英 語

問題冊子2

「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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(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

Atsushi is a high school student. Five years ago, Mr. Smith came to Japan from Australia, and he taught English with Mr. Nagai, Atsushi's father. He stayed with them for one month. He has come to Japan again for his *research. He is now at Miyako-Chuo Station and is calling from there.

Atsushi: Hello, this is Atsushi Nagai. Who's calling, please?

Mr. Smith: It's me, John Smith. I'm *lost, Atsushi.

Atsushi: What? Wait a minute. Father is here. Father! Mr. Smith is on the phone.

Mr. Nagai: Hello, John. What's up?

Mr. Smith: I've just arrived at Miyako-Chuo Station from the airport, but I can't find your station, Fusumabashi Station, on the *railway map.

Mr. Nagai: Did you see the *notice about a change under the railway map?

Mr. Smith: I was *in a hurry, so I didn't notice it.

Mr. Nagai: Oh, I'm sorry. I forgot to tell you. The name of our station has changed *recently because of a new *bridge. It's called *Pearl Bridge Station now.

Mr. Smith: OK, so I couldn't find your station. Now I've found it. I'll call you again when I arrive.

Mr. Smith meets Atsushi and Mr. Nagai at Pearl Bridge Station. They start walking to Atsushi's house.

Mr. Nagai: I'm happy to see you again after a long time.

Mr. Smith: We haven't seen each other for five years. Atsushi has become taller and looks so *grown-up.

Atsushi: I'm seventeen years old.

Mr. Smith: Atsushi has changed so much, and this town has, too.

Mr. Nagai: The old bridge was used for a *century, but the new bridge was built two years ago, and it is a symbol of this town now. At night, it is *illuminated in pearl colors by *LED technology, so it's called Pearl Bridge. The name of our station was also changed to Pearl Bridge Station.

Atsushi: I like this cool name because it is good for the 21st century. Our town is *rapidly changing. It will be a more convenient place. You can see many new shops around the bridge and the station area, and you can get almost everything you want here.

Mr. Nagai: As you say, our lives are becoming more convenient. I grew up with the old

name of the station, so I like the old name better.

Atsushi: Oh, really? I think "Pearl Bridge Station" sounds cooler. I like the new name better.

Mr. Smith: I have the same feeling as your father. The name of a station is very important to the people living near it. For example, this area was famous for its good *fusuma. Once a lot of fusuma for rooms were made around this area and people came across the bridge to buy them.

Atsushi: Mr. Smith, you know the history of this area very well.

Mr. Smith: Yes, I do. I have studied the history of old Japanese towns.

Atsushi: I'm also becoming very interested in the history of my town, and I'm hoping to write a report about it for the next school newspaper.

Mr. Nagai: That is a good idea.
Mr. Smith: Good luck, Atsushi.

Mr. Smith. Good fuck, Atsusiii.

Atsushi: Thank you. I'm feeling good about the old name now.

「注〕 research 調査 lost 道に迷った railway 鉄道 notice 掲示 in a hurry 急いで recently 最近 bridge 橋 pearl 真珠 grown-up 成長した century 世紀 illuminate 照らす LED technology LEDの技術 rapidly 急速に fusuma 建具のふすま

- [間1] Oh, I'm sorry. とあるが、この理由を最もよく表しているものは、次のうちではどれか。
 - 7 Mr. Nagai can't find his station on the railway map.
 - 1 Mr. Nagai is now at the wrong station and can't meet Mr. Smith.
 - ウ Mr. Nagai has forgotten that Mr. Smith is coming to his house.
 - I Mr. Nagai hasn't told Mr. Smith about the new name of his station.
- [問2] it is good for the 21st century とあるが、この内容を最もよく表しているものは、次のうちではどれか。
 - The new name goes well with our convenient lives now and in the future.
 - 1 The new name gives people a good chance to understand the history of pearls.
 - フト The new name tells us about good points of LED technology in the 21st century.
 - If The new name makes the town famous for its *fusuma* and pearls.

