lot of oxygen is used to digest food.

While they are in water, there is very little blood running not only to the parts inside their bodies but also to the skeletal muscles that move their bodies. The blood \*vessels that run to the skeletal muscles become smaller. Then, oxygen comes out of a \*protein called \*myoglobin. It stores oxygen in their muscles. When the amount of oxygen in animals' bodies decreases, the amount of oxygen they use also decreases. (5) Penguins use the oxygen in their muscles first, then they have to use the oxygen stored in their air bags. They can go deep under water because they have the parts inside their bodies and muscles that save oxygen.

When they are in water, the only part that needs a lot of oxygen is their brains. When the amount of \*carbon dioxide in their blood increases, they feel \*pain. To keep oxygen running to their brains for a long time, penguins use neither the parts inside their bodies nor their muscles.

With this body system, they can swim deep in the sea. It is very interesting for us to learn about animals that have different body systems from humans'.

[注] Emperor Penguin	コウテイペンギン	breath	息
store	蓄える	oxygen	酸素
blood	血液	cylinder	ボンベ
neither ~ nor ...	~も...もない	skeletal muscle	骨格筋
one-tenth	10分の1	homeothermic	恒温性の
protein	タンパク質	digest	消化する
carbon dioxide	二酸化炭素	vessel	管
		myoglobin	ミオグロビン (タンパク質の一種)
		pain	苦しさ

[問1] 次の英文が入る最も適切な箇所は、下のうちではどれか。

From these two reasons, Emperor Penguins are able to be under the water for a long time.

- ア
- イ
- ウ
- エ

[問2] 【① by ② that ③ thanks ④ is sent ⑤ the blood ⑥ to】について、本文の<sup>(2)</sup>流れに合うように、【】内の単語・語句を正しく並べかえるとき、【】内で**2番目**と**5番目**にくる単語・語句の組み合わせとして正しいものは、次のうちではどれか。なお文頭に来る文字も小文字で書かれている。

- ア 2番目 ④ is sent      5番目 ③ thanks
- イ 2番目 ④ is sent      5番目 ⑤ the blood
- ウ 2番目 ⑥ to          5番目 ④ is sent
- エ 2番目 ⑥ to          5番目 ⑤ the blood

〔問3〕 (3) they can keep their body temperature almost the same when the air or water temperature around them is very low. を、次のように書き表すとすれば、 の中に入れるものとして、最も適切なものは下のうちではどれか。

when the air or water temperature around them is very low.

- ア Both humans' and penguins' body temperatures do not change a lot
- イ Humans' body temperature gets higher than penguins
- ウ Humans' body size is almost the same as that of penguins
- エ Both humans' and penguins' body temperatures change a lot

〔問4〕 本文の流れに合うように、 4  の中に入るものとして、最も適切なものは次のうちではどれか。

- ア Because of that, the amount of oxygen they use becomes larger.
- イ As a result, the amount of oxygen they use also becomes smaller.
- ウ Then, they use more oxygen than usual.
- エ And the size of their bodies becomes one-tenth, too.

〔問5〕 (5) Penguins use the oxygen in their muscles first, then they have to use the oxygen stored in their air bags. の結果として予想されることを、次のように書き表すとすれば、下の  の中に、どのような英語を入れるのがよいか。最も適切な1語を本文中からそのまま抜き出せ。

The amount of oxygen they use .

〔問6〕 本文の内容と合っているものとして、最も適切なものは次のうちではどれか。

- ア More than 50% of the oxygen in Emperor Penguins' bodies is stored in their air bags.
- イ Emperor Penguins' blood never stops running while they are under the water.
- ウ Emperor Penguins' brains do not use oxygen when they are in the water.
- エ Emperor Penguins feel pain when the amount of carbon dioxide in their blood increases.

このページに問題はありません。

4 次の物語の文章を読んで、あとの各問に答えよ。

(\*印のついている単語・語句には、本文のあとに〔注〕がある。)

Sara was sixteen years old and a little shy. She had her \*entrance ceremony just two days ago. She was happy because she really wanted to enter that high school. During the ceremony, she was thinking about starting something new in her school life. She wanted to be proud of herself by challenging herself, but she didn't know what to try. On the second day of school, Sara stood in front of the school gate with her school uniform and carried her bag with her textbooks, notebooks and pens. The weather was clear without any clouds in the sky. Sara \*took a deep breath. When she looked around, she saw that many students were talking and laughing while they walked into the school building. She thought everyone already had friends. <sup>(1)</sup> She felt nervous and a little scared. "I hope I can make friends," she said to herself.

(2-a), all of her friends from junior high went to different high schools. She walked to her classroom and sat in her seat. A girl next to Sara smiled at her. "Hi, I'm Hinako, nice to meet you!" the girl said. Sara smiled back and said, "I'm Sara. Nice to meet you, too." They talked a little about their junior high school experiences before class started. Hinako was friendly and looked very nice. <sup>(3)</sup> Sara felt a little better because of that. After school, many students were walking around the hallways and looking at posters for club activities to join. There were a lot of clubs such as the music club, the art club, the soccer club, and more. Sara saw a group of students. They were talking in loud voices and laughing near the gym. "They look so happy," she thought. "What club is that?" She walked toward the group and saw a big poster that said, "Basketball Club - Join Us!" <sup>(4)</sup> 【ア watching イ a basketball game ウ her エ it オ reminded カ of】 on TV with her brother last year. The players were fast and strong, and watching the game was so exciting for her. But Sara did not have any experience playing basketball, so trying it was a (5-a) experience for her.

