51 以下の英文を読んで問に答えなさい。(明治大・理工学部 2019)

Growing up in Australia, Jessica Watson and her siblings weren't homeschooled. They were boat-schooled. When Jessica was in the fifth grade, her parents bought a fifty-two-foot boat, packed the kids on board, and set off on what became a five-year-long adventure around the coast of Australia. Jessica was a quiet girl, but underneath her shy exterior, an adventurous spirit was blossoming. During the trip, she learned about the sailor Jesse Martin, who sailed around the world by himself in 1999 when he was only eighteen years old. (A)Martin's story shook Jessica to her core. Even at her young age, she knew that this kind of journey was for her. She too wanted to sail around the world. And she wanted to do it alone.

At first, Jessica kept her dream to herself. Who would [1] it seriously? But she secretly started researching what's known as solo sailing, learning everything she could about the difficult (2)art of piloting a sailboat without help. She pictured what it would be like to be caught in a perilous storm on the open sea. What would such danger feel like? Would she be up for the challenge? Could she manage being alone for an entire lap around the earth? She turned herself into an expert on weather, navigation, and equipment. The more she researched and daydreamed, the more confident she felt that she'd be able to handle whatever Mother Nature threw her way.

Jessica was determined to sail the world, and (B)believe it or not・・・ she actually convinced her parents to let her. This voyage required *serious* planning. She lined up sponsors and recruited a team of experts to chart and follow her journey. She tricked out her boat, called the *Ella's Pink Lady*, with the right equipment to keep her safe and prepared for (C)wild and unpredictable weather. Then, on October 18, 2009, she set out [3] her own. She was sixteen years old and planning to spend the next nine months solo. Thanks to some remarkable communications gear, she would have Wi-Fi for talking to friends, family members, and her support team; she could even check Facebook now and then.

Yet she was still going to be completely, utterly alone out there on the open sea.

Jessica set off on her journey. Once she lost sight of the shore, she found that the (4)solitude didn't bother her. Sure, she talked to her weather vane, the instrument that measures the direction of the breeze (and she even named (5)it Parker). And she had conversations with a seabird that decided to hang out on the boat for a little while, spoke on occasion with the stuffed animals she'd brought along, and (D)gave the boat itself pep talks, addressing the ship as if it were a real person needing encouragement in the face of a coming storm. There were some emotional downtimes, but amazingly, while she did use the phone often to check in with friends and family, there were still times when she

turned down a chance to [6], preferring the silence. And she found that her older brother could still annoy her from thousands of miles away. At one point, while she was alone in the middle of the Pacific Ocean, she wrote on her blog, "Thanks to Dad and (E)Bruce over the last few days for being so patient with me over the phone and for understanding that sometimes a girl just doesn't feel like chatting!"

The journey amazed her; she had experiences that sounded like a dream. Pods of dolphins swam around her bow. Miniature squid somehow fell onto the deck at night. She saw a nocturnal 注1 rainbow, known as (F)a moonbow, as the moonlight shone through a storm.

There was also a run-in with a tanker ship and damage to the boat. There were massive waves that washed over the boat, turning it on its side and tossing her around in the cabin like a waterlogged doll. One night she accidentally boiled her pasta dinner in diesel fuel. So many people on land had said that she shouldn't take this voyage, that she wouldn't be able to handle it. Even in moments of vulnerability and fear, though, (G)Jessica deeply knew that she could in fact handle it.

And so she endured, with great energy and dedication. After sailing 24,285 miles over 210 days, she pulled into Sydney, Australia, to a welcome brigade that included helicopters, boats, television crews, crowds, and, of course, her family. Jessica had become the youngest person to ever sail (H)solo around the world.

[…]

There's a tendency to think of adventurers as rough-and-tumble 注2, bold, and brash. Often, though, the greatest challenges on grand journeys demand an unexpected set of skills. To complete Jessica's incredible adventure, she needed the ability to focus intently, a high tolerance for solitude, and plenty of emotional strength. As an introvert 注3, Jessica was ideally suited to the task.

In general, though, *extroverts* 注4 are more likely to be drawn to risky situations. (7)① not ②don't ③take ④it's ⑤risks ⑥introverts ⑦that, because they do. But they tend to be more careful and measured about the risks they take.

Some scientists believe that the reason people enjoy taking risks may relate to a phenomenon [8] reward-sensitivity. Typically, we look to challenges as a way to gain some kind of reward, whether it's the satisfaction of climbing a mountain or the prize that comes with a winning raffle ticket. There's evidence that extroverts are more susceptible to the rush of pride, excitement, and all-around positive feelings that come with achieving a goal, winning a competition, or overcoming impossible odds. Sure, we all enjoy that thrill. But scientists have found that extroverts experience a slightly more intense kick. The human brain has a kind of built-in reward system 注5, a network of pathways that send

signals back and forth, through a chemical called (9)dopamine, to boost our excitement when something good happens. Scientists say that dopamine pathways [注6] appear to be more active in the brains of extroverts.

In one [10], researchers looked at introverts and extroverts who won gambling contests, and the extroverted winners had more activity in the reward areas of their brains than the introverted victors. I'm sure the introverts loved winning too. But the evidence suggests that their brains' reward networks were just a little less activated, so they felt a bit more mellow about the experience.

Other studies have found that extroverts drive more rashly and get into more car accidents than introverts do!

When it [11] to dangerous adventures like sailing the world or climbing a mountain, introverts' mellowness can be enormously useful. Consider (12)the research of Gunnar Breivik, a sociologist in Norway who has been studying the personalities of extreme sports athletes for decades. At one point Breivik studied mountain climbers as they scaled rock faces, snowy peaks, and steep indoor rock walls. In several studies, he found that climbers were often calmer, more introspective types who would quietly visualize what they wanted to [13]. The ones who were drawn to climbing in nature rather than in the gymnasium were especially introverted.

In another project, Breivik examined the personalities of the members of a 1985 Norwegian expedition to (14)Mount Everest. The group was very successful [15] to other Everest climbers. Six of the seven Norwegian adventurers completed the trek and reached the summit. Breivik assumed they would tend more toward the extroverted end of the spectrum, given the extreme sensations that came with (16)braving the intense cold, winds, and snow. Remember the lemon juice study [注7] that found that introverts react more intensely to stimulation and are more easily overwhelmed by it? Well, Everest represented stimulation at its most intense — the largest dose of lemon juice in the world. Plus, the expedition required incredible cooperation, and he figured that extroverts would be better at [17a] as a team.

As it turned out, though, the adventurers were largely introverted. "They were independent, self-willed, imaginative types," he said. Yet they were also able to work together to help one another reach the top of the world's highest mountain.

Jessica Watson and her amazing solo sail helped to prove Breivik's point that adventurers are often highly focused introverts. Jessica was so competent out at [17b] in part because her quiet nature allowed her to remain calm and focused on the dangers at [17c]. Even on such a risky journey, she managed to stay safe by concentrating on

accurate directions, maneuvering through the turbulent ocean waves, and taking care of herself on her own [18].

