

英 語 問 題

はじめに、これを読みなさい。

1. この問題用紙は 18 ページある。ただし、ページ番号のない白紙はページ数に含まない。
2. 解答用紙に印刷されている受験番号が正しいかどうか、受験票と照合して確認すること。
3. 監督者の指示にしたがい、解答用紙の氏名欄に氏名を記入すること。
4. 解答は、すべて解答用紙の所定欄にマークするか、または記入すること。所定欄以外のところには何も記入しないこと。
5. 問題に指定された数より多くマークしないこと。
6. 解答は、必ず鉛筆またはシャープペンシル(いずれも HB・黒)で記入のこと。
7. 訂正する場合は、消しゴムできれいに消し、消しくずを残さないこと。
8. 解答用紙は、絶対に汚したり折り曲げたりしないこと。
9. 解答用紙はすべて回収する。持ち帰らず、必ず提出すること。ただし、この問題用紙は、必ず持ち帰ること。
10. 試験時間は 60 分である。
11. マークの記入例

良い例	悪い例
	

※ この問題用紙は、必ず持ち帰ること。

[I] 次の各組の意味が同じになるように、かっこの中に単語を一つ入れて、解答欄に記入しなさい。

1. [It is clear that it was an accident.
It goes without () that it was an accident.

2. [My brother is not as interested in planning for the future as I am.
My brother is () interested in planning for the future than I am.

3. [Maybe you should drop your physics course and enroll in a different science course.
() don't you drop your physics course and enroll in a different science course?

〔Ⅱ〕 以下の英文を完成させるために、かっこの中の語を適当な活用形(例 pay→paid)又は派生語(例 music→musical)に変えて解答欄に記入しなさい。変える必要のない場合には、かっこの中の語をそのまま記入しなさい。いずれの場合も、解答欄に記入する語は1語のみとする。

1. After the riot, over 100 people were taken to the hospital, many of (who) had been innocent bystanders.
2. Antarctica is covered by a huge ice cap (contain) 70 per cent of the earth's fresh water.
3. The most traditional (define) of a human community is 'a group of people larger than a family that interact with each other.'
4. I called my husband to tell him I would be late. If I (have) not, he would have worried about me.
5. (Convince) that she could never learn to play the piano, Ann stopped taking lessons.
6. While Paul was climbing a ladder (carry) brushes and paint, a bird flew down and sat on his head.
7. The company will continue to hire new (employ) as long as more orders keep coming in.

〔Ⅲ〕 次の英文を読んで、以下の設問に答えなさい。

① James Smithson, the founding donor of the Smithsonian Institution, was an English chemist and mineralogist. He was the ⁽¹⁾illegitimate son of Hugh Smithson, the first Duke of Northumberland, and Elizabeth Hungerford Keate Macie, a wealthy widow who was a cousin of the Duchess of Northumberland. His exact birthday remains unknown because he was born in secret in Paris, where his mother had gone to hide her pregnancy. In his youth, his name was James Lewis Macie, but in 1801, after his parents died, he took his father's last name of Smithson.

② Smithson never married. He had no children, and he lived a peripatetic life, traveling widely in Europe during a time of great turbulence and political upheaval. He was in Paris during the French Revolution, and was later ⁽²⁾imprisoned during the Napoleonic Wars. Friends with many of the great scientific minds of his age, he believed that the pursuit of science and knowledge was the key to happiness and prosperity for all of society. He saw scientists as benefactors of all mankind, and thought that ⁽⁷⁾they should be considered 'citizens of the world.'

③ Smithson was interested in almost everything and studied a wide range of natural phenomena: the venom of snakes, the chemistry of volcanoes, the constituents of a lady's teardrop, and even the fundamental nature of electricity. He published twenty-seven papers in his lifetime, ranging from an improved method of making coffee, to an analysis of the mineral calamine, ⁽³⁾critical in the manufacture of brass — which led to the mineral being named 'smithsonite' in his honor. He laid out his philosophy most clearly in one of his last papers: 'It is in his knowledge that man has found his greatness and his happiness. No ignorance is without loss to him.' Toward the end of his life, under a clause in his will, he left his ⁽⁴⁾fortune to the United States, a place he had never visited, to found in Washington, under the name of the Smithsonian Institution, 'an

establishment for the increase and diffusion of knowledge among men.'

