

英 語 問 題 紙

令和 7 年 2 月 25 日

自 9 : 00

至 10 : 20

答 案 作 成 上 の 注 意

1. 英語の問題紙は 1 から 16 までの 16 ページである。
2. 解答用紙は ① から ② までの 2 枚である。
3. 解答はすべて解答用紙の指定された箇所に書くこと。
4. 問題紙と草案紙は持ち帰ること。
5. すべての解答用紙に受験番号を記入すること。受験番号が記入されていない解答用紙は、答案が記入されていても採点の対象外となる。

1 以下の英文を読み、問いに答えなさい。

The art of persuasion is one of the most crucial business skills. Without the ability to persuade others to support your ideas, you won't be able to attract the support you need to turn those ideas into realities. And though most people are unaware of it, the ways you seek to persuade others and the kinds of arguments you find persuasive are deeply rooted in your culture's philosophical, religious, and educational assumptions and attitudes. Far from being universal, then, the art of persuasion is one that is profoundly culture-based.

That was the hard lesson learned by Kara Williams, an American engineer newly working as a research manager for a German firm in the automobile industry. As one of the leading experts in her field Williams had extensive experience presenting recommendations and influencing her American colleagues to follow her ideas. But when Williams began working in a German environment she didn't realize that being persuasive would require a different approach. "When I think back to my first presentation to my new German bosses, I wish I had understood the difference and hadn't let their feedback get under my skin. [A] ."

1)

Williams delivered her presentation in a small hall with the directors seated in rows of chairs. She began by getting right to the point, explaining the strategies she would recommend based on her findings. But before she had finished with the first slide, one of the directors raised his hand and protested, "How did you get to these conclusions? You are giving us your recommendations, but I don't understand how you got here. How many people did you interview? What questions did you ask?"

Then another director jumped in: "[B] ."

"I was taken aback*," Williams remembers. "I assured them that the methodology* behind my recommendations was sound, but the questions and

challenges continued. The more they questioned me, the more I got the feeling that they were attacking my credibility*, which puzzled and annoyed me. I have a Ph.D. in engineering and expertise* that is widely acknowledged. Their effort to test my conclusions, I felt, showed a real lack of respect. ²⁾ What arrogance to think that they would be better able to judge than I am!"

Williams reacted defensively, and the presentation went downhill from there. "I kick myself now for having allowed their approach to derail* my point," she says. " C , and three months of research time went down the drain."

³⁾ The stone wall Williams ran into illustrates the hard truth that our ability to persuade others depends not simply on the strength of our message but on how we build our arguments and the persuasive techniques we employ.

Jens Hupert is a German director at the company Williams worked for. Having lived in the United States for many years, he had experienced similar failures at persuading others, though the cultural disconnect ran in the opposite direction. Hupert recalled the problems he'd had the first few times he tried to make a persuasive argument before a group of his American colleagues. He'd carefully launched his presentation by laying the foundation for his conclusions, setting the guidelines, outlining his data and his methodology, and explaining the basis of his argument. He was taken aback when his American boss told him, " D ."

Hupert was unsure. "These are intelligent people," he thought. "Why would they swallow my argument if I haven't built it carefully for them ⁴⁾ from the ground up?"

The opposing reactions that Williams and Hupert received reflect the cultural differences between German and American styles of persuasion. The approach taken by the Germans is based on a specific style of reasoning that is deeply rooted in the culture.

Hupert's time in the United States taught him that Americans have a very

different approach. They focus on practicalities rather than theory, so they are much more likely to begin with their recommendations. Unfortunately, this reasoning method can have the opposite effect when making presentations to an audience whose method of thinking is the opposite — as Kara Williams discovered.

Principles-first reasoning (sometimes referred to as *deductive reasoning*) derives conclusions or facts from general principles or concepts. For example, we may start with a general principle like “All men are mortal.” Then we move to a more specific example: “John Smith is a man.” This leads us to the conclusion, “John Smith will, eventually, die.” Similarly, we may start with the general principle “Everything made of copper conducts* electricity.” Then we show that the old statue your grandmother left you is 100 percent copper. Based on these points, we can arrive at the conclusion, “Your grandmother’s statue will conduct electricity.” In both examples, we started with the general principle and moved from it to a practical conclusion.

On the other hand, with *applications-first reasoning* (sometimes called *inductive reasoning*), general conclusions are reached based on a pattern of factual observations from the real world. For example, if you travel to my hometown in Minnesota one hundred times during January and February, and you observe every visit that the temperature is considerably below zero, you will conclude that Minnesota winters are cold (and that a winter visit to Minnesota calls for a warm coat as well as a scarf, wool hat, gloves, and ear warmers). In this case, you observe data from the real world, and, based on these observations, you draw broader conclusions.