(出典 Susan Cain, et al., *Quiet Power: The Secret Strengths of Introverts*. [2016])

注1 nocturnal 夜の　注2 rough-and-tumble 荒っぽい

注3 an introvert 内向性の人　注4 extroverts 外向性の人

注5 reward system 報酬系　注6 dopamine pathways ドーパミンの経路

注7 the lemon juice study レモンジュースを被験者の舌に垂らし、唾液の分泌量を調べる心理学の実験

(A) 下線部(A)を和訳しなさい。

(B) 下線部(B)で筆者は何を強調しているのか。具体的な内容を日本語で書きなさい。

(C) 下線部(C)の具体例を本文中から探し、英単語 1 語を書きなさい。

(D) 下線部(D)でジェシカは何をしたか。「ジェシカは」に続くかたちで、日本語 10 字以内で書きなさい。

ジ	ェ	シ	カ	は					
				10					

(E) 下線部(E)は誰か。He is に続くかたちで、英単語 3 語で書きなさい。

(F) 下線部(F)は何か。日本語 8 字以上 12 字以内で書きなさい。

							8		
	12								

(G) 下線部(G)を和訳しなさい。

(H) 下線部(H)を言い換えるのに、もっとも適切な英単語 1 語を本文中から選びなさい。

(I) つぎの文を英訳しなさい。
航海をすればするほど、彼女は海を好きになった。

1. 空欄 1 に入れるのに、もっとも適切なものを次の中から1つ選びなさい。
① have ② take ③ give ④ bring ⑤ leave

2. 下線部(2)の意味にもっとも近いものを次の中から 1 つ選びなさい。
① reason ② theory ③ skill ④ measure ⑤ life

3. 空欄 3 に入れるのに、もっとも適切なものを次の中から1つ選びなさい。
① in ② for ③ with ④ on ⑤ to

4. 下線部(4)の意味にもっとも近いものを次の中から 1 つ選びなさい。
① ひとりでいること ② 不安であること ③ 夢があること
④ 信頼していること ⑤ 連絡をとること

5. 下線部(5)の内容として、もっとも適切なものを次の中から 1 つ選びなさい。
① breeze ② direction ③ instrument ④ open sea ⑤ shore

6. 空欄 6 に入れるのに、もっとも適切なものを次の中から1つ選びなさい。
① dream ② talk ③ text ④ understand ⑤ write

7. 下線部(7)の語群をもっとも適切な順番に並べ替え、2 番目と 6 番目にあたる番号を書きなさい。ただし文頭にくる単語も小文字になっている。

8. 空欄 8 に入れるのに、もっとも適切なものを次の中から1つ選びなさい。
① calls ② called ③ calling ④ have called ⑤ to call

9. 下線部(9)との関わりがもっとも**弱いもの**を次の中から 1 つ選びなさい。
① thrill ② kick ③ mellowness
④ excitement ⑤ extreme sensation

10. 空欄 10 に入れるのに、もっとも適切なものを次の中から 1 つ選びなさい。
① brain ② play ③ risk ④ science ⑤ study

11. 空欄 11 に入れるのに、もっとも適切なものを次の中から 1 つ選びなさい。
① comes ② likes ③ tries ④ says ⑤ pays

12. 下線部(12)の結果として適切なものを次の中から 1 つ選びなさい。
① 社会学者にはスポーツマンが多かった。
② 内向性の人たちも危険な登山に向いていた。
③ 有名な冒険家たちは団体行動を嫌っていた。
④ 熟練した登山家たちは感情的になりやすかった。
⑤ アスリートたちには外向性の人間しかいなかった。

13. 空欄 13 に入れるのに、もっとも適切なものを次の中から 1 つ選びなさい。
① deny ② escape ③ exist ④ go ⑤ pursue

14. 下線部(14)の説明としてもっとも適切なものを次の中から 1 つ選びなさい。
① A volcano in northern Tanzania. It has twin peaks, the higher of which, Kibo, is the highest mountain in Africa.
② A mountain in the Himalayas, on the border between Nepal and Tibet, called Chomolungma in Tibetan. It is the highest mountain in the world.
③ A peak in the Alps on the border between France and Italy. It is the highest peak in the Alps and in western Europe.
④ A mountain in south central Alaska. It is the highest mountain in North America, also called Denali.
⑤ A volcano with a crater, situated on the eastern flanks of Mauna Loa. The world's largest active volcanic crater.

15. 空欄 15 に入れるのに、もっとも適切なものを次の中から 1 つ選びなさい。
① compare ② compared ③ comparing ④ to compare ⑤ comparison

16. 下線部(16)の意味にもっとも近いものを次の中から 1 つ選びなさい。
① avoiding　② facing　③ grasping　④ performing　⑤ preventing

17. 空欄 17a ～ 17c に入れるのに、もっとも適切な組み合わせを次の中から 1 つ選びなさい。
① hand – sea – working　② hand – working – sea
③ sea – working – hand　④ working – sea – hand
⑤ working – hand – sea

18. 空欄 18 に入れるのに、もっとも適切なものを次の中から 1 つ選びなさい。
① benefits　② health　③ hope　④ risk　⑤ terms

19. 以下の文には、本文の内容に**合致しないもの**が 1 つある。次の中から選びなさい。
① ジェシカはもの静かな少女だった。
② ジェシカはパスタを燃料油で茹でた。
③ ジェシカは 16 歳のときに航海に出た。
④ ジェシカはクジラに特別な関心を抱いていた。
⑤ ジェシカは航海中でもブログを更新していた。

52 次の英文は、あるアメリカ人ティーチング・アシスタントの日本の中学校における英語授業の体験記である。この文章を読んで下の問に答えなさい。

（東北大 1998）

"Good morning, boys and girls," Mr. Hamano, the regular teacher of English, said in English to the class of seventh-grade students after they had bowed and greeted us in Japanese.

"Today I want you to meet an American teacher."

I introduced myself and called to a student in the front of the class.

"Hello."

"*Hai*," he shouted, popping up from his chair.

" ((1))"

The boy did not even have time to turn around before half the class was shouting his name out loud.

"Matsumoto, Matsumoto," they cried, following the familiar Japanese custom of referring to people by their (A) .

"Hello, Matsumoto. My name is Bruce. ((2))" I held out my hand to greet him, but the boy looked frightened and dropped his eyes to the floor. I realized he had never shaken hands with anyone before. I walked back to the head of the class.

"In America, we like to shake hands," I said to the class.

"In Japan, we bow. Bow, bow, bow. Hello, bow. Good-bye, bow. Nice to meet you, bow. But in America, we talk with our (B) . Hello, shake, shake ... Nice to meet you, shake, shake."

I moved around the room, practicing with various students, but something felt incomplete. The students were grabbing my hand now, but still they bowed their heads.

" ((3))" I called. "When I was a junior high school student, my father taught me how to shake hands. He said two things were important. Number one. ((4))"

I squeezed hard on Mr. Hamano's hand and made a wide grimace on my face.