[4] Why would he decide to give the entirety of his sizable estate — which totaled 1/66 of the United States' entire federal budget at the time — to a country that was foreign to him? Some speculate it was because he was denied his father's legacy. Others ⁽⁵⁾argue that he was inspired by the United States' experiment with democracy. Some attribute his philanthropy to ideals inspired by such organizations as Britain's Royal Institution, which was dedicated to using scientific knowledge to improve human conditions. Smithson never wrote about or discussed his bequest with friends or colleagues, so we are left to speculate on the ideals and motivations of a gift that has had such significant impact on the arts, humanities, and sciences in the United States.

[5] Smithson died in 1829, and six years later, President Andrew Jackson announced the bequest to Congress. On July 1, 1836, Congress accepted the legacy bequeathed to the nation and pledged the faith of the United States to the charitable trust. In September 1838, Smithson's legacy, which amounted to more than 100,000 gold sovereigns, was delivered to the mint at Philadelphia. Recoined in U.S. currency, the gift amounted to more than \$500,000. Another decade of debate passed, however, before the Smithsonian Institution was actually established. Congressmen, educators, researchers, social reformers, and the general public all voiced opinions as to what they believed Smithson had meant by 'the increase and diffusion of knowledge.' Initially most Americans assumed that Smithson intended to found a university, so the debates centered on what type of school. Gradually other ideas were introduced — an observatory, a scientific research institute, a national library, a publishing house, or a museum. The law that finally created the Smithsonian was a ⁽⁶⁾compromise among these ideas, leaving out only the university.

[6] The Smithsonian Institution is now the world's largest museum complex, ⁽⁷⁾composed of a group of national museums and research centers housing the United States' national collections in natural history, American history, air and

space, the fine arts and the decorative arts, and several other fields ranging from postal history to cultural history. The Institution includes sixteen museums, four research centers, the National Zoo, the Smithsonian Institution Libraries (a research library system), the Smithsonian magazine, the Smithsonian Institution Press, the Traveling Exhibition Service, the Office of Education, and a number of other offices and activities.

問 1 下線部(1)~(7)の文中における意味に最も近い語句をそれぞれA~Eから一つ選び、解答欄の記号をマークしなさい。

(1) illegitimate

- A. unhappy
- B. unlawful
- C. unprepared
- D. unproductive
- E. unsatisfactory

(2) imprisoned

- A. hung up
- B. locked up
- C. packed up
- D. saved up
- E. taken up

(3) critical

- A. abundant
- B. common
- C. important
- D. radical
- E. well-known

(4) fortune

- A. destiny
- B. future
- C. goods
- D. luck
- E. wealth

(5) argue

- A. assert
- B. doubt
- C. emphasize
- D. permit
- E. realize

(6) compromise

- A. absolute rejection
- B. close examination
- C. negotiated result
- D. overall success
- E. total misunderstanding

(7) composed of

- A. classified by
- B. created by
- C. made up of
- D. replaced by
- E. taken out of

問 2 本文中の各段落の内容と一致するものを A～E から一つ選び、解答欄の記号をマークしなさい。

第 1 段落

- A. James Smithson later changed his name to 'James Lewis Macie.'
- B. James Smithson's mother would not tell him who his father was.
- C. James Smithson was an American mineralogist and chemist.
- D. No one knows exactly when James Smithson was born.
- E. The name of James Smithson's father remains unknown.

第 2 段落

- A. During the French Revolution, Smithson was living in Marseille.
- B. Many of the leading scientists of the time were friends of Smithson.
- C. Smithson formed a club called 'Citizens of the World.'
- D. Smithson had many scientist friends, yet he distrusted science.
- E. Smithson settled down in London and raised a large family.

第 3 段落

- A. Smithson published more than 207 papers on all kinds of topics.
- B. Smithson visited the United States when he was a child.
- C. Smithson was not interested in studying animals or plants.
- D. Smithson's research extended to the preparation of coffee.
- E. The Smithsonian Institution was named for Smithson's discovery of brass.

第4段落

- A. Letters written by Smithson to friends and colleagues explained his plans for the Smithsonian Institution.
- B. No one knows for sure why Smithson gave all of his money to create the Smithsonian Institution.
- C. Smithson gave his money to the United States because he hated his British father.
- D. Smithson's gift to the United States was so big that it equaled the entire federal budget at the time.
- E. The Smithsonian Institution was supposed to be an imitation of Britain's Royal Institution.

第5段落

- A. In the end, the amount of money given by Smithson was nearly \$100,000.
- B. The city of Philadelphia became the location for the Smithsonian Institution.
- C. The Smithsonian Institution was not established until after much discussion and debate had taken place.
- D. The Smithsonian Institution is now famous for its university.
- E. The Smithsonian Institution was finally built in 1829.