Most people are capable of practicing both principles-first and applications-first reasoning. But your habitual pattern of reasoning is heavily influenced by the kind of thinking emphasized in your culture.⁵⁾ As a result, you can quickly run into problems when working with people who are most accustomed to other modes of reasoning.

In business, as in school, people from principles-first cultures generally want to understand the *why* behind their boss's request before they move to action. Meanwhile, applications-first learners tend to focus less on the *why* and more on the *how*. One of the most common frustrations among French employees with American bosses is that the American tells them what to do without explaining why they need to do it. From the French perspective, this can feel demotivating, even disrespectful. By contrast, American bosses may feel that French workers are uncooperative because, instead of acting quickly, they always ask “Why?” and are not ready to act until they have received a suitable response.

Meyer, Erin. 2015. *The Culture Map*. PublicAffairs. (一部改變)

NOTES*

taken aback: shocked

methodology: set of methods

credibility: reliability or believability

expertise: knowledge or skills

derail: to undo or weaken

conduct: to transmit

問 1. 下線部 1), 3), 4) の意味として, 最も適切なものをそれぞれ 1 つ選び, 数字で答えなさい。

1) get under my skin

① assist me

② irritate me

③ trust me

④ understand me

3) went down the drain

① was missed

② was rewarded

③ was used

④ was wasted

4) from the ground up

① from the beginning

② from the earth

③ from the idea

④ from the work

問 2. 空欄

A

 ~

D

 に当てはまる最も適切な文を以下から 1 つ選び数字で答えなさい。

① If I had held my cool I might have been able to salvage* the situation

② In your next presentation, get right to the point. You lost their attention before you even got to the important part

③ Needless to say, they did not approve my recommendations

④ Please explain what methodology* you used for analyzing your data and how that led you to come to these findings

NOTES*

salvage: to save

methodology: set of methods

問 3. 下線部 2) について、なぜ Williams 氏はそのように感じたのか。本文に即して日本語で説明しなさい。

問 4. 下線部 5) について、具体例を示しながら、本文に即して日本語で説明しなさい。

問 5. 以下の A, B について：

問 5 の問題を削除

① それぞれが本文で述べられている principles-first reasoning か applications-first reasoning かを選び、解答欄を○で囲みなさい。

② ①に即して下線部に適切な英語を書き入れ、それぞれの英文を完成させなさい。

A In Japan, the age of adulthood is 18. Masato is 20. Therefore,
_____.

B Yumi ate icecream three times last week and became sick about two hours later each time. _____. She will probably feel sick in about an hour.

問 6. 本文中で、アメリカ人の上司とフランス人の部下はなぜお互いに不満を抱いているのか、それぞれについて日本語で説明しなさい。

Whether you call it the five-second rule, three-second rule, or the _____-second rule, you know what this rule is. Someone drops a tasty piece of food on the ground and scoops it right back up, declaring that, according to the “rule,” there was no time for the bacteria to attach to the treat. As usual, the history of this idiom is a little more complicated than that, and the science is, too. Is there any scientific validity to the five-second rule?

The five-second rule as we know it today has unclear origins. The book *Did You Just Eat That?* by food scientist Paul Dawson and food microbiologist* Brian Sheldon traces the origins to legends around Genghis Khan. The Mongol ruler is rumored to have implemented the “Khan Rule” at his banquets. “If food fell on the floor, it could stay there as long as Khan allowed,” write Dawson and Sheldon. The idea was that “food prepared for Khan was so special that it would be good for anyone to eat no matter what.”

“In reality,” they write, “people had little basic knowledge of microorganisms* and their relationship to human illness until much later in our history. Thus, eating dropped food was probably not taboo before we came to this understanding. People could not see the bacteria, so they thought wiping off any visible dirt made everything fine.”

Roughly six centuries after Khan’s death, germ theory evolved into, as the *Encyclopedia Britannica* writes, “perhaps the overarching* medical advance of the 19th century.” Researchers determined that tiny, invisible microorganisms caused certain diseases and infections — and French chemist Louis Pasteur proved that those same kinds of microorganisms are behind both wine fermentation* and the souring of milk. But despite knowing that germs are everywhere, it can still be tough to walk away from a tempting treat that slipped through one’s fingers.

We see the rule pop up once again in a 1963 episode of Julia Child’s

cooking show *The French Chef*, which may have helped spread the attitude, if not the phrase, into popular imagination. The famous chef attempted to flip a potato pancake in a pan, but she missed, and the pancake landed on the stovetop.

“When I flipped it, I didn’t have the courage to do it the way I should’ve,” Child said. “But you can always pick it up if you’re alone in the kitchen. Who is going to see?”

