

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 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。)

*Naoko is a Japanese high school student and is now studying at a high school in the United States. Naoko, Chris, John and Anne are now in social studies class and talking about space *exploration with their teacher, Mr. Brown.*

Mr. Brown: In the past, space exploration was an important part of American history. Even after American astronauts landed on the moon in 1969, we Americans are still interested in space. Today, space exploration is often talked about. What are people talking about?

Naoko: Some people say we should stop space exploration, and some say we shouldn't.

Mr. Brown: That's right, Naoko. Why are some people saying that we should stop it?

Naoko: One thing is the cost of space programs, I think.

John: You're right, Naoko. By 2011, the total cost of *NASA's space program reached over 195 *billion dollars.

Naoko: That's a lot of money, isn't it?

Anne: Yes. So, many people feel that the money used for space exploration should be used in other ways.

John: Some people say space money should be better spent on helping people on the Earth. For example, giving health care to everyone, making our education system better, and so on.

Mr. Brown: Yes, a famous American leader once said, "If our country can spend twenty billion dollars to put a man on the moon, it can spend billions of dollars to help children right here on the Earth."

Anne: Space exploration is very expensive.

Chris: I really agree with you, but I think space exploration gives us dreams that we cannot buy with money. It makes us more interested in space and gives us the joy of discovering something we don't know.

Naoko: I think so, too. Do you know *Hayabusa*? It was an *explorer developed by the Japanese and run without a man. It was sent into space in May, 2003, and came closer to one of the small *asteroids near the Earth in September, 2005. The asteroid is called Itokawa. About two months later, it reached Itokawa. *Hayabusa* collected some very small stones and returned to the Earth in June, 2010. Everyone in Japan was very excited. We were proud of our technology and were really cheered up.

Chris: I can imagine how excited you were. Those stones may tell us many things we don't know about and even give us some information about another life in the *universe.

Naoko: Yes. I think it's exciting just to think about another life in the universe.

John: I think so, too. Space exploration is not a waste of money. In fact, the USA spends only one percent of its money on space exploration. We need this money because we need to prepare to move to another planet like Mars.

Naoko: (1)-b

Chris: You know Mars, don't you?

Naoko: Yes, I do. It's a planet in the *solar system and the fourth planet from the sun. But do we need to move to Mars?

John: The idea is this. One day the Earth cannot hold all the people, but Mars will. Also, in the future all the humans will disappear because someday the Earth will be hit by a large rock from space. So we will have to go away from the Earth before that. At that time, a lot of special knowledge about human space travel and the ability to live on Mars will be necessary.

Anne: Well, John, that's not *exactly the thing NASA says, but some scientists think so.

Naoko: In fact, the American government is spending a lot of money, isn't it?

John: Yes, it is. We know the cost of space exploration is very high, but we think it is *worth the money because there are a lot of spin-offs we've got from space exploration.

Naoko: Spin-offs?

Chris: Yes. They are the things people don't *expect to get when they are developing something.

Mr. Brown: Space technology has developed science and technology on the Earth. I think science and technology couldn't develop so much (2)-a space programs. They have developed *medicine, computer technology and the systems to live in a better way. They developed almost all areas of society. In 2012, NASA said there were about 1,800 spin-offs from space technology. Can you think of any examples?

John: Oh, yes. Suits for firefighters. To go through space, rockets should be strong because they have to fight against *heat. ⁽³⁾Also 【 ① could ② needed ③ cold and heat ④ astronauts ⑤ that ⑥ them ⑦ from ⑧ protect ⑨ suits 】 in space. And thanks to the space suits, firefighters can now wear much lighter and stronger suits against fire and smaller face masks they can easily carry.

Chris: I heard the *sight switch was originally developed for astronauts to control their spaceship (2)-b using their hands. And now people can turn on and off the switch by moving their eyes.

Naoko: I didn't know that was one of the spin-offs.

John: Yes, it was. And another spin-off is spacers.

