

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、 から までで、2 ページから 13 ページまであります。

- 2 次の対話の文章を読んで、あとの各問に答えなさい。
(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

Yuri, a student from Japan, is studying at a high school in Canada. She is staying with Mary and her family. Mary and Yuri go to the same high school. They are working on a presentation at Mr. Brown's science class in the living room.

Yuri: Mr. Brown said that we should use two key words, "global warming" and "*carbon" in our presentation.

Mary: Yes, but it's difficult.

Yuri: Well, (1)a ? We should learn what is happening around us first.

Mary: Well, I visited a small town in the north with my friends several months ago. I saw some *tilted houses there.

Yuri: Why were they tilted?

Mary: Well, some people in the town said that the houses stood on the *permafrost. And the permafrost under those houses melted because it became warmer than before.

Yuri: It's shocking. I think that is an example caused by (2). But why is the temperature getting higher?

Mary: I'm not sure. Let's check studies about global warming to learn more about it.

Two hours later, Mary's younger brother, Oliver comes in.

Oliver: Hi, what are you two doing?

Yuri: Hi, Oliver, we ⁽³⁾① for ② give ③ we ④ a presentation ⑤ preparing ⑥ will ⑦ are next week.

Oliver: A presentation? What are you going to talk about?

Mary: About global warming. "Why is the temperature getting higher?"

Oliver: Wow, it's very difficult!

Mary: Oliver, these days we have warmer days. That *is related to our activities.

Oliver: Tell me more about it, Mary.

Mary: We use electricity every day.

Yuri: To make electricity, we burn *fossil fuels such as *coal, oil and gas. Then CO₂ is *released into the air.

Mary: Oliver, I'm sure you have learned at school that CO₂ is a *greenhouse gas.

Oliver: I don't remember.

Mary: The *surface of the earth receives energy from the sun, and it releases the energy into the

air. CO₂ in the air *absorbs the energy released from the surface, and releases it back toward the surface. It warms the earth.

Oliver: Are you saying CO₂ is a bad thing?

Yuri: ⁽⁴⁾I don't think so. If there aren't greenhouse gases like CO₂ in the *atmosphere, the earth will become very cold.

Oliver: What will the temperature be without those gases?

Yuri: Scientists say it will be -19°C.

Oliver: Wow, that is very cold.

Mary: The *average temperature of the earth is about 14°C because of greenhouse gases. But if we have more and more CO₂ in the atmosphere, (1)-b ?

Yuri: Some people say sea level is going up because the temperature is becoming higher. Some towns or islands may be in the sea in the future.

Oliver: That's a big problem.

Mary: So we must not increase the *amount of CO₂. By the way, Oliver, did you turn off the light in the room when you got out of your room?

Oliver: I forgot it!

Mary: Don't leave the light on, Oliver.

Oliver: OK, Mary.

Mary and Yuri give their presentation about global warming and carbon in their science class. Their presentation is coming to an end now.

Mary: Finally, ⁽⁵⁾look at this graph. We collected information from *NASA. This, as you see, shows the temperature *anomaly over about 120 years. The temperatures before 1930 are lower than the temperatures after 1970. Since 1970, the temperature has become higher and higher.

Yuri: Also, the amount of CO₂ increased little by little from 1800 to 1960. But after 1960 it *rapidly increased. We think it is related to our activities. Our daily lives have depended on fossil fuels more and more since 1960. So we must change our way of life. Thank you very much for listening.

After their presentation, Mary and Yuri are talking with their classmates, Tom and Kate in their classroom.

Tom: Your presentation was great.

Kate: I'm really impressed.

Mary: Thank you very much.

Tom: In your presentation you said that plants absorb CO₂ and release O₂. If we plant many trees, they will absorb more CO₂, right?

Yuri: Yes, Tom, plants use CO₂, water, and energy from the sun when they grow, and then they make *carbohydrates.

Kate: That is necessary for life, isn't it?

Yuri: Yes.

Tom: You mean plants *store carbon in themselves in the *process.