[間 3] I have the same feeling as your father. 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。最も適切な連続する3語を
本文中から抜き出せ。
I like of your station, too.
[間4] That is a good idea. とあるが、このときの Mr. Nagai 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。
It is good for Atsushi to learn more about and write a report about it
for the next school newspaper.
ア LED technology
1 Japanese bridges
ウ the history of his town
I how to make good fusuma
〔問 5〕 次の質問に対する適切な答えとなるように、Because に続けて英文を完成させよ。
(Question) Why does Mr. Smith know the history of Atsushi's town very well?
(Answer) Because (
〔問6〕 本文の内容と合っているものを、次のア~カの中から一つ選べ。
When Atsushi got the phone call from Mr. Smith, Mr. Smith was calling from the airport.
1 Mr. Smith and Atsushi have known each other for seventeen years.
ウ Pearl Bridge is illuminated by LED technology all day during the summer.
I At first, Atsushi liked the new name of the station better, but now he is
changing his mind.
★ The new name of the station comes from <i>fusuma</i> and the colors of the old bridge.
カ Mr. Smith doesn't think changing the name of the bridge is necessary because
he lived in Atsushi's town for a long time.
ne nived in ricodom o town for a long time.

- 3 次の文章を読んで、あとの各間に答えよ。なお、(1)~(7) は段落の番号を表している。 (* 印の付いている単語・語句には、本文のあとに〔注〕がある。)
 - What is an *aging society? In an aging society, the *percentage of the people who are 65 years old *and over is 7% and over. Today, Japan is "an aging society." In 2010, the 3 top countries with the highest percentage were Japan (23%), *Italy (20.4%), and Germany (20.4%). The number of people in Japan was about 127 million, in Italy about 60 million, and in Germany about 82 million. Each country is *democratic and has a long history, and many other aging societies are also democratic.
 - In Japan the percentage grew from 7% to 14% in only 24 years (1970 to 1994)! This is the fastest in world history. In France the percentage reached 7% in 1865 and grew to 14% in1979. It took 114 years! Even in Germany the percentage grew from 7% to 14% in 42 years (1930-1972). In such aging societies, health care is very important now. In the future it will be more important because there will be more aging societies in the world. In 2000, 7% of 6 *billion people in the world were 65 years old and over. In 2050, 16% of 9 billion people will be 65 years old and over. Then how will health care change in the future?
 - (3) First, let's look at our life today. More and more people are using smart phones in many ways. A smart phone will be useful for health care, too. With it we can get many kinds of information about health. In the future we will easily check our *body temperature, *blood pressure and many other things with our smart phone, and send the information to hospitals' or doctors' computers. Doctors will keep all the *data for a long time and always choose the best medicine when we need it. They will see us through the camera of our smart phone or computer. People who live far away from a hospital won't go to the hospital to see a doctor when they are sick. They won't wait for a long time at a hospital. All the data about *patients will be kept in computers and shared by other doctors. Doctors won't see patients' data on paper. There will be a new system. In the system we will always get care and information about our health 24 hours a day, 7 days a week. Several doctors will make a group, and do the jobs together.
 - (4) Now many kinds of robots are doing many kinds of jobs in many parts of the world. Many robots are already used in hospitals. Often they help doctors with their work. When robot arms *operate on patients, doctors *control the robot arms by *remote control. Robot arms can usually operate better than doctors. They can operate faster than doctors and make almost no mistakes. In some countries, doctors began to use such robots more than ten years ago. In the future in many countries, more robots will do more difficult jobs faster and better than now.
 - (5) Also in the future, very small machines with cameras on them will go through the blood in our body. Doctors will use the machine by remote control. Doctors will see inside of our body with it. When doctors find sick parts, they will send a very small

machine to bring medicine to the sick parts, or doctors will use the machine to cut them out. Doctors won't have to cut patients' bodies to operate on them. In the future doctors will *cure some of the *diseases which are very difficult to cure now. Many lives will be saved by robots and very small machines. Robots and very small machines are studied and made by us, humans.

