1 Answer the questions about the passage below. Choose the most appropriate answers based on what is stated or implied in the passage. Choose ONE answer unless other instructions are given. Boxes ( ) in the passage indicate missing information.

著作権の都合上、省略します。

1. The first sentences of paragraphs 1–3 are missing.

1 Which sentence best completes paragraph 1?
2 Which sentence best completes paragraph 2?
3 Which sentence best completes paragraph 3?

Sentences:

① Some people believe that their recycling systems are the best in the world.
② For years, Australia had been exporting waste materials for recycling.
③ Australian households produce about 12 million tons of waste every year.
④ Many households have started recycling to manage their organic waste.
⑤ We began by interviewing residents about their existing waste management practices.

2. [4] What does <1>they refer to?

① China ② imports ③ Australian governments ④ waste management policies
⑤ economy ⑥ Resources ⑦ the system ⑧ the shifting phase
⑨ the focus ⑩ garbage disposal sites

3. Choose the most appropriate answer.

[5]	① as though	② in regard to	③ as far as	④ rather than	⑤ similar to
[6]	① came up	② brought up	③ picked up	④ set up	⑤ stood up
[7]	① notes	② noted	③ to note	④ noting	⑤ has noted
[8]	① legislation	② association	③ assumption	④ section	⑤ determination

4. Identify the most stressed vowel and then choose one word for each that has the same vowel pronunciation.

[9] <2>alternatives
[10] <3>substantial

① rat ② pain ③ here ④ floor ⑤ cut ⑥ hit ⑦ heart ⑧ put ⑨ fair ⑩ bird ⑪ tool ⑫ kind

5. [11] What can be inferred about REDcycle's failure?

① Australians were unwilling to participate in the program.
② Supermarkets lacked guidelines for customers to recycle properly.
③ The program was overwhelmed by the volume of collected plastics.
④ Government regulations made recycling too costly to continue.
⑤ Community-level support for recycling programs was inadequate.

6. [12] Which of the following is NOT mentioned as a household experiment conducted by participants?

① being completely waste-free for six weeks
② cooking without plastic
③ shopping at bulk stores
④ starting a garden
⑤ repairing personal belongings
⑥ making a low-waste challenge for friends
⑦ creating a part-time recycling service

7. [13] Which statement best reflects the participants' experiences with the household experiments?

① They found low-waste practices to be simple and enjoyable.
② They thought low-waste practices should be required for families.
③ They faced difficulties in sustaining low-waste practices.
④ They believed rewards were needed to continue low-waste practices.
⑤ They concluded that certain low-waste practices were unhelpful.

8. [14] What is the main idea of the passage?

① Households are primarily responsible for Australia's waste problem.
② Shifting to low-waste living requires systemic and household-level changes.
③ Recycling locally is a practical solution for waste management issues.
④ Policymakers and businesses have done enough to support households.
⑤ The circular economy is unachievable due to government inefficiencies.

2 Answer the questions about the passage below. Choose the most appropriate answers based on what is stated or implied in the passage. Choose ONE answer unless other instructions are given. Boxes ([ ]) in the passage indicate missing information.

The coronavirus pandemic forced a rapid shift towards digital care—things like online consultations with doctors and the use of mobile phone apps for contact tracing and monitoring of patients—in countries with the right <1>facilities and systems. Many of these digital tools were already under development, but the pandemic made people start using them faster. For many richer countries, these and emerging digital solutions offer a clear opportunity to manage the rising costs of their health systems. Meanwhile, for developing countries that are still in the early stages of building their health systems, these tools could be life-changing.

Many developing countries will never be able to achieve universal healthcare using the usual system, where medical treatments happen in special centers run by highly trained doctors. Digital technologies open up the possibility of completely new models of care, such as patients having access to high-quality information and controlling their own medical records, artificial intelligence (AI) to aid *[1]diagnosis, and robotic delivery of many procedures.

It is now possible to measure vital signs like temperature, blood pressure, and oxygen levels at home at very low cost, <2>eliminating the need to visit a clinic. This is especially important for the treatment of long-lasting health problems such as *[2]diabetes, for which home-based care is more effective and less costly than regular visits to a health facility. Increasingly, less complex diseases that are now treated as outpatient care will be managed in the home, remotely, using smartphones, and it will be possible to receive treatment from a doctor or healthcare professional [18] anywhere in the world.