A tall girl saw Sara in front of the poster. "Hey! Are you interested in basketball?" she asked with a big smile. "Well... maybe," Sara said. "I'm Mira. I'm the captain of this club. Come to the gym and try it! No experience? No problem!" Sara was not sure and said, "I'm not good at sports..." "That's not a problem," Mira said \*kindly. "Many people start as beginners. Just come and join us anytime." "OK, I'll try," Sara said \*nervously. She was very worried because she had no experience playing it. (2-b), she still wanted to try something new in high school, so she decided to try basketball.

The next day after school, Sara took a deep breath nervously and walked into the gym. Many girls were passing the ball, shooting, and running on the court. They laughed and cheered for each other. While Sara was standing at the side and watching their play, Mira ran over with a big smile and said, "Sara! You came!" Sara smiled and said, "Yes, I did." Mira gave her a ball and said, "Let's play together." (2-c), Sara felt a little nervous. She could not

catch the ball, and her balls didn't go into the \*hoop. But the other girls cheered for her and smiled at her. "Nice try!" "Good effort!" Sara started to enjoy playing basketball more and more. She liked exercising her body. She liked the sound of the \*bouncing the ball. Most of all, she liked being with the teammates. Sara was so \*focused on the practice that she didn't \*look carefully around her. After the practice, everyone sat on the floor and drank water. A girl came to Sara and said, "Hi, you did great today." Sara looked up and saw someone she knew! Sara was surprised and said, "Hinako?" "Yes! I was playing with another team. I realized you were playing on a different team! But you didn't notice me!" Hinako said with a \*playful smile. Sara laughed and said, "I was so focused on my play that I couldn't look around. Today is a big day for me." Their faces were red from running, and they both laughed together.

On her way home, Sara looked up at the sky. The clouds in her mind were all gone now. Because of her new challenge, she felt good, strong, and \*confident. "I think I've found my place. Now, I have a \*brave heart, and I am really proud of myself," she said to herself. From that day, Sara went to basketball practice every week. She practiced hard and made mistakes, but she never gave up. The team helped her to play better, and she helped them, too. She started to laugh more, talk more, and feel more confident. At school, she said "Good morning" with a smile on her own. She walked with her teammates. She wasn't alone anymore. Sara learned an important thing.

Trying something (5-b) is scary, but it can bring good results. It can bring you friends, fun, and \*confidence.

〔注〕	entrance ceremony	入学式	take a deep breath	深呼吸する
	kindly	優しく	nervously	不安げに
	hoop	バスケットボールのゴールリング	bounce	跳ねる
	focused on ~	~に集中して		
	look carefully around	注意深く周りを見る	playful	いたずらっぽい
	confident	自信がある	brave	勇敢な
	confidence	自信		

〔問1〕 She felt nervous and a little scared. とあるが、その時の Sara の気持ちに最も近いものは次のうちではどれか。

- ア She was nervous because it was bad weather that day.
- イ She was worried that she would not be able to make any friends.
- ウ She felt worried because a girl next to her suddenly spoke to her.
- エ She was sad because she couldn't play basketball well.

〔問2〕 (2-a) から (2-c) の中には、それぞれ次の A～C のうちいずれかの単語・語句が入る。その組み合わせとして、最も適切なものは下のうちではどれか。

- A At first
- B In fact
- C However

	(2-a)	(2-b)	(2-c)
ア	A	B	C
イ	A	C	B
ウ	B	A	C
エ	B	C	A
オ	C	A	B
カ	C	B	A

〔問3〕 Sara felt a little better because of that. を、次のように書き表すとすれば、 の中に入れるものとして、最も適切なものは下のうちではどれか。

After , Sara felt a little better.

- ア attending her entrance ceremony
- イ deciding what club to join
- ウ chatting with one of her classmates
- エ finding a friend from the same junior high school

〔問4〕 【ア watching イ a basketball game ウ her エ it オ reminded カ of】について、<sup>(4)</sup>本文の流れに合うように、【】内の単語・語句を正しく並びかえるとき、【】内で2番目と5番目にくる単語・語句として正しいものはどれか。【】内のア～カの中からそれぞれ一つ選べ。なお文頭に來る文字も小文字で書かれている。

〔問5〕 本文の流れに合うように、〔5-a〕と〔5-b〕に入る共通の英語1語を本文中からそのまま抜き出せ。

〔問6〕 本文の内容と合っているものとして、最も適切なものは次のうちではどれか。

- ア Mira told Sara to have confidence when they met first in the hallway.
- イ Sara and Hinako already knew each other before practicing basketball together.
- ウ Sara learned that the importance of challenging herself was always easy at first.
- エ Playing basketball did not help Sara to make friends or have fun at all.

〔問7〕 あなたがこれから挑戦したいこと一つと、その理由を具体的に20語以上30語以内の英文で書け。二つ以上の英文になっても構わない。ただし、明らかに未完成の文は、語数には含めないものとする。下の〔例〕のように、「,」「.」などの符号は語数に含めない。短縮形は1語と数える。

〔例〕 I'm a student. My mother said to  
me, "Are you busy?" I said, "Yes!"