

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 12 ページまであります。

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次の対話の文章を読んで、あとの各問に答えよ。

(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

*Daisuke and Yuko are first-year high school students in Japan. John is also a first-year student. He came to Japan from America to study in Daisuke and Yuko's school. They belong to the brass band club and play the trumpet. Now they are practicing in their trumpet group after an *ensemble in the club.*

John: What's wrong, Daisuke? Do you have any problems?⁽¹⁾

Daisuke: Yes, John. Our concert will be held next week. I could play the middle part of the music that we practiced in the ensemble well. But I couldn't play the beginning of it. Can you teach me a little?

John: Sure! This music is difficult to play.

Yuko: Daisuke, can you play it now?

(Daisuke's play)

John: Just keep your *lips in the same *form and play it.

Yuko: Daisuke, try one more time.

Daisuke: Sure, like this?

(Daisuke's play)

John: That's nice!

Yuko: You are better than before.

Daisuke: Thank you. (2-a)

John: You are right. We need more practice! Oh, it's time for the second ensemble.

Yuko and Daisuke: OK, let's go!

(After the second ensemble)

Daisuke: I played better in the ensemble. (2-b)

John: That's good!

Yuko: John, you are a good teacher! In my case, I could play it better because I changed how I sit.

John: It is interesting to see how much we have improved in the ensemble after we taught each other in the trumpet group. In my school in America, we don't often practice in a small group like this today.

Daisuke: Oh, I see! In Japan, we often have group practices as we did.

John: That kind of practice is very good! In my band, many students practice alone and take *personal lessons with an *instructor about twice a week. So, students have less chances to teach each other than those in Japan.⁽⁴⁾

Daisuke: Oh, that's interesting. Which is better, to practice alone or to practice together with your friends?

John: When you practice alone, you can *concentrate on practicing. But as we did today, I think that practicing together and teaching each other is the best way to improve our skills quickly and help each other with our weak points.

Daisuke: Before, it was difficult for me to ask someone because I am shy. So I thought that it was better to practice alone. But thanks to your advice, I improved my skills and I really enjoyed playing the music.

Yuko:

Daisuke: That's right. It is wonderful to have friends who can teach each other and learn together.

〔注〕 ensemble 合奏（部活動全体での合奏） lips 唇
 form 形 personal lesson 個人レッスン
 instructor 指導者 concentrate on ~ ~に集中する

〔問1〕 ⁽¹⁾ any problems とあるが、Daisuke がそのように考える曲の部分とそれに対するアドバイスの組み合わせとして、最も適切なものは次のうちではどれか。

	曲の部分	アドバイス
ア	the beginning part	how he sits
イ	the beginning part	form of lips
ウ	the middle part	form of lips
エ	the middle part	how he sits

〔問2〕 から の中には、それぞれ次のA～Dのうちいずれかの文が入る。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 I could play it well because of your advice.
- B Let's teach each other when we have something difficult to play.
- C But I want to practice a little more.
- D Well, each of them has good points.

	<input type="text" value="(2-a)"/>	<input type="text" value="(2-b)"/>	<input type="text" value="(2-c)"/>	<input type="text" value="(2-d)"/>
ア	A	C	B	D
イ	A	D	B	C
ウ	C	A	D	B
エ	C	B	D	A

〔問3〕 ⁽³⁾ That kind of practice の内容として、最も適切なものは次のうちではどれか。

- ア All the members of the club get together and teach each other.
- イ Members of the trumpet group practice and teach each other.
- ウ A leader of the trumpet group teaches each member how to play the trumpet.
- エ Each member of the trumpet group takes a personal lesson with a music teacher.

〔問4〕 ⁽⁴⁾ those in Japan の内容として、最も適切なものは次のうちではどれか。

- ア chances of playing the trumpet in Japan
- イ teachers in Japan
- ウ John's friends who live in Japan
- エ students in Japan

〔問5〕 ⁽⁵⁾ it was better to practice alone 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。

was better

- ア to teach friends how to play
- イ to practice together and teach each other
- ウ to ask friends to play with Daisuke
- エ to practice without friends' help

〔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 Daisuke could play the trumpet better in the second ensemble.
- イ The brass band of Daisuke's school is going to have a concert next month.
- ウ The music which the brass band members in Japan practiced was easy for John to play.
- エ John said his brass band club in America had ensembles twice a week.

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次の文章を読んで、あとの各問に答えよ。

(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

What do you know about *magnets? Do you know where magnets are used? Now the power of magnets is used in a lot of daily goods all over the world and they are necessary for our lives. You may know magnets have N *poles and S poles. When N and S poles are close together, they try to stay together. When N and N poles or S and S poles are close together, they try to move away. Now, let's see how people have used magnets in our history.