"Number two. ((5))"

Everybody seemed to understand. But when I moved toward the class, the silence quickly returned. Not only had these students never shaken hands, I realized, but they had also been taught never to look a stranger in the eye. They had learned instead to lower their eyes when greeting an elder person. As their elder, I could not expect students to look me in the eye on our first meeting. But as their teacher, I had to convince them that showing me (C) meant standing face to face and looking me in the eye.

"In America," I continued, trying to revive the situation. "We have several different types of greetings. Sometimes we use a special kind of handshake."

I went back toward Matsumoto, lifted one of his arms above his head, and slapped his hand with mine.

"(　　(6)　　)"

Slowly the students regained their energy and practiced greeting one another with slapped palms and knocked elbows. By now we had used up most of the class with just the basics of greetings.

"If you don't like either of these," I said, moving toward a girl who stood gaping at me in the front row. "(　　(7)　　)"

I stepped up to the girl's desk, lifted her hand in mine, and gave it a quick (　D　) on the top.

The class let out a dreamy *oooooh*, and someone called from the back of the class.

"*Crazy boy. He is a crazy boy*."

問1　　次の(a)～(g)の中から、文中の空所(1)～(7)に入れるのに最もふさわしいものを一つずつ選びなさい。ただし同じものを重複して選んではならない。

(a) Eye to eye.
(b) Everybody, please stand up.
(c) Firm grip.
(d) Nice to meet you.
(e) We call this a 'High Five.'
(f) What is your name?
(g) You could try this.

問2　　文中の空所(　A　)～(　D　)に入れるのに最もふさわしいものを、それぞれ(1)～(4)の中から一つずつ選びなさい。

(A)	(1) full names	(2) given names	(3) nicknames
	(4) surnames		
(B)	(1) eyes	(2) hands	(3) hearts
	(4) mouths		
(C)	(1) gratitude	(2) kindness	(3) friendship
	(4) respect		
(D)	(1) kiss	(2) glance	(3) pat
	(4) shake		

53 次の英文を読み、下の問いに答えなさい。

（東北大 1997）

"Talking about bicycles," said my friend, "I have been through four stages. I can remember a time in early childhood when a bicycle meant nothing to me: it was just part of the huge, meaningless background of grown-up tools against which life went on. Then came a time when to have a bicycle, and to have learned to ride it, and to be at last spinning along on one' s own was like (A)entering Paradise. That apparently effortless and frictionless gliding seemed to have solved (B)the secret of life. Now one would begin to be happy. But, of course, I soon reached the third period. Pedalling to and fro from school (it was one of those journeys that feel up-hill both ways) in all weathers, soon revealed the prose of cycling. The bicycle, itself, became to me what his oar is to a galley* slave."

"But what was the fourth stage?" I asked.

"I am in it now, or rather I am frequently in it. I have had to go back to cycling lately, then again and again the mere fact of riding brings back (C)a delicious scent of memory. I recover the feelings of the second stage. For it really is a remarkably pleasant motion. To be sure, it is not a recipe** for happiness as I then thought. In that sense the second stage was an illusion. But (D)an illusion of something."

"How do you mean?" said I.

"I mean this. Whether there is or is not the kind of happiness which one's first experiences of cycling seemed to promise, it is something to have had the idea of it. The value of the thing promised remains even if that particular promise was false."

"Sounds like (E)a carrot in front of a donkey's nose."

"Even that wouldn't be quite a cheat if the donkey enjoyed the smell of carrots as much as, or more than, the taste. Or suppose the smell raised in the donkey emotions which no actual eating could ever satisfy? Wouldn't he look back (when he was an old donkey, living in the fourth stage) and say, 'I'm glad I had that carrot tied in front of my nose. Otherwise I might still have thought eating was the greatest happiness. Now I know there's something far better—the something that came to me in the smell of carrot. And I'd rather have known that than not to have known it, for even to have wanted it is what makes life worth having'."

"I don't think a donkey would feel like that at all."

"No. Neither a four-legged donkey nor a two-legged one. But I have a suspicion that to feel that way is (F)the real mark of a human. The bicycle is only one instance. I think there are (G)these four stages about nearly everything.

注　*galley:　奴隷のこぐ帆船　　**recipe:　作り方

下線部(A)～(G)の意味に最も近いものを、それぞれ下の(1)～(4)の中から一つずつ選びなさい。

(A) (1) a reference to the famous book by Milton in which salvation is granted by God
(2) a reference to Heaven, place of eternal happiness
(3) the achievement of temporary happiness
(4) achieving the simple life all humans strive for

(B) (1) a human's goal of living an easy, untroubled existence
(2) the belief that human life should remain mysterious
(3) the solution explaining why we are alive and how to live well
(4) man's tendency of trying to explain every detail about his life

(C) (1) an activity or object which transports us back to an earlier, pleasant time
(2) the wonderful fragrances that are carried to us by the wind
(3) words, acts or ideas which, like perfume, intoxicate and even enslave us
(4) remembrance which comes flooding back when we smell certain foods

(D) (1) a beautiful thing you can never reach, like an oasis
(2) an illusion which deceives people
(3) an illusion which, nonetheless, possesses a positive aspect
(4) an elusive wish which has significance in one's life

(E) (1) the belief that stubborn people can only be motivated by food
(2) the idea that senses, like sight and smell, are valuable in performing tasks
(3) an example of how all animals perform well when given a reason
(4) something leading us to act without our having to think about it

(F) (1) a person's essential nature
(2) the view that one is measured by their achievements
(3) the true goal that exists in each person's mind
(4) some people cannot be happy unless they have left evidence of their existence

(G) (1) the belief that all things, like people, go through the phases of birth, growth, decline and death
(2) like a rocket, one's life has power boosters which flame brightly, then fall away, leaving the next smaller stage to propel us forward
(3) a four-part cycle of ignorance, interest, distaste and reborn interest concerning an object or activity
(4) from Shakespeare's idea that "all the world is a stage," there are four important stages we play our lives out on: dramatic, romantic, comic and tragic

54 次の文章を読んで、問 1〜3 に答えなさい。

（神戸大 2010）

They stopped at a grocery store designed to look like a log cabin. Nancy pulled out a shopping cart.

"Do we need a cart?" Mary said.

" (　A　) ," Nancy said. "The wine alone would break your arm."

In the far corner of the cart, Mary saw something brown. Square. A wallet. She gave it to Nancy, who quickly examined it. "Henry Sam Stewart," she read. "Blue eyes, overweight. Lives on the Nevada side of Lake Tahoe*" She looked at Mary. "You know what that means?"

"He's a gambler."

"No," Nancy said. "It means you'll get a big reward."

"Because he's a gambler."

"(　B　). Because, Mary, he lives far away. He'll be really grateful if we made (1)the effort."

Nancy bought a map along with the groceries, and they climbed back into the van and set out to find Henry Sam Stewart. The wallet sat between them in the cup-holder.

"How much do you think we'll get?"

"*You*'ll get it. You found the wallet," Nancy said. "And I would say fifty dollars would be a fair reward."

"Fifty!" Mary didn't know what she'd spend it on. Maybe a present for Nancy.

It took over an hour to get to the house of Henry Sam Stewart.