Yuri: That's right. After plants die, they release CO₂ little by little.

Tom: I see.

Kate: I heard there are many dead trees in forests. Do they also release CO₂?

Yuri: Yes, forests store carbon and release it little by little.

Tom: Is there anything else that stores carbon?

Mary: Yes. We didn't talk about it, but permafrost stores carbon.

Kate: Permafrost?

Mary: Yes. There are many dead plants in the permafrost, but (6) because they are *frozen.

Kate: I see.

Mary: As you know, the temperature has become higher since 1970. Some people say the permafrost has begun to melt.

Kate: Really?

Yuri: We don't know how much carbon is stored in the permafrost, but one study shows that it is larger than the amount of carbon in the atmosphere.

Tom: Wow, I can't believe that. If the temperature continues to go up, the permafrost will melt and release CO₂. It will make the temperature of the atmosphere higher and higher.

Mary: (7) We are afraid that will happen.

Kate: You are right. We must do something to stop the permafrost from melting.

Tom: I didn't think our activities are related to global warming, but today from your presentation I have learned that it is really important to save energy in our daily life.

Yuri: I will tell my friends in Japan about the town in the north of Canada.

Mary: It is important for us to learn about this problem.

Tom: Yes. If we learn more, it will be the first step to solve this problem.

〔注〕 carbon 炭素	tilted 傾いた	permafrost 永久凍土
be related to ~ ~と関連がある		fossil fuel 化石燃料
coal 石炭	release 放出する	greenhouse 温室効果の
surface 表面	absorb 吸収する	atmosphere 大気
average 平均	amount 量	NASA 米国航空宇宙局
anomaly 標準値と測定値の差		
(ここでは, 1950 ~ 1980 年の平均気温を標準値としている。)		
rapidly 急速に	carbohydrate 炭水化物	store 蓄える
process 過程	frozen 凍った	

〔問 1〕 , の中に, それぞれ次のどれを入れるのがよいか。

- ア how shall we start
- イ why is it impossible
- ウ what will happen
- エ when is it possible

〔問 2〕 本文の流れに合うように, の中にどのような英語 2 語を入れるのがよいか。

〔問 3〕 ¹³【① for ② give ③ we ④ a presentation ⑤ preparing ⑥ will ⑦ are】とあるが, 本文の流れに合うように, 【 】内の単語・語句を正しく並べかえたとき, 2 番目と 5 番目と 7 番目にくるものの組み合わせとして最も適切なものは次のア～カの中ではどれか。

	2 番目	5 番目	7 番目
ア	②	③	⑤
イ	②	④	⑦
ウ	②	⑤	⑦
エ	⑤	③	②
オ	⑤	④	③
カ	⑤	⑥	②

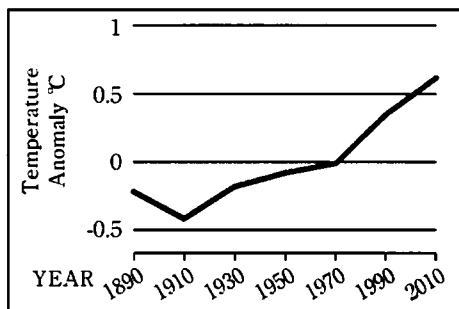
〔問4〕 ¹⁴ I don't think so. とあるが、Yuri の考えを次のように書き表すとすれば、 の中に下のどれを入れるのがよいか。

CO₂ isn't a bad thing because .

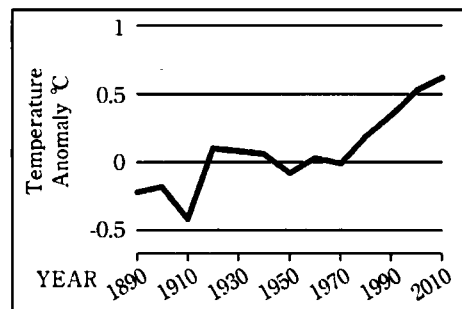
- ア it keeps the temperature of the earth low
- イ it keeps the earth warm
- ウ it makes the atmosphere cold
- エ it makes the earth too warm