One study says that magnets were first found in *ancient Greece. About 2,300 years ago, some people knew that magnets show *directions. Later, a *compass was invented in China and there is a record of using it in the 11th century. Then in the next century, the compass was introduced to Europe. After that, in the 14th century, it was improved by a person from Italy and used for crossing the sea. Through its long history, people have understood the *characteristics of magnets and used them in many ways.

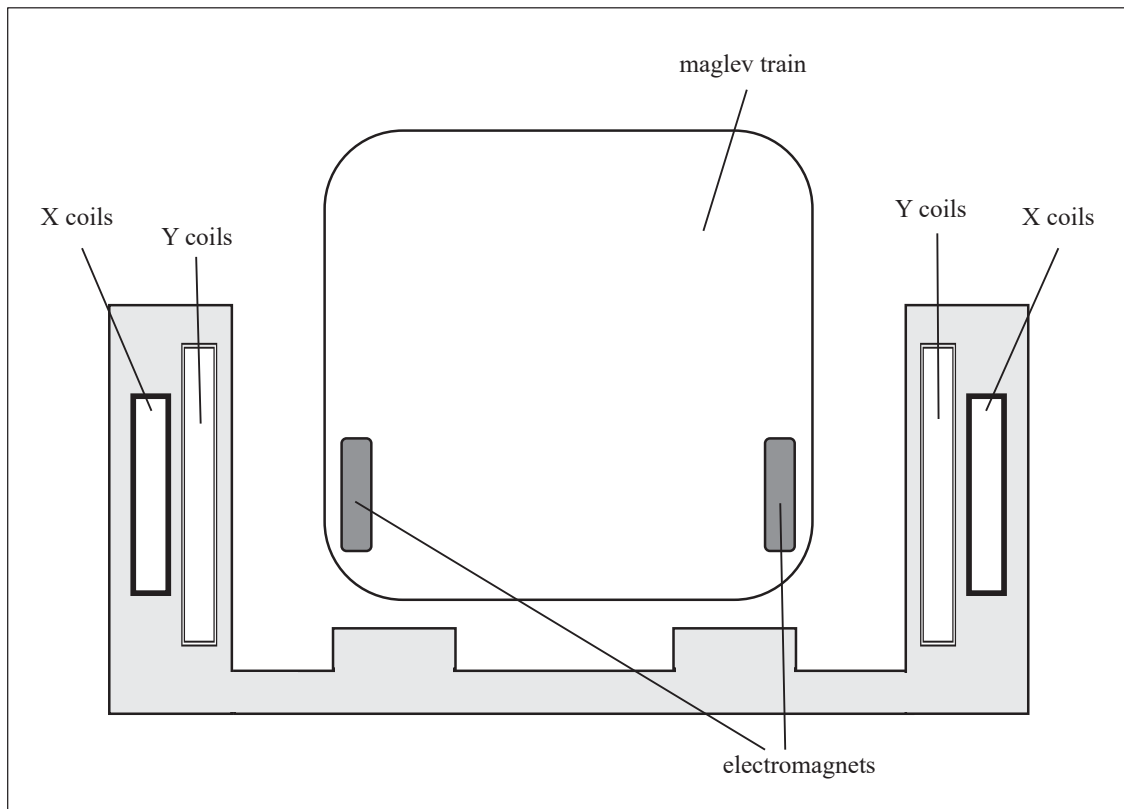
One example of the use of magnets in our daily lives is smartphones.

1

And have you ever heard the word *electromagnet? One scientist found a *relationship between the power of magnets and electricity in 1820. Then, a few years later, the first electromagnet was made by sending electricity through *coils *wound on iron. Maybe some of you have seen an *MRI device in a hospital. Some MRI devices use the power of this kind of magnets. It is a large *tunnel-shaped machine that works like a large magnet. When a person enters the machine and is hit by an *electromagnetic wave, the body can be seen from many views.

Also, *maglev trains use the power of electromagnets. Usually, *ordinary trains run with *wheels on railroads. However, when they run fast, the wheels *spin around. Then, maglev trains use the power of very strong electromagnets to help the body of the train *float and run. Look at **Picture**. One type of maglev train has these strong electromagnets in both sides of the train. There are walls on both sides of the train's course. Both walls have two kinds of coils. The first is X coils. A maglev train moves forward thanks to X coils. The second is Y coils. A maglev train floats thanks to Y coils. And there are two main ideas that let this type of maglev trains run.