"(　C　) ," Nancy said as they turned off onto his street. "Hand me my lipstick."

Nancy could apply lipstick to her wide, thin lips without looking. Mary tucked her hair behind her ears.

"Hmm," Nancy said, as they pulled up to the house.

"What?" said Mary, but she saw what Nancy was seeing. The house was falling apart. They got out of the car. The wooden stairs leading up to the front door creaked* like they might collapse beneath their feet.

Henry Sam Stewart answered the door. He looked remarkably like the picture on his driver's license. He was wearing shiny blue jogging shorts and a white turtleneck. "What can I do for you?" he said.

"Hi," Nancy said. "We have found out your wallet."

She held out her hand toward Mary. Mary placed the wallet in Nancy's hand, and she put it in Henry's.

"Jeez. Where'd you find this?" he said. "(　D　)."

"At the grocery store," Nancy said.

"On the other side of the lake," Mary added.

"Well, thank you, ladies," he said. He tipped* an imaginary hat toward them.

"(　E　)?" Nancy said.

"You want to come in?" he said.

"No, thank you. I'm just wondering where this young woman's reward money is."

"Reward?"

"Yes, that's customary when someone returns a wallet."

"I don't like beggars," Henry Sam Stewart said. "(　F　) ."

"The reward's not for me. It's for Mary here. An eleven-year-old girl who's too honest to take the money from your cheap wallet."

"Well, thank you, Mary," he said to Mary. "Sometimes kindness is its own reward. Maybe your mother hasn't learned that yet?"

Mary looked at Nancy.

"Do you know what kind of lesson you're teaching this child?" Nancy said.

"(2)I can't stand people who think they don't owe people anything. What kind of world is that? I'm going to write down our address here and when you become a decent person, I want you to send her the reward money."

Nancy took a piece of paper from her purse.

Henry Sam Stewart shut the door on them.

Nancy clenched her fists, tilted her head to the sky and mimed screaming. Then, composing herself, she wrote down her address and pushed the paper under the door.

"Stupid! " she yelled.

注　Lake Tahoe　　タホ湖(ネバダ州とカリフォルニア州の境にある湖)
　　creak(ed)　　きしむ
　　tip(ped)　　(敬意を表すために帽子を軽く上げて)あいさつする

問1　　空所(　A　)～(　F　)に入る最も適切な表現を下から選びなさい。ただし、それぞれの表現は一度しか使えません。

(ア)I didn't know it was gone
(イ)I might have given you a reward if you hadn't been so pushy
(ウ)No, stop with that
(エ)That's it
(オ)We're buying for the whole weekend
(カ)We're getting close

問2　　下線部(1)の the effort の内容を 20 字以内の日本語で説明しなさい。ただし、句読点も 1 字に数えます。

									20

問3　　下線部(2)を日本語に訳しなさい。

55 次の文章を読んで、問 1〜5 の設問に答えなさい。

（千葉大 2019）

Does studying mathematics enhance your overall mental prowess*?

Abraham Lincoln certainly believed so, embarking on the arduous* task of mastering Euclid's treatises* on geometry to increase his cognitive capacities, in particular his linguistic and logical abilities. This idea — that mathematics strengthens your mind much as physical exercise strengthens your body, helping you negotiate a variety of mental challenges — goes all the way back to Plato. Alive and well in today's world, it is one reason popularly given for why everyone should study mathematics.

So it can come (1)as a surprise to learn that cognitive psychologists have a different take on the issue. Various studies point to the conclusion that subjecting the mind to formal discipline — as when studying geometry or Latin — does not, in general, engender* a broad transfer of learning. There is no sweeping increase of a general capacity for tasks like writing a speech or balancing a checkbook.

But surely a narrower claim is true: that mathematics, so systematically built as it is on inference*, must develop logical thinking. Right?

By "logical," I mean the kind of thinking needed to solve the following problem: Four cards are laid in front of you, each of which, it is explained, has a letter on one side and a number on the other. The sides that you see read E, 2, 5 and F. Your task is to turn over only those cards that could decisively prove the truth or falsity of the following rule: "If there is an E on one side, the number on the other side must be a 5." Which ones do you turn over?

Clearly, the E should be turned over, since if the other side is not a 5, the rule is untrue. And the only other card that should be flipped is the 2, since an E on the other side would again disprove the rule. Turning over the 5 or the F doesn't help, since anything on the other side would be consistent with the rule — but not *prove* (2)it to be true.

This innocuous*-looking puzzle, a variation of which was introduced by the British psychologist Peter Wason in 1966, has been called "the single most investigated paradigm in the psychology of reasoning." If you answered E and 2, congratulations: You are among the roughly 10 percent of the public able to solve the puzzle. Many reasons have been advanced for this poor showing, including the lack of relevance of such an abstract exercise to people's daily lives.

Most people reflexively* eliminate the cards not explicitly specified in the rule (the F and the 2) and then continue with slower, more analytic processing only for the E and the 5. In this, they rely on an initial snap judgment about superficial similarity, a tendency that some scholars speculate* evolved in humans because in most real-world contexts,

quickly detecting such similarities is a good strategy for survival.

Interestingly, though, it turns out that if the puzzle's abstract rule is translated into terms that are logically equivalent but grounded in real-world experience — as in, "If someone is drinking beer at a bar, she must be at least 21 years of age" — then the success rate jumps to 75 percent or more.

I learned about the Wason selection task and its intricacies* from a fascinating recent book, "Does Mathematical Study Develop Logical Thinking?" by the education and cognition researchers Matthew Inglis and Nina Attridge. They conducted experiments that found that (3)university students studying mathematics were just as likely as those studying history to quickly reject the F and the 2 cards. But differences emerged in the slower, more effortful cogitative* phase that followed, leading to divergent success rates in the end: 18 percent for the mathematics students versus 6 percent for the history students.

Based on results from a slate of such reasoning tasks, Dr. Inglis and Dr. Attridge show that studying higher mathematics (at the advanced secondary and college levels) does lead to an increase in logical ability. In particular, mathematics students become more skeptical* in their reasoning — they begin to think more critically.

But these gains, though significant enough to establish a causal relation between mathematics education and logical thinking, are too modest to settle the debate on how much mathematics should be prescribed as part of a general education, and for which students. (An 18 percent success rate is hardly compelling.) Moreover, there is the possibility of a self-selection effect: Students with the greatest potential to get a benefit in their logical reasoning might be disproportionately attracted to mathematics classes in the first place, so these gains might not apply to the entire population.

In any event, the most crucial finding of such research, in my view, is how much insight the psychological study of learning can contribute to the practical teaching of mathematics — two fields of endeavor that are too often pursued separately. It is sadly telling that while the Wason selection task is well known among psychologists, it is not familiar to most mathematicians and math teachers.

(4)I propose we start to teach the Wason selection task in mathematics courses at the high-school level and higher. The puzzle captures so much that is essential to mathematics: the nuts and bolts of inference, the difficulty of absorbing abstract concepts when removed from the context of real-world experience, the importance of a deliberative cogitative process and the pitfalls of instant intuitive judgments. I presented the puzzle to a recent college class of mathematics majors and they listened with rapt* attention afterward — startled by their lowly 19 percent success rate.