- *iPS cells were first produced in 2006 from mouse *cells and in 2007 iPS cells were produced from human cells by Shinya Yamanaka's team at Kyoto University. In October 2012, Yamanaka got the *Nobel Prize in Physiology or Medicine. That was good and exciting news for Japan and for many other countries in the world, too. iPS cells can be made from human's cells. iPS cells can *divide into many kinds of cells and be every part of a human body. If doctors can take cells from patients and make iPS cells without problems, doctors can make every part of a body. A lot of patients can use it and a lot of lives all over the world will be saved, so many doctors and scientists are trying to find the right way to do this.
- Doctors can also use iPS cells to study diseases that are very difficult to cure. They take cells from the patients themselves and make the sick parts with iPS cells. Doctors can study the parts, and find the best way or the best medicine to cure the diseases. Doctors think that they can do a lot of great things with iPS cells. However, there are some problems when doctors use iPS cells. When they put iPS cells into a human body, they may cause *cancer, so doctors and scientists have to study hard to stop this. Health care in the future will give us not only good things but also some problems. Even robots may sometimes make a mistake. Someone may also get patients' data from doctors' computers. We always have to be careful about health care in the future and think about its problems together. A smart phone, a computer, a robot, a very small machine, and iPS cells are all made and used by us, humans.

〔注〕 aging society 高齢化社会 percentage 百分率 and over ~以上 Italy イタリア democratic 民主主義の billion 10 億 blood pressure 血压 body temperature 体温 data データ patient 患者 control 操作する operate 手術する cure 治療する remote control 遠隔操作 iPS cells iPS細胞 (誘導多能性幹細胞) disease 病気 cell 細胞 Nobel Prize in Physiology or Medicine ノーベル生理学・医学賞

cancer がん

divide into ~ ~に分裂する

〔問1〕(1),(2)の段落の内容に一致するものを、次のア~オの中から一つ選べ。

- T In an aging society, 7% and over of the people are 65 years old.
- 1 There are more people who are 65 years old and over in Italy than people who are 65 years old and over in Germany.
- ブ Japan needed only 24 years to become an aging society. It is the fastest in world history.
- In France the percentage of the people who are 65 years old and over grew from 7% to 14% in 114 years. In Germany it took more years.
- オ Health care is more important in the future because there will be more people who are 65 years old and over in the world.

〔問2〕 本文の内容に合うように、次の空所に入る算用数字を答えよ。

In 2050 there will be () billion more people in the world than people in 2000.

〔問3〕(3)の段落の内容に一致するものを、次のア~オの中から一つ選べ。

- Today the number of the people who are using smart phones is growing. Most of them are using their smart phone just as a phone.
- 1 In the future we can use our smart phone in more ways in health care.
- Doctors will get a lot of information about the patients by using smart phones and computers. Patients will go to the hospital to see the doctors when they are sick as we do now.
- I Doctors will keep their patients' data in their computers and can always see the data, but other doctors won't see them.
- オ In the future doctors will make a new system. They will make a group, get information and take care of the patients from Monday through Saturday.

[間4] (4), (5) の段落の内容に一致するものを、次のア~オの中から一つ選べ。

- P Robot arms can operate on patients better than human doctors in many cases, and robot arms can do it alone without human doctor's help.
- 1 In the future doctors will operate and do more difficult jobs themselves much faster and better than now.
- ウ A very small machine will not only bring medicine to the sick parts but also cut them off.
- I Doctors will cut only small part of the patients' body if they operate on the patients with very small machines.
- オ In the future there will be no diseases that are very difficult to cure if doctors can use robots and very small machines.

[問5] (6), (7) の段落の内容に一致するものを、次のア~オの中から一つ選べ。

- The first iPS cells from human cells were produced in 2006 by Shinya Yamanaka's team at Kyoto University.
- 1 Doctors can take cells from patients and make iPS cells without problems now, so they can make every part of a body.
- Doctors take sick parts from the patients and make sick parts with iPS cells. After doctors study the sick parts, they put the sick parts into the body.
- When doctors put iPS cells into a human body, they have to be very careful, because there is a problem iPS cells may cause cancer.
- → Only doctors and scientists always have to be careful about health care in the future and think about its problems together.