Picture



First, X coils become electromagnets when electricity runs through them. And then both “attracting” and “getting away” power of the magnets are produced between the electromagnets in the maglev train and X coils. Then, the train can move forward and run. Second, when the maglev train passes by, electricity runs through Y coils on the wall and they become electromagnets. The shape of Y coil is like an “eight”, and the pole of the top part and the under part are different. Then, between the electromagnets in the train and Y coils, “getting away power” and “attracting power” are produced and the train floats.⁽⁴⁾ “Getting away power” pushes up the train, and “attracting power” pulls it up. Also, the train sometimes moves away from the center of its course while it is running. Then, “getting away power” and “attracting power” are produced between Y coils and the electromagnets in the train. I

You may think that the maglev train is the train of the future. However, around the year 2000, Tokyo started using this system in a subway. Today, magnets are used in various fields. Now, some studies show that we can use the power of magnets to collect garbage in space. What can humans do with magnets next? The power of magnets will continue to be important to develop many technologies and cultures in the future.

〔注〕 magnet 磁石	pole 極
ancient Greece 古代ギリシャ	direction 方角
compass 羅針盤	characteristic 特徴
electromagnet 電磁石	relationship 関係
coil コイル	wound on iron 鉄に巻かれた
MRI device 磁気共鳴画像撮影装置	tunnel-shaped トンネル状の形をした
electromagnetic wave 電磁波	maglev train 磁気浮上式リニアモーターカー
ordinary 普通の	wheel 車輪
spin around 空回りする	float 浮く

〔問1〕 の中には、次のA～Dの文が入る。本文の流れに合うように、正しく並べかえたとき、最も適切なものは下のうちではどれか。

- A So, a smartphone is very small.
- B Later, this magnet helped companies to make smaller smartphones.
- C And it is possible to hold it with one hand.
- D In 1982, one of the strongest magnets was invented in Japan.

- ア B→A→C→D イ B→D→C→A
- ウ D→B→A→C エ D→C→A→B

〔問2〕 本文の流れに合うように、 に英文を入れるとき、最も適切なものは次のうちではどれか。

- ア Maglev trains run with their wheels on the railroads when they run fast.
- イ Maglev trains run in the same way when they run slowly.
- ウ On the other hand, maglev trains don't have wheels.
- エ On the other hand, maglev trains can't stop easily when they run with their wheels on the railroads.

〔問3〕 次の英文が入る最も適切な箇所を、本文の ～ の中から一つ選べ。

So, the train is moved back to the center of its course.

〔問4〕 ⁽⁴⁾ the train floats について、次の質問の答えとして最も適切なものは下のうちではどれか。

According to the passage, when an electromagnet of the maglev train on one side is N pole, what is the pole of each top part and under part of Y coil on the same side?

- ア Both the poles of the top part and under part are S.
- イ Both the poles of the top part and under part are N.
- ウ The pole of the top part is N and the under part is S.
- エ The pole of the top part is S and the under part is N.

〔問5〕 本文の流れに合うように、次のA～Dを出来事が起きた順に並べかえたものとして、適切なものは下のうちではどれか。

- A An electromagnet was made for the first time.
- B Some people noticed that magnets show directions.
- C A compass was introduced to Europe.
- D A person from Italy improved a compass.

- ア B→A→C→D
- イ B→C→D→A
- ウ C→A→B→D
- エ C→B→D→A

〔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 Though a compass was born in China, there is no record about using it.
- イ MRI devices can work like trains with the power of electromagnets.
- ウ X coils in the train help maglev trains move forward.
- エ Power of magnets can be used to collect garbage in space.

4 次の文章を読んで、あとの各問に答えよ。

(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

Junko is a third-year high school student in Japan. Last year she stayed at a *host family's house for a month in New Zealand during her summer vacation to *study abroad. It was the first time for her to visit another country. (1-a) she was in New Zealand, she went to a high school and met Joshua and Holly. She made friends with them.

One weekend, Joshua, Holly, and Junko promised to go shopping in the town. On that day, Junko needed to take a bus alone. She waited for it at the bus station. (1-b), the bus didn't come *on time. Finally, it came, but it didn't stop and kept going. A little later, the next one came. A boy who just ran to the same bus station raised his hand and then it stopped. Junko also got on the same bus. She learned that she needed to raise her hand to stop buses. After she got on the bus, she found that some bus stations didn't show their name. Later, Junko could not understand the driver's announcement and didn't know where to get off. Junko got off the bus anyway. She couldn't find the name of the bus station and nobody was there. She didn't know what to do and began to cry. Then, an old woman who just passed by said to her, "What's wrong?" Junko said, "Well, I think I got off at the wrong bus station." and told her ⁽²⁾ things which happened that day with gestures. The old woman stopped a bus for Junko. When it arrived, she told the driver about the bus station that Junko would get off at. Junko thanked the old woman and got on the bus. It took Junko to the right bus station. When Junko got off, the driver said to her, "Have a nice day!"