Naoko: Spacers?

John: Yes, they were created for the shoes the astronauts wore to walk on the moon. Spacers are like air *cushions. If we wear the shoes with spacers, we don't get too tired. Now sports players and many people wear them. These shoes have become very popular.

Anne: How about *freeze-dried food?

Mr. Brown: Well, the idea of drying food is not really new. From the old times people dried food to keep it for a long time. In fact, many companies produced a lot of freeze-dried food. But NASA developed the skill to make food much lighter to carry in a space ship. When the food is freeze-dried, it becomes 80 percent lighter but keeps 98 percent of its *nutrition. And freeze-dried food is delicious.

Naoko: That's amazing.

Mr. Brown: Yes. Also, doctors and nurses at some hospitals are helped by spin-offs. One of them is the technology to check the conditions of sick people in bed on a computer at a nurses' station. This technology was developed to check astronauts' health conditions from the Earth. Well, we've talked a lot about spin-offs. Is there anything else you want to talk about before class ends?

Anne: Yes, Mr. Brown. I read a report in the newspaper which made me worried.

Chris:

Anne: It's about space pollution.

Naoko: Space pollution?

Anne: Yes, the newspaper said that we are actually destroying space by continuing to send rockets and *satellites into space. We are already polluting the Earth very much. Some people feel we shouldn't do the same thing to space. They worry that space pollution will only get worse as space exploration continues. We should think about this more as one of the members of the universe.

Naoko: You're right, Anne. I've never thought about that...

John: I heard some scientists are working hard on the technology to clean up space garbage. They are thinking about the way to pull down the garbage to a point toward the Earth, and to burn it there in a safe way.

Anne: We really are living in the age of science and technology, aren't we?

Mr. Brown: Yes, we are, Anne. Once a very famous British scientist said, “*Even if we don't like the *development of science and technology, one thing is clear. We cannot go back to the past.”

Chris: He is right. That is *civilization and development, isn't it?

Mr. Brown: Right. So next week, we'll talk about the development and civilization of society.

[問4] 次の(1)~(5)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) The Japanese explorer called *Hayabusa* .

- ア ran around Itokawa and found another life there
- イ gave us some information about another life in the universe
- ウ reached Itokawa with an astronaut to collect small stones
- エ was sent into space, reached Itokawa and gathered small stones

(2) John says it will be necessary .

- ア to find the way to travel to Mars by a Japanese spaceship
- イ to find another life with high level of technology on Mars
- ウ to have special knowledge of space travel to Mars
- エ to develop space technology to get more resources from Mars

(3) John says space exploration is not a waste of money because .

- ア it has brought many useful and helpful spin-offs to us
- イ it is a very important part of American history
- ウ we can develop the civilization of our society
- エ a famous American leader said we could give dreams to the children on the Earth

(4) When the food is freeze-dried, it is .

- ア lighter but not delicious
- イ lighter and has more nutrition
- ウ lighter but keeps almost all nutrition
- エ lighter but loses almost all nutrition

(5) Some scientists are working hard .

- ア because they have no idea about what causes space pollution
- イ to find the way to burn space garbage in a safe way
- ウ because they say space exploration is more important than protecting the Earth
- エ to send space garbage to Mars to find an answer to the garbage problem in space

〔問5〕 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 Mr. Brown says Americans are not interested in space any more because American astronauts landed on the moon.
- イ NASA says that it will reduce space exploration because many people say NASA is spending most of their government's money.
- ウ An American leader once said American people would need twenty billion dollars to help children on the Earth.
- エ An explorer made by the Japanese people returned to the Earth after it traveled in space for about seven years.
- オ Mr. Brown says space technology has developed technology on the Earth so much that Americans don't need to continue space exploration any more.
- カ At some hospitals, doctors and nurses are checking sick people's conditions on a computer with the information sent from their bed.
- キ Anne says now is the time to stop space exploration because we are polluting not only the Earth but also space.
- ク A British scientist once said that someday we could go back to the past thanks to the development of space technology.