〔問 6〕	次の文章は本文の内容について書かれたものである。	A	٤	В	に
本	文の内容に即した適切な語句を本文中から探して書け。				

There will be more aging societies in the world in the future, so health care will be more important than now. We will send many kinds of data to doctors with a A , so we won't go to see a doctor. Robots will help doctors with their work. Robots will do more difficult jobs faster and better than now. In the future doctors will bring medicine to the sick parts, or cut them off with a very small machine. iPS cells made from human's cells can divide into many kinds of cells and be B of a human body. If a lot of patients can use it, a lot of lives all over the world will be saved. However, there are both good things and some problems with health care in the future. We always have to be careful about health care in the future and think about its problems together.

Kenji was a first-year high school student and a member of the soccer club. He studied hard and practiced soccer hard. He was very busy, but sometimes he worried about his future. He didn't know what to do in the future. "Why am I studying?" "Why should I go to college?" He sometimes asked himself these questions again and again in bed at night.

Kenji was going to go to a *nearby elementary school with his teachers and classmates for three days during the summer vacation. He was going to teach *arithmetic to the students there as a volunteer. He had a cousin and sometimes taught him, so he was looking forward to it.

On the first day of the volunteer work, Kenji taught arithmetic to the fourth-grade students. There was a new student. His name was Makoto. His family came to this city four months ago. Makoto was very *shy and talked only a little. He was sitting alone in the corner of the classroom. Kenji said to one of the boys, " (2-a) " The boy answered, "He is a new student. We tried to talk to him some times, but he was shy. So he usually sits alone like that."

Kenji felt *concerned and went to Makoto. He said, "We are studying arithmetic together. Why don't you join us?" Makoto answered, "I don't like arithmetic, so I don't want to study it." When Kenji heard this, he took out his *tablet computer and *searched for an *arithmetic game. He [Makoto/play/the/how/showed/game/to]. It was a game with comic book characters. He brought the computer with him for a student like Makoto. Makoto didn't look interested in the game at first. But when he started to play it, soon he became interested in it. Makoto asked Kenji some questions about the game when he didn't understand. When Makoto finished the game, he said, "I have never thought arithmetic games are so exciting." "If you study harder, you'll understand arithmetic better," Kenji answered. Soon they discovered they both liked soccer very much, and talked about it. Makoto felt very happy for the first time since he came to this school. He said to Kenji, "I had a very good time today. Please come again tomorrow."

When Kenji was leaving the school, Makoto's *homeroom teacher came to him and said, "Makoto talked so much. I have never seen him like that. You gave him something very important. Thanks to your help, he will change." Kenji was glad to hear this, and learned that Makoto came to this city just four months ago. Kenji hoped to do something for Makoto.

On the second day Kenji went to Makoto's class again. This time Kenji gave more difficult arithmetic problems to the students and said, "Make some groups and try to *solve the problems together. (2-b) The group that can solve all the problems first will be the *winner." He saw Makoto. Makoto was trying to solve the problems with the other boys. Kenji was glad to see them because Makoto needed friends who could talk and work with him. Makoto's homeroom teacher was also glad, and told Makoto to do his best.

Makoto's group finished first and the answers were all *correct. "Makoto's team is 5 !" said Kenji. Makoto said, "We solved the problems together, but Hiroshi and I did most of them." Makoto introduced Hiroshi to Kenji. They talked together after that, and Kenji and Makoto learned that Hiroshi was a member of a local soccer club. During the *lunch break they played with a soccer ball. Hiroshi was very good at playing soccer, and Kenji was surprised to find that Makoto could play as well as Hiroshi. Kenji said to Makoto, "You are a very good player! (2-c) " "I like soccer very much, so my father bought me a soccer ball. I play with it when I have time," Makoto answered. "Why don't you join our soccer club? You can be a *regular member if you try hard," said Hiroshi. Makoto was very glad to hear that, and said to Hiroshi, "I will ask my father."