〔問5〕 ¹⁵ look at this graph とあるが、this graph の内容を正しく表しているのは次の中ではどれか。

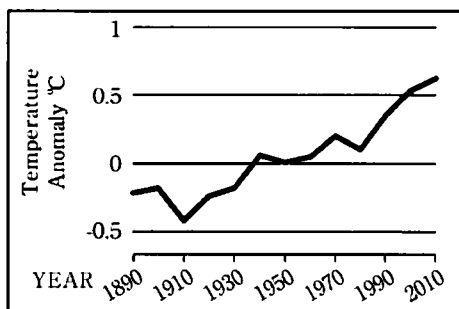
ア



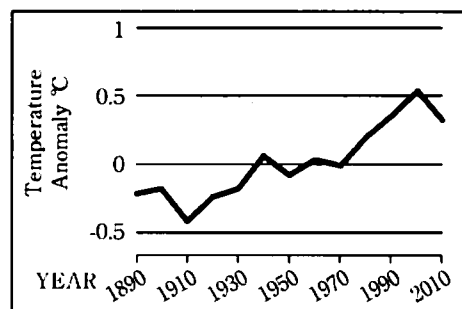
イ



ウ



エ



〔問6〕 本文の流れに合うように、 (6) に英語を入れるとき、最も適切なものは次の中ではどれか。

- ア they use CO₂
- イ they absorb CO₂
- ウ they don't release CO₂
- エ they don't store CO₂

〔問7〕 (7) We are afraid that will happen. とあるが、この文の内容を次のように書き表すとすれば、 の中に下のどれを入れるのがよいか。

We are afraid that .

- ア the permafrost will store carbon and the temperature will go up
- イ the permafrost will melt and the temperature will become higher
- ウ the temperature will not go up but the permafrost will melt
- エ the permafrost will melt and the temperature will go down

〔問8〕 本文の内容と合っているものを、次のア～クの中から二つ選びなさい。

- ア When Yuri visited a small town in the north with her friends several months ago, she saw some tilted houses there.
- イ CO₂ in the atmosphere releases the energy back to the sun, but it keeps the atmosphere warm.
- ウ The temperature of the earth will be 14°C in 2020 because greenhouse gases like CO₂ absorb energy from the sun.
- エ Oliver turned off the light when he left his room and went into the living room.
- オ The amount of CO₂ has increased rapidly since 1960 because we have used more and more fossil fuels.
- カ Plants use only water and energy from the sun to store CO₂ in their bodies when they grow.
- キ The amount of carbon in the atmosphere is smaller than the amount of carbon stored in the permafrost.
- ク After Mary's presentation, Tom learned that their activities are not related to global warming at all.

3 次の文章を読んで、あとの各問に答えなさい。

(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

*Masaru Yanaka is a high school student. He is in Yanaka *Coating. It is his grandfather's factory next to their house. Ryo is showing Masaru how to coat parts for a bike. He is a young worker in the factory. Masaru is now interested in coating but things were different before. He remembers those days.*

On a spring day last year, Masaru was on his way home from school with his friends. When they passed a hospital, Haruka said she wanted to be a doctor. She wanted to work to help people. Keisuke said that he wanted to be a soccer player. Only Masaru had no plan for the future. From that day, he began to think about his future.

A few months passed. Masaru liked studying at school and enjoyed playing sports with his friends. But there was one thing on his mind that made him *uneasy. "What do I want to be in the future?" (1) It was difficult to find the answer.