Wearable devices, meanwhile, will make it possible to monitor patients remotely, with the data gathered by such devices becoming a vital tool for both patients and healthcare professionals. Electronic records that function across digital platforms will enable treatments that are more personalized. India has already taken advantage of this opportunity, based on the *3biometric universal identity program used to deliver its health insurance scheme. Imagine a world in which every health worker is <3>equipped with a device that provides access to their patients' health records, that responds to the inputting of key symptoms data with recommended diagnoses and treatments, and that can immediately order any appropriate medicines. In certain isolated parts of Africa, drones are already being used to deliver vaccines and blood.

One of the major costs to health systems results from 30 to 50 percent of patients receiving medications for long-term conditions not following through with their treatment. Fixing this could result in less medication being wasted, fewer hospital admissions, plus faster recovery and improved quality of life and productivity for patients. Technology may be able to help here, too. Text and mobile phone applications can be used to remind patients to take their medicines, exercise, and do physical therapy. Another promising approach is an electronic medication bottle which registers the dates and times when it is opened and reminds patients to take their medicines at the right time.

However, the social contract will need to change if this new world of digital medicine is to work. Probably the most important question we will have to answer is who owns and controls patients' data and how its privacy and security can be guaranteed. This is an unavoidable issue because many of the wider benefits of digitalization—for research and monitoring public health—rely specifically on pooling and sharing data. There have already been cases of violations of privacy in the pursuit of developing better treatments. We need to develop principles that ensure each individual has control of their own data while allowing the wider public benefits to be realized. There is also a growing awareness among people about the importance of addressing bias in the *4algorithms: currently most of the research that supports their design has been conducted on white men, which may not be suitable for diagnosis and treatment of women and people from different ethnic groups.

It is likely that countries will arrive at different decisions on the balance between individual privacy and collective benefit. During the coronavirus pandemic, citizens in many Asian countries willingly [19] their governments having access to personal data for the purpose of contact tracing. However, in Europe, there was a preference for decentralized systems that specifically prevented governments from having a central source of information. In democratic countries, there is emerging agreement that citizens should control their own data and their permission be required for it to be used for any wider purpose. However, there is wide variation in practice, and the situation is still evolving. It may be necessary to have an approach whereby some data (such as having an illness that is viewed negatively by others) is more protected than other data that clearly serves a public purpose (such as having an infectious disease).

Despite the challenges, digital provision offers a real opportunity to deliver better healthcare at lower costs and [20] doctors from some of the more routine aspects of care, such as taking patients' blood pressure or temperature. This will allow them to focus on the higher-quality human interactions with patients that ensure following treatment plans and ultimately better outcomes. This combination of "high tech" and "high touch" may be the way to balance cost and quality in the future of healthcare, but however successful and efficient the provision may be, the best outcomes will come not from the treatment of illness, but from its prevention.

*1diagnosis = discovery, identification, or determination of the cause and nature of a disease, disorder, or problem through examination and analysis（複数形は diagnoses）
*2diabetes = 糖尿病
*3biometric = 生体認証の
*4algorithms = processes or rules for solving a problem or performing a task

1. Which is the most stressed syllable in the following word?

[15] <1>facilities　　fa-cil-i-ties
①②③④

2. Choose the answer that is closest in meaning.

[16]	<2>eliminating	① dividing	② removing	③ suggesting	④ confronting	⑤ assuring
[17]	<3>equipped with	① furnished with	② brought with	③ offered by	④ assigned by	⑤ delivered by

3. Choose the most appropriate answer.

[18]	① locate	② located	③ to locate	④ in location	⑤ location of
[19]	① submitted	② presented	③ demanded	④ applied	⑤ accepted
[20]	① force	② allow	③ prevent	④ encourage	⑤ free

4. [21] How might digital technologies improve healthcare in developing countries?