〔問6〕 次の文章は、Naoko が授業を受けた後に書いた日記である。(a)～(e)の中にそれぞれ適切な英語 1 語を入れなさい。

Today we talked about space exploration in Mr. Brown's class. It was very exciting. Some Americans say (a) to space exploration. They point out that its (b) is very high. They are right at some points, but space exploration has produced many good things called spin-offs.

Many people both in Japan and America wear (c) with spacers. They are one of the spin-offs. Thanks to them, we can play sports without getting too tired.

If we have to (d) the Earth as John says, we need to prepare for the day. But I hope the day will never come.

I've never thought about space pollution. Some people say that it will get (e) if we keep sending rockets into space. Now we need to start thinking about not only the environment of the Earth but also the environment of space because we are one of the members of the universe.

Mr. Brown's class is very interesting. I cannot wait for the next class.

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次のページに進みなさい。

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。)

Alex was a first year student at high school in the USA. He enjoyed watching American football games on TV. His friends said that he should join the team, and he really wanted to join the team. But he thought he was not good at playing sports, and was not big like an American football player. When he talked about the football team with his parents, they were afraid that he could not do hard training.

Mr. Cooper was the *head coach of the football team at school and taught P.E. One Saturday afternoon, Alex came to his room and said, "I want to join the football team." Mr. Cooper said that Alex would have a hard time if ⁽¹⁾ he did so. Alex felt sad, but he asked Mr. Cooper to give him a chance. Mr. Cooper always thought that football was for everyone, so finally he told him yes.

On the opening day of practice in September, Alex came out to the field before anyone else. All the players *stretched for thirty minutes, and then they began to run two *miles around the track. Alex was in the back of the group, and soon his running became very slow. Mr. Cooper said to him, "Alex, why don't you stop running?" Alex said, "I only ran half a mile," and he almost began to cry. Mr. Cooper said that he could keep running, but Alex (2). So Mr. Cooper stopped him.

Alex could not finish running two miles for many weeks. During practice Mr. Cooper asked one of the coaches to take care of Alex. The coach gave Alex easier exercises than other players'. Alex tried as hard as he could, and Mr. Cooper began to have different feelings about Alex as a football player.

As practice went on, Alex played better and better and he began to think he could play a game. Now he laughed and *joked with his team members. Mr. Cooper felt many players began to see him as their little brother. They tried to help him as their teammate.

Just before the football season started in October, Alex ran two miles and finished with other teammates for the first time. But he did not play in any game, and the team won only one game that season.

After the season was over in January, Alex visited Mr. Cooper in his room. He said that he was proud of Alex. Alex said to Mr. Cooper, "Coach, I didn't play enough this season." Mr. Cooper answered, "I didn't want you to get injured." Alex said, "I understand why you didn't use me in the game, but I'd like you to use me next season. ⁽³⁾ 【① anything ② before ③ can ④ there ⑤ the next season ⑥ I ⑦ is ⑧ do】?" Mr. Cooper gave him a training program. Alex did not have any of Mr. Cooper's classes. So Mr. Cooper did not see him very often during the off-season. When he saw Alex, he always waved at him. He knew that Alex was training. He could see Alex was getting stronger.

Some weeks later in February, Alex visited Mr. Cooper again. He looked stronger and had a *tan. He said to Mr. Cooper, "Now I feel stronger, and I want to train harder. Your program has become too easy." Mr. Cooper laughed and said, "I'll add a few more exercises.

And why don't you run four miles, much longer than before?" He kept training very hard.

At the beginning of September, just before the season started, Alex ran two miles faster than anyone else. He did the exercises very well, so Mr. Cooper chose Alex as one of his starting members in the opening game in October.

The next Monday after they lost the opening game, Mr. Cooper talked to Dave about the game they lost. Dave was captain of the team and was the best player, but he did not make efforts to train himself. He told funny stories to his classmates and was popular at school.