On the last day Makoto studied arithmetic with the other boys. Kenji was walking around the class, and answered questions when he was asked. During the lunch break Makoto, Hiroshi, and some of the other boys played with a soccer ball. When Makoto's homeroom teacher saw them, he said to Kenji, "I never imagined this. Makoto changed a lot in just a few days! Thank you very much, Kenji-san. (2-d) "Kenji answered, "I really want to say thanks to them from myself." "What do you mean?" said the homeroom teacher. Kenji answered, "Thanks to them, I found what I should do in the future. I want to do something for other people, like a teacher's job."

「注」 nearby 近くの arithmetic 算数 shy 内気な concerned 心配して tablet computer タブレット型コンピューター search for ~ ~を検索する arithmetic 算数の homeroom teacher 学級担任 solve 解く winner 勝者 correct 正解の lunch break 昼休み regular レギュラーの

- (問1) He sometimes asked himself these questions again and again in bed at night. とあるが、この理由を最もよく表しているものは、次のうちではどれか。
 - Kenji was very busy, because he studied hard and played soccer hard. He didn't know what to do at school the next day.
 - Kenji didn't like to study hard. He sometimes wanted to know how to spend an easy school life.
 - ウ Kenji sometimes taught his cousin. His cousin was glad, but Kenji didn't like teaching very much.

[問2] (2-a) から (2-d) の中には、それぞれ次の(A)~(D) のうちのいずれかの文が入る。それぞれに入る文を並べた組み合わせとして正しいものは、次のうちではどれか。

- (A) You did a good job for Makoto.
- (B) This is a kind of game.
- (C) Why is he sitting alone there?
- (D) How did you learn soccer?
- ア (2-a)(A), (2-b)(C), (2-c)(D). (2-d)(B) (2-b)1 (2-a)(C), (B), (2-c)(A), (2-d)(D) ウ (2-a)(C), (2-b)(B), (2-c)(D), (2-d)(A) I (2-a)(B), (2-b)(C), (2-c)(A), (2-d)(D)
- [問3] He【Makoto/play/the/how/showed/game/to】. について、本文の流れに合うように【 】の中の語を正しく並べかえよ。
- [問 4] Kenji was glad to hear this, とあるが、この理由を最もよく表しているものは、次の (4) うちではどれか。
 - 7 The homeroom teacher said Kenji was a very good soccer player.
 - 1 The homeroom teacher said Makoto would change by Kenji's volunteer work.
 - ウ A lot of students were able to study arithmetic very well and played soccer with Kenji.

〔問5〕	5	に入る最も適切な2語を本文中から抜き出せ
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- 〔問6〕 本文の内容に合うように、アーカの英文を起こった順序に並べかえよ。ただし、エが 4番目にくるものとする。
 - In the group work Makoto met Hiroshi. They played with a ball with Kenji. Hiroshi said to Makoto, "Why don't you join our soccer club?"
 - 1 On the last day Makoto studied arithmetic and played with a ball with some of the other boys in the class. Kenji felt happy to see them and found what he should do in the future.
 - ウ Kenji spent a very busy school life. He was going to do volunteer work at an elementary school.
 - I Makoto became interested in the arithmetic game and got excited. He and Kenji talked after the game and Makoto felt very happy.
 - オ Kenji searched for an arithmetic game on his tablet computer. Kenji showed it to Makoto.
 - カ In the fourth-grade students' class at the elementary school, Kenji met Makoto. He was sitting alone in the corner.
- [問7] Makoto は Hiroshi の所属するクラブに入ることになり、その報告と夏休みのボランティアのお礼の手紙を Kenji に送ろうと考えた。Makoto の立場になって 25 語以上の英文で書け。二つ以上の英文になってもかまわない。なお、「,」「.」などは語数に含まない。短縮形は 1 語と数える。

Hi,Kenji.	d)	
		Makoto