① by focusing primarily on the treatment of chronic diseases in remote areas
② by supporting the development of special medical centers run by experienced doctors
③ by providing life-changing healthcare solutions that are more accessible to patients
④ by encouraging younger patients to manage their health through mobile apps
⑤ by using government funding to provide traditional healthcare services

5. [22] In paragraph 4, why does the author mention drones in Africa?

① to show how technology has improved access to healthcare in remote areas
② to explain why rural areas struggle with healthcare due to lack of transport
③ to describe how drones are used for environmental and military purposes
④ to argue that many developing countries cannot afford new technologies
⑤ to compare the effectiveness of digital solutions used in India and in African countries

6. [23] What is paragraph 5 mostly about?

① the high costs of medications for long-term conditions
② how new technology is replacing medications for patients
③ the challenges patients face in obtaining their medication
④ how digital tools can help patients take their medicine properly
⑤ how electronic medication bottles assist older patients

7. [24] In paragraph 6, what does the author suggest about patients' data?

① It is important to store health data in physical formats.
② Patients should have control over their own data.
③ Doctors should have unrestricted access to patients' data.
④ Health data should not be shared for research purposes.
⑤ Data stored electronically can be lost or stolen.

8. [25] What is the main idea of the passage?

① Technology has made healthcare delivery more complicated.
② Wearable devices are an ideal solution to healthcare problems.
③ The coronavirus pandemic affected the use of technology in healthcare.
④ Many countries are adopting similar digital healthcare systems.
⑤ Digital tools are transforming healthcare worldwide.

3 Answer the questions about the passage below. Choose the most appropriate answers based on what is stated or implied in the passage. Choose ONE answer unless other instructions are given. Boxes ([ ]) in the passage indicate missing information.

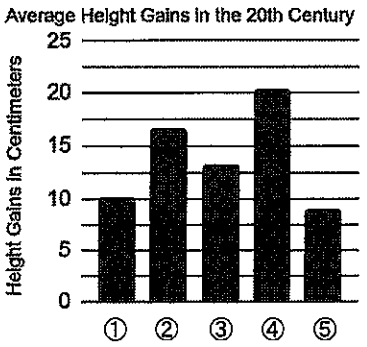
Like many other inquiries into the human condition, studies of human height have their belated origins in 18th-century France, where between 1759 and 1777 Philibert Guéneau de Montbeillard measured his son every six months, from birth to his 18th birthday, and the Comte de Buffon published the table of the boy's measurements in the 1777 supplement to his famous book, *Histoire Naturelle* (Natural History). However, Montbeillard's son was tall for his time (as a young adult he matched today's average Dutchman), and we did not see systematic large-scale data on human height and the growth of children and young adults until the 1830s, [26] Edouard Mallet and Adolphe Quetelet provided such data.

Since then, we have studied all aspects of human height, ranging from its expected progress with age and its relation to weight to its *1nutritional and genetic determinants and gender differences in growth phases. [27] we know (with high accuracy) expected heights (and weights) at different ages. If a young American mother comes to her *2pediatrician with a two-year-old boy measuring 93 centimeters, she will be told that her son is taller than 90 percent of children in his age group.

<1>For those interested in long-term measures of progress, as well as revealing international comparisons, one of the best outcomes of modern systematic studies of growth remains the well-documented history of rising average heights. Although stunting (inadequate growth that produces low height for age in young children) is still common in many poor countries, its global occurrence has declined—mostly [28] rapid improvement in China—from about 40 percent in 1990 to about 22 percent in 2020, and growing taller was a global trend of the 20th century.

Better health and better nutrition—above all, greater intakes of high-quality animal protein (dairy products, meat, and eggs)—have driven the shift, and being taller is associated with a surprisingly large number of benefits. These do not include generally higher life expectancy, but there is a lower risk of heart diseases, and also higher mental ability, higher lifetime earnings, and higher social status. Correlation between height and earnings was first documented in 1915 and has since been [29] repeatedly in groups ranging from Indian coal mine workers to Swedish company executives. Moreover, the latter study showed that the company executives were taller in firms with larger assets!