Logical thinking may be promoted by mathematics, but it is a gradual and complex learning process. Psychological insight into learning, such as that offered by Wason's puzzle, can give students a head start by educating them on the challenges they will face.

出典: Manil Suri. "Does Math Make You Smarter?" *The New York Times*, April 13, 2018.

(注)

prowess	優れた能力	arduous	困難な
treatises	論文	engender	生じさせる
inference	推論	innocuous	どうということもない
reflexively	反射的に	speculate	推測する
intricacies	複雑さ	cogitative	思考の
skeptical	懐疑的な	rapt	うっとりした

問1　下線部(1)はなぜ"surprise"となるのですか。その理由を日本語で説明しなさい。

問2　下線部(2)の"it"の具体的な内容を日本語で述べなさい。

問3　"those"が何を示すかを明らかにして、下線部(3)を日本語に訳しなさい。

問4　下線部(4)のように筆者が提唱する理由を日本語で述べなさい。

問5　次の文は本文を要約したものです。①～⑩に入る最も適切な語を下の表のイ)～ヨ)から選びなさい。ただし、文頭の語も小文字で表記しています。

It is often said that mathematics enhances our mental prowess. This idea (①) came from Plato. However, some cognitive psychologists (②) with this view. Various studies suggest that it doesn't enhance our (③) to carry out other tasks. In order to (④) the connection between mathematical skill and logical thinking, a puzzle using cards was introduced. Although the puzzle did not look (⑤), only about 10 percent of people were able to solve it. This poor result is (⑥) to be due to the lack of relevance of the task to people's daily lives. When trying to solve the puzzle, many people (⑦) to start by making quick and superficial judgments. This is because they use the skills they (⑧) in real-world contexts. Other experiments revealed greater logical ability in students who studied mathematics at a higher level. (⑨) these factors, it is difficult to decide how much mathematics students should study as part of their general education. We can (⑩) from this research that studying the psychology of learning can enhance the practical teaching of mathematics.

イ) ability	ロ) agree	ハ) although	ニ) asked
ホ) complicated	ヘ) conclude	ト) despite	チ) developed
リ) disagree	ヌ) investigate	ル) originally	ヲ) tend
ワ) tending	カ) said	ヨ) says	

56 次の英文は、経済のグローバリズムと政治のグローバリズムを区別することが必要であると述べています。この二つのグローバリズムについて、解答欄の書き出しに続けてそれぞれ句読点を含めて 150 字程度の日本語で説明しなさい。
（静岡県立大・国際関係学部 2019）

(一部省略) , we need to separate political globalism from economic globalism.

When we do this, we find that economic globalism is a force for enormous good in the world, but political globalism is primarily a tool for increasing the power of states.

As to economic globalism, we can see again and again that the free flow of goods and services, unimpeded* by states, improves international relations and increases standards of living. Where governments have increasingly joined the "globalized" economy, extreme poverty declines while health and well-being increases. Latin American states that have embraced* trade and freer economies, for example, have experienced growth. Those states that stick to the regimented* economies of old continue to stagnate*. These benefits, however, can be — and have been — achieved by decentralized*, unilateral* moves toward free trade and deregulated* economies. No international bureaucracy* is necessary.

This is economic globalization: opening up the benefits of global trade, entrepreneurship*, and investment to a larger and larger share of humanity.

Meanwhile, *political globalization* is an impediment* to these benefits: Political globalists at the World Health Organization, for example, spend their days releasing reports on how people shouldn't eat meat and how we might regulate such behavior in the future. Political globalists hatch* new schemes to drive up the cost of living for poor people in the name of preventing climate change. Meanwhile, the World Bank issues edicts* on how to "modernize" economies by increasing tax revenues — and thus state power — while imposing new regulations.

It's essential to make these distinctions. Economic globalism brings wealth. Political globalism brings poverty.

Economic globalism is about getting government out the way. It's about *laissez-faire**, being hands-off, and promoting the freedom to innovate, trade, and associate freely with others.

Political globalism, on the other hand, is about control, rules, central planning, and coercion*.

Some careless observers may lump* all this together and declare "globalism" to be a wonderful thing. But when we pay a little more attention to the details, things aren't quite so clear.

(出典) Ryan McMaken, "The Difference between Good Globalism and Bad Globalism", *Mises Wire*, Auburn, Alabama, March 28, 2018. (https://mises.org/wire/difference-between-good-globalisrn-and-bad-globalism) (英語表現の明らかな誤りは改めた。)

〔注〕

unimpeded:	妨げられていない	embrace:	採用する
regimented:	厳しく統制された	stagnate:	停滞する
decentralized:	分権的な	unilateral:	一方向の
deregulate:	規制を解除する	bureaucracy:	官僚機構
entrepreneurship:	起業家活動	impediment:	妨げ
hatch:	企てる	edict:	指令

laissez-faire: (仏語) レッセフェール、自由放任不干渉政策
coercion: 強制
lump: ひとまとめにして扱う

経	済	の	グ	ロ	ー	バ	リ	ズ	ム
は	、								
									150

政	治	の	グ	ロ	ー	バ	リ	ズ	ム
は	、								
									150

57 次の文章は睡眠の歴史について書かれた本の一部です。文章を読み、下の設問に答えなさい。

（東京外国語大 2019）

What we now think of as "time" is largely an invention of the industrial age. Factories and the economic system that grew around them in the nineteenth century depended on disconnecting workers' sense of time from ①the natural rhythms of day changing into night and season into season. Instead of waking more or less when the sun rose and dropping off not long after it set, sleeping more in the lean winter months and less in harvest times, and punctuating their days with naps, workers had to learn to rise consistently to the sound of a factory bell and organize their downtime accordingly. Schedules for travel, school, and commerce followed these industrial patterns of uniform clock time: a time newly homogeneous across season, region, or profession. When employers demanded too much of the workers' time, depriving them of adequate sleep, the workers advocated for sleep that was *more* standardized, rather than less. What they pictured was a time that was reserved exclusively for sleep, a time both demanded by industry and made impossible by it. The eight-hour ideal as we know it is largely a result of ②this push and pull between management and labor.

In order for the system to work, with workers getting to the factory floor at the appropriate time, so that the factories could be productive throughout the year, ③sleep had to be subjected to increasing levels of control. For this to happen, sleep had to be understood as a medical issue that could be empirically observed, manipulated, and corrected. Much of the biomedical research into sleep from the late nineteenth century until the present day has been underwritten by businesses with an interest in understanding how to manipulate or exploit body rhythms to make workers more efficient — as well as by the military, which wants to create armies of flexibly alert fighters. Sleep science emerged as a profound response to the industrial age, in which the rhythms of daily life came unstuck from the internal rhythms of workers, and experts were needed to understand what was happening in order to repair the damage.