One day, when Masaru got home, he saw Ryo in front of the factory. Ryo said to Masaru, "Hi, how was your day?" Masaru answered, "Not bad. Why did you decide to work here?" Ryo said to Masaru, "Why are you asking such a question?" Masaru said that his friends had plans for their future but he didn't. Ryo said, "I see.... It's hard to decide what you are going to do in the future. I wanted to study at college, and I decided to make money for it by myself. Your grandfather and mine are good friends, and your grandfather *allowed me to work here and go to college at night. I like working here. I'm really proud of our *products." Ryo continued, "I'm going to work here after graduating college. And your grandfather is a *legend, you know." "A legend? I've never heard about that," Masaru said. It was (2) [① was ② hear ③ his first ④ to ⑤ a legend ⑥ called ⑦ time ⑧ his grandfather]. Ryo said Masaru's grandfather worked harder than anybody else in the factory. "He really makes every effort to make the best products." Masaru didn't know what his grandfather and father were really doing. He said, "On my first sports day in elementary school, I really wanted everybody in my family to come and see me. But my grandfather and father were very busy with their work and they couldn't. I was sad, so I've stayed away from the factory since then." "I'm sorry to hear that. They have a lot of things to do and are always working hard. (3)" Ryo said. "I know. I've grown up now. But I just can't change my *attitude." Masaru said.

The summer vacation started the next day. As Masaru loved riding his bike and he had more time than usual, he planned to go on a bike trip and stay one night in a tent all by himself. When he told his parents about it, they didn't say OK at first. He said to them, "I hear that there is a camping place at the top of the hill which has a beautiful view of a lake. I've really wanted to go there."

And his grandfather *sided with him and said. "The world is like a book and people who do not travel read only one page." Then his parents allowed him to go.

Several days later, Masaru went on the bike trip early in the morning. It was a nice ride for a few hours, but after that there was a long *slope and he couldn't *pedal his bike anymore. Then, he heard a noise. He got a *flat tire! He looked for a bike shop. All he could see were orange trees. He saw a man among the trees. He asked the man the way to a bike shop. The man answered, "There is not a bike shop near here. You have to go down the hill to town. You got a flat tire?" Masaru said, "Yes. How long will it take if I walk there?" The man answered, "More than an hour. I'm Ogawa. I'll take you there in my *truck." Masaru said, "Thank you. I'm Masaru Yanaka. Um, Mr. Ogawa, do you grow oranges?" "Right. It's a hard job. It is always influenced by the weather. But there are people who love our oranges. Some even write to us. When we read those letters, we feel our hard work is *rewarded." Masaru felt Mr. Ogawa was so *content with his life and job.

Soon, Mr. Ogawa and Masaru arrived at the bike shop. Masaru thanked Mr. Ogawa for taking him all the way down the hill. "That's OK. When you meet someone in trouble next time, return the kindness to that person. The world goes around in that way," Mr. Ogawa said. And he introduced Masaru to Mr. Genda. "This boy got a flat tire. Can you *fix it?" Mr. Genda answered, "Of course. I can fix any bike trouble, you know. Let me see.... The tire has *struck a nail. It won't take long." Masaru felt *relieved to hear that. Then Mr. Genda said, "This is a good bike. All the parts are coated by a legend." "A legend?" Masaru asked. "Yeah, a legend that started Yanaka Coating," Mr. Genda said. Mr. Ogawa said, "How do you know such a thing?" "I've been in this business for almost sixty years. So I know he has great skills and is respected by many people in the coating business," Mr. Genda answered. "Yanaka Coating is my grandfather's factory," said Masaru. Mr. Genda was surprised and said, "I hear your grandfather *is always willing to learn new skills. And he never says no to any work that needs difficult skills. So many companies ask Yanaka Coating to coat their parts. And it coats many kinds of parts. Even the parts for the space station." Masaru said, "Maybe that makes my grandfather always busy."

Masaru thanked Mr. Ogawa and Mr. Genda and went up the hill again. At the top of the hill, he put up a tent before it got dark. He enjoyed the beautiful view of the lake from there. That night he thought about his grandfather. When he looked up at the sky, it was full of stars. Everything was quiet. "The space station is among those stars. The parts my grandfather, father and Ryo coated are used there," he said to himself.

The next morning Masaru made his bike trip home. While he was pedaling his bike, he began to understand why Mr. Genda and Mr. Ogawa looked happy and proud. And his grandfather, father and Ryo, too. He thought, "It's really wonderful to produce things that help people or make them happy." When he got home, he decided to see what they were doing in the factory. The little trip

was one of the pages in his book. He decided to read every page of it and find new things.