The flopped pancake sat on the stovetop for about four seconds before Child tossed it back into the pan, but by the time the phrase began to become more common and appear in print, people decided for themselves the exact amount of acceptable seconds. According to the *Oxford English Dictionary*, the first mention in print of some sort of rule came from the 1995 novel *Wanted: Rowing Coach*, which referenced a “twenty-second rule.” A few years later, in the 2001 animated film *Osmosis Jones*, a character follows the “ten-second rule” and eats a contaminated egg, which sends his body’s immune system* into chaos.

Robyn Miranda, a Ph.D. candidate in food science at Rutgers University, published a study in *Applied and Environmental Microbiology* with her adviser that scientifically investigated the validity of the five-second rule.

“It was not what I expected to do for my master’s,” she says. “We saw this as a really important opportunity to look at this rule that people truly follow, that consumers really use. So, let’s see if this matters, from a public health standpoint.”

Miranda stocked up on four different food types: watermelon, bread, bread and butter, and gummy candy. Then, she carefully dropped each food onto one of four surfaces typically found in kitchens — stainless steel, tile, wood, and carpet — and let each food item sit for exactly less than a second, five seconds, 30 seconds, and five minutes to measure bacterial transmission. Miranda and a team of undergraduates did 20 tests of each food, on each

surface, for each length of time, over the course of six months. “I’m not going to lie; doing the experiments lost its luster* after a while,” she says. “But the results were very interesting.”

Long story short, says Miranda, longer contact times did result in transfer of more bacteria, though there were also times when the transfer was instant. Watermelon’s high moisture content made it an easy target for bacteria to attach to it from the surface, and it had the highest rate of contamination.

On the other hand, the gummy candy had the lowest. The gummies puzzled Miranda and her team, who guessed its stickiness would pick up more bacteria. They consulted a physical chemist, who said it was possible that some sort of interaction of the acidity of the gummy was rejecting the bacteria.

When it came to surfaces, carpet had a very low rate of transfer compared to stainless steel. It was likely because carpet has narrow gaps, they determined, and the bacteria would fall and sit underneath the surface while the food sat on top. “It’s science,” Miranda says. “Everything depends.”

While microorganisms are to blame for infections, not all bacteria are created equal.

“We carry four pounds of bacteria around with us on our bodies all the time,” Paul Dawson tells *Science Friday*. “And we have more bacterial cells in and on our body than we have our human cells — so we’re kind of in symbiotic relationship* with it. And we’re more and more finding they are part of our health, the delicate balance there, so to speak.”

There is some truth to the idea that exposure to certain bacteria can help build immunity, says Dawson. But we also know that people can become seriously sick from certain infections, so random exposure may not be the best practice. Dawson compares eating food off the floor to wearing a seatbelt: “You probably could do both of those your whole life and never be injured or get sick, but we know with the seat belt that if you have an accident or there is bacteria there, you’re going to be exposed to it.”

“Speaking specifically about the five-second rule and when eating food off the floor, probably in reality there’s not much risk in that,” he says. “But I don’t know if there’s much to be gained either though, as far as immunity.”

But often, it’s not immunity that’s the focus of people’s minds when a piece of food hits the floor.

“I don’t eat food off the floor, but I also don’t drop food on the floor,” says Robyn Miranda. “But if I [did], it would depend.” Watermelon? No way, she says. Skittles*? Maybe. “I guess you’d be surprised what people will do for a food that they care about.”

Mayer, J. 20 February 2019. The Origin Of ‘The Five-Second Rule’

<https://www.sciencefriday.com/articles/the-origin-of-the-five-second-rule/>

NOTES*

microbiologist: a person who studies objects such as viruses and bacteria that are too small to be seen by just the human eye

microorganism: an organism that is too small to be seen by just the human eye

overarching: very important because it affects many things

fermentation: a process of chemical change in which the sugar in food or drink turns into alcohol

immune system: a system in our body that helps protect us from diseases

luster: attractiveness or appeal

symbiotic relationship: a relationship between organisms that are equally dependent on each other

Skittles: small, round, fruit-flavored candies

問 1. 筆者の考えと一致するものを以下から 1 つ選び、数字で答えなさい。

- ① A mistake made by the chef Julia Child on her cooking show in the early 1960s may have had a major role in the “_____ -second rule” gaining popular public acceptance.
- ② Paul Dawson suggests that eating food that has fallen to the floor within five seconds is usually risky but at the same time helps strengthen one’s immunity.
- ③ The character in an early 1990s film had no negative reaction to eating food covered with germs because he ate it within 10 seconds after it had been dropped to the ground.
- ④ The first mention in print of a rule concerning the time limit in which food could be eaten after it was dropped to the ground appeared in the *Oxford English Dictionary*.

