

2024 年度

帰国生入試 問題 (英語)

注 意 事 項

- ・ 試験開始の合図があるまで問題冊子を開かないでください。
- ・ 解答用紙のみを集めます。問題冊子は持ち帰って構いません。
- ・ この冊子には問題が1 ページから 6 ページまであります（ただし 2 ページ目は白紙）。万一、印刷が欠けている部分があった場合は、手を挙げて監督者に知らせてください。
- ・ 試験問題は【1】【2】【3】の3 題です。【1】については英語で解答し、【2】【3】についてはそれぞれ指示された形式に従い記号で答えてください。
- ・ この冊子には解答用紙が2 枚はさまれています。3 題の問題の答えをそれぞれ所定の解答用紙に書いてください。

【 1 】

If you could choose one of the chores around the house and design a new robot to reduce the time and effort needed to do that chore, what kind of robot would you design? Explain why this invention would be important to you. Write your answer in English.

【 2 】

Choose from the list (A-G) the most appropriate sentence for each gap (1-5) in the text. Note that each sentence can be used only once. There are two extra sentences that do not need to be used.

Like all dinosaurs, *T. rex* reproduced by laying eggs. Baby *T. rexes* were tiny — probably no bigger than a pigeon — when they hatched from their eggs, which were most likely no larger than a football. [1]

Scientists used to think that *T. rex* grew like an iguana or a crocodile: that it kept growing throughout its life, gradually getting bigger and bigger and finally reaching its full adult size after about 100 years. Now we know that this is wrong. Dinosaurs like *T. rex* grew quickly, much more like birds than lizards or crocodiles.

The evidence is buried deep inside the bones of dinosaurs. Bones are made of living tissues, just like skin and muscle. As bone grows, new layers are added to the outside. [2] They look like rings, and each ring marks one year of growth. So you can count the rings and tell how old the dinosaur was when it died. It's the same when you look at a tree trunk: you can count the rings and tell how old the tree is.

Greg Erickson, who studied the bite force of *T. rex*, cut open the bones of many dinosaurs, including *T. rex* and other tyrannosaurs. What Greg found shocked him. [3] That means tyrannosaurs hatched, grew up, reached adult size, and died within three decades. Their life span was less than half the average human life span. Thus, *T. rex* must have grown *very* quickly in order to get so big.

Just like humans, the bodies of *T. rex* changed as they grew up. Thomas Carr has spent many years studying tyrannosaur growth. Thomas has carefully examined dozens of *T. rex* skeletons that have been found by paleontologists. [4] His research shows that *T. rex* was a long-legged, fast runner when it was young, but as an adult it got heavier and slower. Young *T. rexes* had long skulls with weak bones, small muscles, and thin teeth. But adults had deeper skulls with huge muscles and banana-sized teeth. It seems like juveniles could probably chase down prey like cheetahs do, but were not strong enough to crush through bone. Adults, on the other hand, couldn't run fast, but they had very powerful jaws.

[5] Perhaps they hunted in packs, with the juveniles chasing down the prey and then the adults jumping out at the last moment to kill the prey with a bone-shattering bite. This is a scary thought, but it is probably true. Paleontologists have found some tyrannosaur species in bonebeds, where many juveniles and adults are buried together as fossils. This is a sign that they were probably living together. And if they were living together, they were most likely hunting together.

[Adapted from *The Age of Dinosaurs* (2021) by Steve Brusatte]

- A) There was no clear evidence that they were quite different according to their age.
- B) Maybe the juveniles and the adults worked together.
- C) If you cut open a dinosaur bone, you can see these different layers.
- D) These include fossils that cover the entire life of the dinosaur, from juvenile to adult.
- E) Therefore, *T. rex* must have grown *a lot* to change from a little baby to an enormous adult.
- F) By working together, the jaws and arms allowed *T. rex* to eat a lot of food.
- G) Not a single bone had more than thirty growth rings!

【 3 】

Read the following passage and choose the best answer from among the four choices for each question. Write the corresponding letter on your answer sheet.

The Game Boy came out in Japan on April 21, 1989. It had these games: *Super Mario Land*, *Alleyway*, *Baseball*, and *Yakuman*. Three months later, on July 31, 1989, the Game Boy was launched in North America. It was bundled with a new game called *Tetris*.