This industrial manipulation of time was intensified by the spread of electricity and powerful artificial lighting, from the widespread use of gaslight early in the nineteenth century to electric lighting at the turn of the twentieth — and now the ubiquitous flood of blue light emanating from electronic screens. Historians and anthropologists, as well as many scientific sleep researchers, have begun to explore the profound effects of artificial lighting and the electrification of domestic spaces on sleep patterns. Even today, most societies that have not experienced the widespread introduction of electricity into homes

tend to distribute sleep in several segments throughout the day and night; yet in Western Europe and North America, across the nineteenth and twentieth centuries, packaging one's sleep in one bundle quickly became the norm. Historian Roger Ekirch's influential argument is that before the industrial age, most societies practiced ④"segmented sleep" at night, in which sleep came in two installments, with an interval of quiet wakefulness. As powerful new light sources pushed back the boundaries of night, however, people were induced to stay up later, pushing the first installment of sleep forward until that interval was lost. Sleep now had to be stuffed into one package. This novel arrangement put extreme pressure on those whose internal clocks simply couldn't adapt to this historically novel expectation, leading to a spike in medical complaints about poor sleeping.

Electricity and artificial light also affected the spatial arrangements associated with sleep, especially within middle-class families, which were acquiring larger and more autonomous homes as industrial wealth spread through society in the nineteenth and twentieth centuries. ⑤The key development — so obvious that many of us can barely see it as anything other than natural — was the spatial separation of parents or other adult caretakers from children throughout the night. Why, given that virtually no society anywhere before the nineteenth-century West insisted on children sleeping alone, did this bizarre ideal take hold? One factor is that parents, given access to new entertainment technologies in the home, wanted a space of their own to stay up late once children went to bed.

The deeper issue was their society's emphasis on privacy, a value that is most dear at night. The sociologist Norbert Elias argued in 1939 that for bourgeois European families, sleeping in private, out of view of others, became a hallmark of "civilization" across the eighteenth and nineteenth centuries. As with other manners, one needed to be taught how to do this from an early age. Accordingly, each child had to be trained to go to bed in his or her own room and stay there through the night. And so the child's bed became a central training ground for a society of sturdy, solitary sleepers — people who attended to their bodily needs out of view of others. Sleep dogma — reinforced across the nineteenth and twentieth centuries by health reformers, psychologists, and pediatricians — promoted the idea of consolidated nighttime sleep for children in their own rooms: a very weird arrangement by historical and cross-cultural measures. The goal was the creation of hearty, autonomous, self-willed adults who could march off confidently into the workforce, in full possession of their powers to sleep and wake when instructed, and careful not to let themselves drop off in public.

Learning to sleep "normally" means being trained to sleep by the rules of this system as a child, then outfitting yourself with enough space and gear to reproduce it when you're

an adult. Those who can't pay their way into normal sleep are left outside the gates, scrambling through odd jobs, undiagnosed health problems, and vulnerable nighttime conditions in which restful slumber is almost unthinkable. And those who, by virtue of inclination or cultural background, sleep differently come to be regarded as backward or even perverse. The sociologist Elias's observation that Europeans defined themselves as civilized in part by doing their sleeping in private also implied that non-Europeans whose sleep did not conform to this standard were defined as ⑥"other," somehow primitive or in need of reform; this judgment also applied to Europeans who couldn't afford to do all of their sleeping in private. Scenes of naked "savages" lying on communal sleeping mats, African slaves bundled in the holds of slave ships, or poor urban whites sleeping ten or twelve to a room in rickety tenement buildings came to represent all that an ideal white European or American should not be. Accordingly, health reformers and moralizers set about convincing the laboring classes to sleep more privately — as did missionaries and colonial authorities in places where European and American power extended its reach.

And so, in the industrial age, sleeping became subject to novel demands that put pressure on sleep's rhythms, environments, and configurations. The pressures are felt in different ways by different groups — young, old, rich, poor, black, white, female, male — but we've all been dealing with the fallout from the invention of normal sleep in the nineteenth century ever since.

【設問】

1. 下線部①に従った睡眠の取り方とは具体的にどのようなものか、本文に即して 80 字以内の日本語で説明しなさい。

									80

2. 下線部②はどのようなことを指しているか、70 字以内の日本語で説明しなさい。

									70

3. 下線部③のためにどのようなことが必要とされたのか、40 字以内の日本語で説明しなさい。

									40

4. 下線部④は強力な新しい人工照明の登場によってどのように変化したか、60 字以内の日本語で説明しなさい。

									60

5. 下線部⑤はどのようなことを指しているか、40 字以内の日本語で説明しなさい。

									40

6. 下線部⑥について、本文では社会学者 Norbert Elias の議論を踏まえ、ヨーロッパ人と非ヨーロッパ人の場合に分けて定義されている。どのような定義か、80 字以内の日本語で説明しなさい。

									80

58 次の英文を読んで、下記の設問に答えなさい。

（兵庫医科大 2008）

Lucy and Pete, returning from a remote Pacific island, find that the airline has damaged the identical antiques that each had purchased. (1)An airline manager says that he is happy to compensate them but is handicapped by being clueless about the value of these strange objects. Simply asking the travelers for the price is hopeless, he figures, for they will inflate it.

Instead he devises a more complicated scheme. (2)He asks each of them to write down the price of the antique as any dollar integer between 2 and 100 without conferring together. If both write the same number, he will take that to be the true price, and he will pay each of them that amount. But if they write different numbers, he will assume that the lower one is the actual price and that the person writing the higher number is cheating. In that case, he will pay both of them the lower number along with a bonus and a penalty — the person who wrote the lower number will get $2 more as a reward for honesty and the one who wrote the higher number will get $2 less as a punishment. For instance, if Lucy writes 46 and Pete writes 100, Lucy will get (　ア　) and Pete will get (　イ　) .

(from "The Traveler's Dilemma" by Kaushik Basu

Scientific American Magazine, June 2007)

* integer: exact whole number

(1) 下線部(1)を和訳しなさい。

(2) 下線部(2)を和訳しなさい。

(3) (　ア　), (　イ　)に入る適切な数字を書きなさい。

59 次の英文を読んで、下記の設問に答えなさい。

（兵庫医科大 2008）

Are biometric techniques the future of personal identification?

(1)Yes, because unlike conventional recognition techniques such as passwords or ID cards, which are based on "what you know" or "what you have," biometric recognition is based on "who you are" : anatomical features such as face, fingerprint or iris, or behavioral traits such as signature or gait. (2)This makes biometric technologies much more difficult to abuse than traditional methods of identification. Unlike passwords or ID cards, it is extremely difficult to guess, share, misplace, copy or forge biometric identifiers.