Now Masaru is watching Ryo. Ryo is coating parts in the factory. Masaru is surprised by the beautiful coating. He can't wait to turn a new page of his life.

- 〔注〕 coat 金属で塗装する uneasy 不安な allow 許可する
 product 製品 legend 伝説的な人 attitude 態度
 side with ~ ~の味方をする slope 坂 pedal ~ ~のペダルをこぐ
 flat tire パンクしたタイヤ truck トラック reward 報いる
 content 満足して fix 修理する struck a nail 釘を踏んだ
 relieved 安心して be willing to ~ すすんで~する

〔問1〕 ⁽¹⁾ It was difficult to find the answer. とあるが、その内容を次のように書き表すとすれば、 の中にどのような英語を入れるのがよいか。3語で書きなさい。

It was difficult to find to be in the future.

〔問2〕 ⁽²⁾ 【 ① was ② hear ③ his first ④ to ⑤ a legend ⑥ called ⑦ time ⑧ his grandfather 】 とあるが、本文の流れに合うように、 内の単語・語句を正しく並べかえたとき、3番目と5番目と7番目にくるものの組み合わせとして最も適切なものは次のア~カの中ではどれか。

	3番目	5番目	7番目
ア	①	④	③
イ	④	⑤	⑥
ウ	④	⑧	⑥
エ	⑥	③	④
オ	⑥	④	③
カ	⑧	⑥	②

〔問3〕 本文の流れに合うように、に英語を入れるとき、最も適切なものは次の中ではどれか。

- ア Why don't you see their work in the factory?
- イ Why don't you stay away from the factory?
- ウ Why don't you invite them to the factory?
- エ Why didn't you invite them to the event?

〔問4〕 次の(1)~(4)の文を、本文の内容と合うように完成するには、の中にそれぞれ下のどれを入れるのがよいか。

(1) Ryo decided to work at Yanaka Coating because .

- ア he was a good friend of the legend of coating
- イ his father was a good friend of Mr. Yanaka's
- ウ he wanted to be a legend of coating like his father
- エ he wanted to work and also go to college at night

(2) Masaru began to stay away from the factory when .

- ア he found that it was difficult to become a legend like his grandfather
- イ he found his grandfather was too busy with his work to have time for Masaru
- ウ his grandfather asked him to help with his work in the factory
- エ he knew it was difficult to change his attitude and help his grandfather

(3) When Mr. Ogawa took Masaru to the bike shop, he told Masaru .

- ア to help people in trouble in future
- イ to stay at his house that night
- ウ to work for his father's factory in future
- エ to help him with his work to grow oranges

(4) Mr. Genda knew about Yanaka's factory because .

- ア Masaru's grandfather was one of his friends
- イ he was in the coating business for a long time
- ウ Masaru's grandfather was well known in the coating business
- エ he started Yanaka Coating 60 years ago

[問5] 本文で述べられた内容と合っているものを、次のア～クの中から、二つ選びなさい。

- ア Masaru felt relieved to find that some of his friends also had no future plans.
- イ Ryo worked harder and longer than anybody else in the factory as he was the youngest.
- ウ When Masaru wanted to go on a bike tour alone, his parents sided with him at first.
- エ Masaru walked all the way down the hill to get to the bike shop because he got a flat tire.
- オ Mr. Ogawa was encouraged by the letters from people who loved his oranges.
- カ Masaru's grandfather was called a legend because he was really good at fixing bikes.
- キ Masaru realized why his grandfather looked happy and proud after he met Mr. Ogawa and Mr. Genda.
- ク After the bike trip, Masaru began to work in the factory to coat parts for the space station.

[問6] (4) things that help people or make them happy とあるが、このようなことについて考えられる具体例を一つ挙げ、それを取り上げた理由を 30 語以上 40 語程度の英語で答えなさい。「.」「.」「!」「?」などは語数に含めません。これらの符号は、解答用紙の下線部と下線部の間に入れなさい。