問 2. 下線部 1) はどのようなものか。具体的に日本語で説明しなさい。

問 3. 以下の①, ②の文を例にならい、本文と一致する内容となるように全文を書きかえなさい。

例：(誤) According to Paul Dawson, people carry forty pounds of bacteria on their bodies all the time, but have more human cells in their bodies than bacterial cells.

(正) According to Paul Dawson, people carry *four* pounds of bacteria on their bodies all the time, *and have more bacterial cells in their bodies than human cells*.

- ① In the early 1900s, French chemist Louis Pasteur proved that microorganisms that caused diseases were all different from those responsible for the souring of milk.
- ② Robyn Miranda says that she often drops food and is much more likely to eat watermelon that has fallen to the floor than Skittles.

問 4. 以下は本文中の実験に関する「まとめ」の一部である。空欄に本文に即して
適当な語句を記して英文を完成させなさい。

Short summary of an experiment examining the validity of the 5-second rule

Over a period of (1), an experiment was conducted in which four different types of foods were dropped onto four different types of kitchen surfaces, and left in place for four different lengths of time. Overall results indicated that usually greater amounts of bacteria were transferred to foods that had a (2) contact time with surfaces. Surprisingly, gummies had a (3) rate of contamination than what the researchers had expected. In contrast, (4) had the highest rate. Concerning surfaces, carpets had a much lower rate of transfer than (5).

問 5. 以下の問を読み、自分の言葉で 60 語以上の英語で答えなさい。

Your friends have brought you a cake they made for your birthday. Unfortunately, one of them drops it just before handing it to you. If the cake is picked up from the floor within five seconds, do you think you might still eat it? **In your own words**, explain what you would probably do and why.

問 6. 本文の内容に沿った対話になるように空欄(1)~(10)をうめなさい。なお、空欄(1), (2), (5), (7)~(10)については、①~⑩の選択肢から最も適切なものを1つ選び、数字で答えなさい。また、空欄(3), (4), (6)については、適当な語句を記して英文を完成させなさい。

Ichika: Hey Koharu, what's going on? Did I see you (1) your dog just now?

Koharu: I'm afraid so. I'm not happy with him right now.

Ichika: No? What did he do?

Koharu: Well, we were just returning home from our morning walk. I always like to bring dog biscuits with me during these walks and I'll give two or three of them to Romi if he's behaving (2), like not barking or trying to chase other dogs.

Ichika: That's nice of you. So what happened?

Koharu: Okay, so just a few moments ago, he saw a squirrel and immediately pulled so hard on his leash that I tripped and nearly (3) balance. When that happened, a few of the biscuits fell out of my bag onto the ground and Romi ate them.

Ichika: Why's that a problem? Sounds smart to me. I have a dog too and I know those treats can be expensive. It seems like he didn't want the money to go to waste.

Koharu: What? That's not really the main problem. I'm mad because Romi ate something off the ground.

Ichika: Oh. I see. (4) were the biscuits on the ground before he ate them?

Koharu: I'm not sure but probably not more than one or two seconds.

Ichika: Ah, well then, no problem. Five-second rule.

Koharu: Excuse me?

Ichika: Five-second rule. I'm sure you know it. If you accidentally (5) something on the floor or ground, it's still okay to eat as long as you (6) up within five seconds.

Koharu: Oh, I know the rule but does anyone actually believe it? I don't think there's much logic to it. The ground isn't clean. There are germs, bacteria and who knows what else.

Ichika: I know that. That's why you need to be (7) and get it off the ground within five seconds.

Koharu: I don't think it works like that. I've actually read an article about this. According to the article, at least in some cases, it doesn't matter if it only takes you one second. Once the food hits the ground, it's contaminated. And probably not just the ground outside. I'm sure that's also true if you drop something on the floor in your house.

Ichika: Are you saying my house is (8) ?

Koharu: What? No, that's not what I mean. I'm saying that no matter how clean a place is, there are always going to be germs and bacteria on the floor.

Ichika: Well, I follow the five-second rule all the time. So why haven't I ever gotten (9) if what you say is true? And look at Romi — he seems fine right now.

Koharu: If I understood it correctly, the article suggested our bodies are often (10) enough to fight off the ill effects the bacteria could cause. But not always, and some people may have a weaker immune system than others, so why risk it? I'm sure Romi will be okay, but eating food from the ground is not something I want to become a habit with him.

Ichika: Okay. I can understand that. You're probably right. Like they always say, better safe than sorry.

選択肢

① above

④ cleaner

⑦ drop

⑩ make

⑬ quick

⑯ sick

⑲ unable

② badly

⑤ cool

⑧ eat

⑪ oldest

⑭ scolding

⑰ slow

⑳ weakest

③ best

⑥ dirty

⑨ health

⑫ praising

⑮ shouting

⑱ strong

㉑ well

Blank lined paper for drafting.