(from *Nature*, 446.6 September, 2007, 38)

*metric: a system or standard of measurement

*anatomical: relating to bodily structure

*iris: the round colored part of a person's eye

*gait: a person's manner of walking

(1) 下線部(1)の文章には省略されている部分がある。それを含めて和訳しなさい。

(2) 下線部(1)の文中の二重線“biometric recognition”とは具体的にはどのようなものを指すのか、本文中よりさがして日本語で答えなさい。

(3) 下線部(2)を和訳しなさい。

(4) 下線部(2)の文中の二重線“traditional methods of identification”とは具体的にはどのようなものを指すのか、本文中よりさがして日本語で答えなさい。

60 次の英文は *BBC Future* (2018 年 11 月 28 日)に掲載された"Is breakfast really the most important meal of the day? " (Jessica Brown)の記事を一部改変したものです。この文章をよく読んで、医学科と歯学科の受験者は問題3,4,5,6に答えなさい。保健衛生学科と口腔保健学科の受験者は問題1,2,3,5,6に答えなさい。

（東京医科歯科大 2020）

Along with old classics like ‘carrots give you night vision’ and ‘Santa doesn’t bring toys to misbehaving children’, one of the most well-worn phrases in the arsenal of tired parents everywhere is that breakfast is the most important meal of the day. Many of us grow up believing that skipping breakfast is a dietary travesty — even if only two thirds of adults in the UK eat breakfast regularly, according to the Association of UK Dieticians(BDA), and around three-quarters of Americans.

The clue for why breakfast is supposed to be important is in its name: we’re advised to eat (1)**it** to break our overnight fast.

“The body uses a lot of energy stores for growth and repair through the night,” explains dietician Sarah Elder. “Eating a balanced breakfast helps to up our energy, as well as protein and calcium used throughout the night.”

But there’s widespread disagreement over whether breakfast should keep its top spot in the hierarchy of meals. As well as the rising popularity of fasting diets, there have been concerns around the sugar content of cereal and the food industry’s ***involvement*** in pro-breakfast research — and even one claim from an academic that breakfast is “dangerous”.

So what’s the reality? Is breakfast a necessary start to the day. . .or a marketing ploy by cereal companies?

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The most researched ***aspect*** of breakfast (and breakfast-skipping) has been its links to obesity. Scientists have different theories as to why there’s a relationship between (2)**the two**.

In one US study that analysed the health data of 50,000 people over seven years, researchers found that those who made breakfast the largest meal of the day were more likely to have a lower body mass index (BMI) than those who ate a large lunch or dinner. The researchers argued that breakfast helps increase satiety, reduce daily calorie intake, improve the quality of our diet — since breakfast foods are often higher in fibre and nutrients — and improve insulin sensitivity at subsequent meals, which can be a risk for diabetes.

But as with any study of this kind, it was unclear if that was the cause — or if breakfast—skippers were just more likely to be overweight to begin with.

To find out, researchers designed a study in which 52 obese women took part in a 12-week weight loss programme. All had the same number of calories over the day, but half had breakfast, while the other half did not.

What (3)**they** found was that it wasn't breakfast itself that caused the participants to lose weight: it was changing their normal routine. The women who said before the study that they usually ate breakfast lost 8.9 kg when they stopped having breakfast, compared to 6.2 kg in the breakfast group. ***Meanwhile***, those who usually skipped breakfast lost 7.7 kg when they started eating it — and 6 kg when they continued to skip (4)**it**.

If breakfast alone isn't a guarantee of weight loss, why is there a link between obesity and skipping breakfast?

Alexandra Johnstone, professor of appetite research at the University of Aberdeen, argues that it may simply be because breakfast-skippers have been found to be less knowledgeable about nutrition and health.

"There are a lot of studies on the relationship between breakfast eating and possible health ***outcomes***, but this may be because those who eat breakfast choose to habitually have health-enhancing behaviours such as not smoking and regular exercise," she says.

A 2016 review of 10 studies looking into the relationship between breakfast and weight management concluded there is "limited evidence" supporting or ***refuting*** the argument that breakfast influences weight or food intake, and more evidence is required before breakfast recommendations can be used to help prevent obesity.

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Intermittent fasting, which involves fasting overnight and into the next day, is gaining ground among those looking to lose or maintain their weight or improve their health.

One pilot study published in 2018, for example, found that intermittent fasting improves blood sugar control and insulin sensitivity and lowers blood pressure. Eight men with pre-diabetes were assigned one of two eating schedules: either eating all their calories between 9:00 and 15:00, or eating the same number of calories over 12 hours. The results for the 9:00-15:00 group were found to be on par with medicine that lowers blood pressure, according to Courtney Peterson, the study's author and assistant professor of nutrition sciences at the University of Alabama at Birmingham.

[ア] Still, the study's small size means more research is needed on its possible long-term benefits.

If skipping breakfast (and other food outside of a restricted time slot) could ***potentially*** be good for you, does that mean breakfast could be bad for you? One academic has said so, arguing that breakfast is 'dangerous': eating early in the day causes our cortisol to peak more than it does later on. This causes the body to become resistant to insulin over time and can lead to type 2 diabetes.

But Fredrik Karpe, professor of metabolic medicine at Oxford Centre for Diabetes, Endocrinology and Metabolism, argues this isn't the case. Instead, higher levels of cortisol in the morning are just part of our body's natural rhythm.

Not only that, but breakfast is key to jumpstarting our metabolism, he says. "In order for other tissues to respond well to food intake, you need an initial trigger involving carbs responding to insulin. Breakfast is critical for this to happen," Karpe says.

A randomised control trial published last year involving 18 people with, and 18 people without, diabetes found that skipping breakfast ***disrupted*** the circadian rhythms of both groups and led to larger spikes in blood glucose levels after eating. Eating breakfast, the researchers conclude, is essential for keeping our body clock running on time.

Peterson says those who skip breakfast can be divided into those who either skip breakfast and eat dinner at a normal time — getting the benefits of intermittent fasting, if not breakfast — or those who skip breakfast and eat dinner late.

"For those who eat dinner later, their risk of obesity, diabetes and cardiovascular disease goes through the roof. While it seems breakfast is the most important meal of the day, it might actually be dinner," she says.

"Our blood sugar control is best early in the day. When we eat dinner late, that's when we're most ***vulnerable*** because our blood sugar is worst. There's more research to do, but I'm confident you shouldn't skip breakfast and have dinner late."

She says we should think of our circadian rhythm as an orchestra.

"There are two parts of our circadian clock. There's the master clock in the brain, which we should think of as ***analogous*** to a conductor of an orchestra, and the other half is in every organ, which has a separate clock," she says.

And that 'orchestra' is set by two outside factors: bright light exposure and our eating schedule.

"If you're eating when you're not getting bright light exposure, the clocks that control metabolism are in different time zones, creating ***conflicting*** signals as to whether to rev up or down."

It's like two halves of an orchestra playing different songs, Peterson explains, and this is why eating late impairs blood sugar and blood pressure levels.

Researchers from the University of Surrey and University of Aberdeen are halfway through research looking into the mechanisms behind how the time we eat influences body weight. Early findings suggest that a bigger breakfast is beneficial to weight control.

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Breakfast has been found to affect more than just weight. Skipping breakfast has been associated with a 27% increased risk of heart disease, a 21% higher risk of type 2 diabetes in men, and a 20% higher risk of type 2 diabetes in women.

One reason may be breakfast's nutritional value — partly because cereal is fortified with vitamins. In one study on the breakfast habits of 1,600 young people in the UK, researchers found that the fibre and micronutrient intake, including of folate, vitamin C, iron and calcium, was better in those who had breakfast regularly. There have been similar findings in Australia, Brazil, Canada and the US.