第6段落

- A. More people visit the Smithsonian Institution each year than any other museum in the world.
- B. The Smithsonian Institution has an exchange program with Japan's National Museum of Nature and Science.
- C. The Smithsonian Institution has grown to become the biggest museum complex in the world today.
- D. The Smithsonian Institution collects things related to science and technology, rather than art and natural history.
- E. The Smithsonian Institution now has four museums, sixteen research centers, a zoo, a research library system, and many other facilities.

問3 下線部(ア)が表している具体的な内容として最もふさわしいものをA～Eから一つ選び、解答欄の記号をマークしなさい。

- A. children
- B. friends
- C. happiness and prosperity
- D. science and knowledge
- E. scientists

問4 下記の問いの答えとして最もふさわしいものをA～Eから一つ選び、解答欄の記号をマークしなさい。

Question: Where would you be likely to read this article?

- A. In a book on the Smithsonian Institution.
- B. In a book on the U.S. Congress.
- C. In a guidebook for traveling in Europe.
- D. In a manual for manufacturing smithsonite.
- E. In an economics textbook.

〔Ⅳ〕 次の英文を読んで、以下の設問に答えなさい。

① Brain scientists have discovered that expertise is simply the wisdom that emerges from errors made in brain cells. Mistakes aren't things to be ⁽¹⁾discouraged. On the contrary, they should be cultivated and carefully ^(ア)investigated.

② Carol Dweck, a psychologist at Stanford University in California, has spent decades demonstrating that one of the crucial ⁽²⁾elements of successful education is fostering the ability to learn from mistakes. Teachers should, therefore, encourage their pupils to do their best and learn from the mistakes they make in the process of working hard. But, unfortunately, children are often taught the exact opposite. Instead of praising children for trying hard, teachers typically praise them for their *innate intelligence (being smart). Dweck has shown that ^(イ)this type of encouragement actually backfires, since it leads students to see mistakes as signs of stupidity and not as the building blocks of knowledge. The regrettable ⁽³⁾outcome is that children never learn how to learn.

③ Dweck's study involved more than four hundred fifth graders who are ten to eleven years old. One at a time, the children were removed from class and given a relatively easy test consisting of nonverbal puzzles. After the child ⁽⁴⁾finished the test, the researchers told the student his or her score and provided a single sentence of praise. Half of the children were praised for their intelligence: 'You must be smart at this,' the researcher said. The other students were praised for their effort: 'You must have worked really hard.'

④ The students were then allowed to choose between two different subsequent tests. The first choice was described as a more difficult set of puzzles, but the children were told that they would learn a lot from attempting it. The other option was an easy test, similar to the test they had just taken.

⑤ When Dweck was designing the experiment, she'd expected the different ^(ウ)forms of praise to have a rather modest effect. After all, it was just one

sentence. But it soon became clear that the type of compliment given to the fifth graders dramatically influenced their choice of tests. Of the group of children that had been praised for their efforts, 90 per cent chose the harder set of puzzles. However, of the children that were praised for their intelligence, most went for the easier test. ‘When we praise children for their intelligence,’ Dweck wrote, ‘we tell them that this is the name of the game: look smart, don’t risk making mistakes.’

[6] Dweck’s next set of experiments showed how this fear of failure actually inhibited learning. She gave the same fifth graders yet another test. This test ⁽⁵⁾ was designed to be extremely difficult, but Dweck wanted to see how the children would respond to the challenge. The students who had been praised for their efforts in the initial test worked hard at figuring out the puzzles. ‘They got very involved,’ Dweck says. ‘Many of them remarked without being asked, ⁽⁶⁾ “This is my favorite test.”’ Children that had initially been praised for being smart, on the other hand, were easily discouraged. Their inevitable mistakes were seen as signs of failure.

[7] The final round of tests was the same difficulty level as the initial test. Nevertheless, students who had been praised for their efforts exhibited significant improvement, raising their average score by 30 per cent. This result was even more impressive when compared with students who had been randomly assigned to the ‘smart’ group; they saw their scores drop by an average of nearly 20 per cent. For the ‘smart’ children, the experience of failure (A).

[8] The problem with praising children for ‘being smart’ is that it misrepresents the reality in the brain cells. The ‘smart compliment’ encourages children to avoid the most useful kind of learning activities, which is learning from mistakes. Unless you experience the unpleasant symptoms of being wrong, your brain will ^(x) never revise its models. Before your brain cells can succeed, they must repeatedly fail.