Tetris was not created in Japan or North America. *Tetris* came from Russia. Alexey Pajitnov (say: ah-LEK-say pah-JEET-nov) was a computer programmer who worked at a government computer center in Moscow.

As a child, he had always loved puzzles, especially pentominoes.

A set of pentominoes consists of twelve shapes made by joining five squares together side-to-side.

In June 1984, Alexey got the idea that this game might make a fun computer game. He quickly realized, though, that twelve pentomino pieces rotating on a small screen would be too complicated. So, he reduced the pieces to seven shapes made by joining four squares together side-to-side.

Alexey wrote the original program on a Russian computer. It did not have graphics, so he used letters for the playing pieces. Then he figured out how to make the pieces flip and rotate. Alexey programmed the game so that each full line of pieces would disappear and give the player more space on the screen to continue playing. As players reached different levels, the pieces appeared faster and faster. Alexey named the game *Tetris*, taking the first part of the Greek word *tetra*, which means “four,” and the second part of the word *tennis*, which was Alexey’s favorite sport.

Alexey worked for the Russian government when he created the game. And he worried he might get in trouble if he tried to sell it himself. So, he granted his rights to the government for ten years. Boy, was the country lucky! Alexey did not make any money from the sales of *Tetris* until 1996.

Today, *Tetris* is among the top-selling games of all time and one of the most well-known in the world. There are several reasons for this. It is a simple game to learn, so many people are willing to try it. (It’s hard, however, to get really skillful at it.) *Tetris* holds players’ attention for long periods of time. Gamers always feel as though they learn something new as they play. It also has good pacing. It starts slow, then goes faster and faster to keep players on their toes!

The Game Boy was a huge success in North America. It sold more than 118 million units *and* adults bought the Game Boy, too. They played on their way to and from work. Video games were no longer just for kids!

[Adapted from *What is Nintendo?* (2021) by Gina Shaw]

Question 1:

Choose the sentence that best describes *Tetris*.

- A) It came out in North America about three months before it did in Japan.
- B) It was developed in order to boost the sales of the Game Boy in Russia.
- C) The developer created the game mainly for children in North America.
- D) A Russian computer programmer created the game in the 1980s.

Question 2:

How did the developer make the game much easier for everyone to play?

- A) By joining squares together side-to-side.
- B) By copying the rules of pentominoes.
- C) By allowing the players to rotate the shapes.
- D) By using fewer and simpler shapes.

Question 3:

Why did the developer most likely name the game after the Greek word *tetra*?

- A) Each piece was made of four squares.
- B) The developer’s favorite sport was tennis.
- C) There were four different levels in the game.
- D) It involved pieces of four different shapes.

Question 4:

Why was the Russian government lucky?

- A) The developer got in trouble selling the game himself.
- B) The Game Boy became very popular all over the world.
- C) They made a lot of money from the sales of the game.
- D) The developer sold the information to the government.

Question 5:

Which one of the following is **NOT** mentioned as the reasons for the success of *Tetris*?

- A) It is not difficult for many people to learn and start playing.
- B) It is more popular among adults than among children.
- C) It keeps offering new challenges even for long-time players.
- D) The changing speed of the game keeps players entertained.

【1】

*書ききれない場合は裏を使ってください。

受験番号	
氏名	

【1】	合計

【 2 】

1

2

3

4

5

【 3 】

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2

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4

5

受験番号	
氏名	

【2】【3】

【1】

【解答例】

If I could design a robot to help with one of the chores around the house, I would create one that folds the laundry. My father works hard every day, and after he comes home, he spends a lot of time doing the housework. One job that seems to take a particularly long time is folding the washing, and he usually stays up late to do it. I feel sorry for him because he doesn't get enough sleep and is often tired as a result. If I designed a robot to fold the laundry, my father could go to bed earlier, so he could get more rest and would feel better during the day.

(114 words)

*書ききれない場合は裏を使ってください。

受験番号	
氏名	

【1】

合計

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【解答】

【2】

1 **E** 2 **C** 3 **G** 4 **D** 5 **B**

【3】

1 **D** 2 **D** 3 **A** 4 **C** 5 **B**



受験番号	
氏名	

【2】【3】

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