Breakfast is also associated with improved brain function, including concentration and language. A review of 54 studies found that eating breakfast can improve memory, though the effects on other brain functions were inconclusive. However, one of the review's researchers, Mary Beth Spitznagel, says there is "reasonable" evidence breakfast does improve concentration — there just needs to be more research.

"Looking at studies that tested concentration, the number of studies showing a benefit was exactly the same as the number that found no benefit," she says.

"And no studies found that eating breakfast was bad for concentration."

What's most important, some argue, is what we eat for breakfast.

High-protein breakfasts have been found particularly effective in reducing food cravings and consumption later in the day, according to research by the Australian Commonwealth Scientific and Industrial Research Organisation.

While cereal remains a firm favourite among breakfast consumers in the UK and US, a recent *Which?* investigation into the sugar content of 'adult' breakfast cereals found that some cereals contain more than three quarters of the recommended daily amount of free sugars in each portion, and sugar was the second or third highest ingredient in seven out of 10 flaked cereals.

But some research suggests if we're going to eat sugary foods, it's best to (5)**do it** early. One study found that changing levels of the appetite hormone leptin in the body throughout the day coincide with having our lowest threshold for sweet food in the morning, while scientists from Tel Aviv University have found that hunger is best regulated in the morning. They recruited 200 obese adults to take part in a 16-week-long

diet, where half added dessert to their breakfast, and half didn't. Those who added dessert lost an average of 40 lbs(18 kg) more ― however, the study was unable to show the long-term effects.

A review of 54 studies found that there is no consensus yet on what type of breakfast is healthier, and concluded that the type of breakfast doesn't matter as much as simply eating something.

＊＊＊

While there's no conclusive evidence on exactly what we should be eating and when, the consensus is that we should listen to our own bodies and eat when we're hungry.

"Breakfast is most important for people who are hungry when they wake up," Johnstone says.

For instance, research shows that those with pre-diabetes and diabetes may find they have better concentration after a lower-GI breakfast such as porridge, which is broken down more slowly and causes a more gradual rise in blood sugar levels.

Every body starts the day differently ― and those individual differences, particularly in glucose function, need to be researched more closely, Spitznagel says.

[イ] In the end, the key may be to be mindful of not over-emphasising any single meal, but rather looking at how we eat all day long.

"A balanced breakfast is really helpful, but getting regular meals throughout the day is more important to leave blood sugar stable through day, that helps control weight and hunger levels," says Elder.

"Breakfast isn't the only meal we should be getting right."

保健衛生学科と口腔保健学科のみ

1 ***The following words appear in bold italics in the text. On the answer sheet, circle the letter indicating the best definition for each word (based on how the word is used in the text).***

involvement

(a) enthusiasm (b) motivation (c) objection
(d) participation (e) position

aspect

(a) benefit (b) controversy (c) point
(d) problem (e) purpose

Meanwhile

(a) At the same time (b) Briefly (c) In the end
(d) On average (e) Sometimes

outcomes

(a) habits (b) improvements (c) issues
(d) needs (e) results

refuting

(a) claiming (b) disproving (c) ignoring
(d) losing (e) making

potentially

(a) doubtlessly (b) eventually (c) immediately
(d) obviously (e) possibly

disrupted

(a) blocked (b) decreased (c) destroyed
(d) interrupted (e) restarted

vulnerable

(a) hungry (b) natural (c) troubled
(d) uncomfortable (e) weak

analogous

(a) comparable (b) dominant (c) fundamental
(d) obedient (e) related

conflicting

(a) broken (b) dangerous (c) electrical
(d) opposing (e) timed

保健衛生学科および口腔保健学科

2 ***What do the following words, which are underlined in the text, refer to? <u>Answer using one to five English words that can replace the underlined text</u>.***

(1) it　　(2) the two　　(3) they

(4) it　　(5) do it

全学科

3 ***According to the text, decide whether the following statements are true (T) or false (F). For each statement circle the correct answer on the answer sheet.***

1. According to the article, more than 70% of adults in the UK and US eat breakfast regularly.
2. According to one US study of 50,000 people, those who eat breakfast tend to have a lower BMI than those who do not.
3. The US study also found that consumption of breakfast foods can lead to a higher risk for diabetes.
4. According to Alexandra Johnstone, smokers typically skip breakfast.
5. A 2016 review of 10 studies concerning breakfast and weight management could not confirm whether eating breakfast can help prevent obesity.
6. Intermittent fasting has been proven to help people lose weight and stay healthy.
7. A study published in 2018 investigated the effects of intermittent fasting on men with pre-diabetes.
8. According to Courtney Peterson, the men who ate all their calories between 9:00 and 15:00 were able to lower their blood pressure with the help of medicine.
9. In Peterson’s study, one group of subjects didn’t take any calories after 3 PM.
10. According to one academic, eating breakfast is dangerous because it can gradually lead to insulin resistance and type 2 diabetes.
11. According to Fredrik Karpe, ‘carbs’ are necessary to jumpstart your metabolism.
12. A randomised control trial involving 36 people found that both people with and without diabetes tend to skip breakfast.
13. The researchers involved in the randomised control trial concluded that breakfast is important to regulate our body clock.

14. Peterson seems to suggest that the timing of eating dinner may be a more important factor for our health than whether we eat breakfast or not.
15. Peterson claims that our blood sugar control is worst late in the day.
16. According to Peterson, playing two songs at the same time is good for your blood sugar and blood pressure levels.
17. The researchers from the University of Surrey and University of Aberdeen recommend eating breakfast earlier for better weight control.
18. The article states that the UK study on the breakfast habits of young people encouraged other countries to find similar results.
19. Mary Beth Spitznagel seems to think that eating breakfast improves concentration.
20. Spitznagel argues that what we eat for breakfast is very important.
21. Research by the Australian Commonwealth Scientific and Industrial Research Organisation suggests that eating a high-protein breakfast can help people eat less later in the day.
22. The results of research conducted at Tel Aviv University suggest that eating sugary foods for breakfast might not be a big problem.
23. The results of the review of 54 studies imply that eating cake for breakfast would be better for our health than skipping breakfast.
24. Elder implies that stable blood sugar levels depend on weight and hunger levels.

医学科と歯学科のみ

4 ***Briefly (in 10 to 25 words) answer the following questions <u>in your own words, using complete English sentences</u>. Base your answers on the information presented in the article.***

1. Summarise the results of the study involving 52 obese women taking part in a 12-week weight loss programme.

2. Summarise Fredrik Karpe's arguments against the position that eating breakfast is "dangerous".

3. What may be good to eat for breakfast and why? Give two examples from the text.

全学科

5 下線部[ア]と[イ]を日本語に訳しなさい。

全学科

6 朝食が最も重要な食事であるという考え方に対する否定的な見解とその根拠を、この記事の内容に即して、次のキーワードをすべて用いて日本語で 400 字以内にまとめなさい。なお、キーワードは初出の際に四角く囲むこと。

｛ **体重、　糖分、　夕食** ｝

									100

									200
									300
									400