The next day after practice, Dave noticed Alex was still training all by himself in the field. He said to Mr. Cooper, "Why is Alex still out there?" Mr. Cooper told Dave to ask Alex himself. Dave went to Alex and said to him, "Why are you still on the field?" Alex answered, ". I want to be a good player like you. You are my hero." Dave knew that the players had to practice more to win more games. The next day Mr. Cooper was surprised that Dave was training with Alex after practice was over.

A week later all the members were preparing for one of their biggest games, and practiced very hard. When practice was over, they were very tired. When they were leaving the field, Dave asked them to join more exercises together. Of course, Alex was also there.

The next Sunday the team played the important game. At the beginning they were losing, and some players were giving up. But Alex was not giving up, and Dave was not giving up, either. Both Alex and Dave were fighting very hard in high spirits in the game, and the team began to *come back. They won the game in the end.

Mr. Cooper chose Alex as the best player of that week. Alex not only played very well but also showed his teammates the fighting spirit of the team. They finished the season as one of the top teams in their city.

When the football season was over in January, there was a team meeting. The big *award went to the best player of each season *based on the point system. Though Mr. Cooper felt that he wanted to give it to Alex, he knew it was for Dave, the best player of the team. Mr. Cooper called Dave up on the stage to give it to him.

Dave said, "I'm very happy to receive this award and know what it means. But there is someone who *deserves it more than I do." All the team became silent. He continued, "With the help of a person, I did very well this season, and the team *accomplished everything." He turned toward Alex in the audience. Dave didn't know what to say. After a few moments he said, "Alex, you said that I was your hero. Now you .

Alex *encouraged his teammates to play harder, and his fighting spirit made the team stronger. This happened because Alex never gave up.

- 〔注〕 head coach 監督 stretch ストレッチをする
 mile マイル (1マイルは約1.6キロ) joke 冗談を言う
 tan 日焼け come back 盛り返す award 賞
 based on ~ ~に基づいて deserve 値する accomplish 成し遂げる
 hug 抱きしめる encourage 励ます

〔問1〕 ⁽¹⁾ he did so 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。4語で書きなさい。

he

〔問2〕 本文の流れに合うように、 (2) 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 kept running two more miles
- イ kept running faster than other members
- ウ stopped running and took care of other members
- エ could not run any more and started to walk

〔問3〕 ⁽³⁾ 【① anything ② before ③ can ④ there ⑤ the next season ⑥ I ⑦ is ⑧ do】?
 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。なお、文頭にくる語も小文字になっています。

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

〔問4〕 本文の流れに合うように、 (4) 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 My teammates told me to practice with them after usual practice
- イ We won the opening game and I want to win more games
- ウ We lost the game, so I want to practice more to win games
- エ I wasn't chosen as a starting member, so I need to practice more

〔問5〕 本文の流れに合うように、の中にどのような英語を入れるのがよいか。本文中の**連続する英語3語**で答えなさい。

〔問6〕 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 Alex liked American football very much, so he went to the head coach of the football team without talking to anybody about joining it.

イ When Alex joined the team for the first time, he came out to the field the earliest among the team members.

ウ One of Mr. Cooper's coaches gave Alex different exercises from other players' and those exercises were more difficult than the exercises other players did.

エ Alex couldn't finish running two miles even during the last week of practice in his first season and his team won only one game that season.

オ In February after the first football season finished, Mr. Cooper met Alex and found Alex wasn't training.

カ Dave was popular at school because he told jokes to other students and always trained himself very hard for football games.

キ The team was losing an important game at first, but won that game because Alex and Dave showed them the fighting spirit.

ク Alex played much better in an important game, so Mr. Cooper chose him as the best player of the season as well as the best player of the week.

〔問7〕 次の質問に対する答えを、**40語以上50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。

What kind of experience impressed you the most?

2
西

英

計