Long-term population-wide findings are equally fascinating. Average male heights in preindustrial Europe were between 169 and 171 centimeters, and the global average was about 167 centimeters. Plenty of information about body sizes and shapes available for 200 countries shows an average gain over the 20th century of 8.3 centimeters for adult women and 8.8 for men. The population of every country in Europe and North America got taller, while South Korean women recorded the century's largest average female gains (20.2 centimeters) and Iranian men topped the male sequence with 16.5 centimeters. Detailed Japanese data, recorded since 1900 for both sexes at 12 different ages between 5 and 24, show how growth responds to nutritional restrictions and improvements: between 1900 and 1940, the average height of 10-year-old boys rose by 0.15 cm/year, but wartime food shortages cut it by 0.6 cm/year. The annual increase resumed only in 1949, and during the second half of the century it averaged 0.25 cm/year. Similarly, the Chinese gains were interrupted by the world's largest famine (1959-61), but males in major cities still averaged an increase of 0.13 cm/year during the latter half of the 20th century. In contrast, measurements for the second half of the 20th century show minimal gains in India and Nigeria, none in Ethiopia, and a decline in Bangladesh.



Which nation has the tallest citizens? For males, the record holders are the Netherlands, Belgium, Estonia, Latvia, and Denmark; for females, it is Latvia, the Netherlands, Estonia, the Czech Republic, and Serbia; and the tallest group (with an average height of over 182.5 centimeters) is that of the Dutchmen born during the last quarter of the 20th century. Milk has been a key growth factor, [30] it in Japan or in the Netherlands. Before the Second World War, Dutchmen were

smaller than American men, but post-1950, US milk consumption declined while in the Netherlands it rose until the 1960s—and <2>it continues to be higher than in the US. The lesson is obvious: the easiest way to improve children's chances of growing taller is for them to drink more milk.

*1nutritional = 栄養上の
*2pediatrician = children's doctor

1. Choose the most appropriate answer.

26	① who	② whereby	③ which	④ when	⑤ whether
27	① Because	② Although	③ As a result,	④ On the other hand,	⑤ Despite that,
28	① in order to	② to contribute	③ regardless	④ in accordance	⑤ thanks to
29	① translated	② prepared	③ occurred	④ confirmed	⑤ participated
30	① be	② to be	③ have	④ to have	⑤ having been

2. 31 For the underlined sentence <1>, find the MAIN VERB of the sentence.

① interested	② measures	③ progress	④ revealing	⑤ comparisons
⑥ outcomes	⑦ studies	⑧ remains	⑨ well-documented	⑩ average

3. 32 In the last paragraph, what does <2>it refer to?

① Milk	② key growth factor	③ Japan	④ Netherlands	⑤ Dutchmen
⑥ Americans	⑦ milk consumption in the US	⑧ milk consumption in the Netherlands		

4. 33 Why does the author mention that Montbeillard's son was tall for his time?

① to explain why Montbeillard's research became widely known
② to show that his son's height was not representative of most people
③ to argue that Montbeillard's measurements were the most reliable
④ to compare his son's height to that of today's average Dutchman
⑤ to suggest that his son influenced future studies on height

5. 34 One of the primary reasons for the global trend of growing taller in the 20th century was _____.

① a decrease in global dairy prices
② the decline in infectious diseases
③ improvement in global education systems
④ increased consumption of high-quality animal protein
⑤ greater efficiency in food transportation systems

6. 35 In paragraph 4, which TWO are NOT mentioned as benefits associated with being taller?

① longer life expectancy
② reduced risk of heart diseases
③ better mental ability
④ greater lifetime income
⑤ improved social status
⑥ increased popularity among peers

7. The graph in the passage shows height gains in centimeters for different groups during the 20th century.

36 Which bar represents the global average for men?
37 Which bar represents South Korean women?
38 Which bar represents Iranian men?

8. 39 According to paragraph 5, what affected the average height of 10-year-old Japanese boys during the 1940s?

① industrialization of Japan's economy
② introduction of milk into school lunches
③ lack of food during the war
④ improvements in living standards
⑤ new national health programs

9. 40 What is the most appropriate title for the passage?

① The History of European Height Studies
② The Surprising Benefits of Being Taller
③ Identifying the World's Tallest Populations
④ Tracking Growth from Childhood to Adulthood
⑤ Understanding Human Height and Its Global Trends

出典