Junko *felt at ease to see Joshua and Holly. Junko said sorry to them for being very late. (1-c), Junko told them why she was late. Holly said to her, "No problem. Getting on a bus in a different country is very difficult for the first time. Don't worry." Then, Joshua said to Junko, "Junko, maybe there are some differences between Japan and New Zealand, but I hope that you take actions and enjoy New Zealand." Thanks to the kindness of people and friends in New Zealand, ⁽³⁾ Junko decided to do so.

The next weekend, Junko decided to take a bus by herself to Holly's house. She raised her hand to stop a bus. After she got on the bus, she told the driver about the street name of Holly's house. And she asked him where the nearest bus station was. Then he let her sit near him. A young man who sat near Junko asked her, "Are you a student from *overseas? Where are you from?" She answered, "I am from Japan." He said to her, "Oh, you are from Japan! I went to Japan two years ago! I love Japanese anime." Junko said, "Oh, you have been to Japan! Which anime do you like?" The young man answered her questions *happily. Then, an old man joined their *conversation and they enjoyed talking a lot. When she got off the bus, they said to her, "Enjoy New Zealand!"

On another day, Junko went to a shop with her host mother. She saw a clerk, a girl, and

her mother. Junko thought they had some trouble. Junko walked to them and said, "Do you need any help?" The girl and her mother were tourists from Japan. The mother said to Junko, "We want to buy a bottle of jam because it is a popular souvenir. But we can't find it because we couldn't explain it well. The clerk also speaks very fast, so we can't understand his words." Junko tried to help them and told the clerk about the jam they wanted to buy in English with gestures. Finally, they could buy it. They thanked Junko as Junko did the other day. Junko felt very happy to be able to help people in need. Her host mother said, "You did a very good job, Junko. ⁽⁴⁾ I am proud of you."

At that time, Junko understood that it was important to step forward and take actions. Through this experience, Junko learned many things. She thought that she wanted to communicate with people in various countries in the future. To do so, she decided to study other languages and cultures at a university.

- 〔注〕 host family ホストファミリー study abroad 留学する
on time 定刻に feel at ease 安心する
overseas 海外の happily うれしそうに
conversation 会話

〔問1〕 本文の流れに合うように、(1-a) から (1-c) の中には、次のA～Cのいずれかの語が入る。それぞれに入る組み合わせとして、適切なものは下のうちではどれか。

- A Also
B However
C While

	(1-a)	(1-b)	(1-c)
ア	A	B	C
イ	A	C	B
ウ	C	A	B
エ	C	B	A

〔問2〕 ⁽²⁾ things which happened that day の内容として、最も適切なものは次のうちではどれか。

- ア Junko couldn't get off at the right bus station.
イ Junko couldn't take a bus with her friends to go shopping.
ウ Junko was able to raise her hand to stop a bus.
エ Junko could understand the announcement of the bus driver.

〔問3〕 Junko decided to do so とあるが、その後 Junko がした行動として、最も適切なものは次のうちではどれか。

- ア She ran to the bus station near Holly's house by herself.
- イ She asked a young man where the right bus station was.
- ウ She said to Joshua and Holly, "Take actions in New Zealand."
- エ She talked with people on the bus when she was going to Holly's house.

〔問4〕 I am proud of you. を次のように書き表すとすれば、下の の中に入る最も適切な1語を本文中から抜き出せ。

Junko's host mother was proud of Junko because Junko could other people.

〔問5〕 本文に登場する人物とその人物に関する説明の組み合わせとして、適切なものは次のうちではどれか。

	人物	人物に関する説明
ア	Holly	She tried to help people with Junko.
イ	A young man	He visited Japan two years ago.
ウ	Junko's host mother	She took a bus with Junko to see Junko's friends.
エ	A girl	She told Junko that she could buy a souvenir by herself.

〔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 Junko thought that the most important thing was to understand people's action.
- イ Junko wanted people in various countries to help each other.
- ウ Junko found that she should step forward and take actions.
- エ Junko wanted to buy a bottle of jam by herself for her host mother.

〔問7〕 これまであなたが誰かの役に立った具体的な経験1つについて30語以上40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!"