[9] This insight does not apply only to fifth graders solving puzzles; it applies to ⁽⁷⁾

everyone. Over time, the brain's flexible cells become the source of expertise. We tend to think of experts as being weighed down by information, their intelligence dependent on a vast amount of knowledge. In fact, experts actually rely on their emotions. When they evaluate a situation, they do not systematically compare all the available options or consciously analyze the relevant information. Instead, they naturally depend on the emotions generated by their brain cells. Their errors have been translated into useful knowledge, which allows them to benefit from a set of accurate feelings they cannot even begin to explain.

*innate 生まれつきの, 先天的な

問 1 下線部(1)~(7)の文中における意味に最も近いものをそれぞれA~Eから一つ選び, 解答欄の記号をマークしなさい。

(1) emerges from

- A. comes out of
- B. gets lessened by
- C. is contrasted to
- D. stays away from
- E. tries to imitate

(2) elements

- A. components
- B. discussions
- C. surprises
- D. talents
- E. textbooks

(3) outcome

- A. cause
- B. departure
- C. exit
- D. guess
- E. result

(4) nonverbal

- A. expressed through music rather than words
- B. not using any words
- C. using a lot of words
- D. using baby language
- E. using more words than necessary

(5) inhibited

- A. developed into
- B. held back
- C. led to
- D. lived in
- E. resulted in

(6) involved

- A. angry
- B. confused
- C. disappointed
- D. excited
- E. nervous

(7) insight

- A. experiment
- B. damage
- C. discovery
- D. mistake
- E. regulation

問 2 下線部(ア)～(エ)の文中における意味に最も近いものをそれぞれA～Eから一つ選び、解答欄の記号をマークしなさい。

(ア) they should be cultivated and carefully investigated

- A. More experts in brain science are needed in today's world.
- B. Students should develop an interest in how the brain works.
- C. Teachers must correct their students' mistakes.
- D. The more mistakes scientists make, the wiser they become.
- E. The positive effect of making mistakes should be studied more closely.

(イ) Dweck has shown that this type of encouragement actually backfires

- A. Dweck actually could not find any difference between praising children for being smart or praising them for working hard.
- B. Dweck discovered that children had to be born smart in the first place in order to learn a lot.
- C. Dweck found that praising children for being smart had a negative effect on their ability to learn.
- D. Dweck observed that if children were praised for being smart, they could learn a lot more.
- E. Dweck's study had a negative effect on her career because no one understood the value of her research.

(㉞) she'd expected the different forms of praise to have a rather modest effect

- A. Dweck believed that modest children and bold children respond differently to praise.
- B. Dweck expected to get more criticism than praise for her research results.
- C. Dweck felt that different forms of praise would have a big effect on how children learn.
- D. Dweck thought that children's learning would not be affected very much by different forms of praise.
- E. Dweck was interested in how different forms of praise affect modesty in children.

(㉟) Unless you experience the unpleasant symptoms of being wrong, your brain will never revise its models

- A. By constantly changing your ways of thinking, making mistakes will seem less and less important.
- B. Even if you feel unpleasant after making a mistake, your thinking cannot change instantly.
- C. Feeling unpleasant is less important than changing how you think.
- D. If you are ready to change your ways of thinking, your sense of unpleasantness will disappear very soon.
- E. Your brain will learn how to think differently only after you feel the unpleasantness of making mistakes.

問 3 第 7 段落の空所(A)に、以下の(イ)~(ハ)の語句を文脈に照らし合わせて最もふさわしくなるように並び替えて入れるとすれば、2 番目と 4 番目に来る語句は何になりますか。正しい組みあわせを A~E から一つ選び、解答欄の記号をマークしなさい。

- (イ) actually got worse (ロ) discouraging (ハ) had been
(ニ) so (ホ) that (ヘ) their scores

- A. (イ), (ロ)
B. (ロ), (ハ)
C. (ニ), (ホ)
D. (ホ), (ヘ)
E. (ヘ), (イ)

問 4 第 3 段落の内容に合致しないものを A~E から一つ選び、解答欄の記号をマークしなさい。

- A. All the fifth graders took the test singly.
B. All the subjects were praised after taking the test.
C. Half of the children were praised for their smartness, the rest for their effort.
D. The children who could not solve the puzzles were taken out of the class one by one.
E. There were only two types of praise, each made of a single sentence.

問 5 第9段落の内容に合致しないものをA～Eから一つ選び、解答欄の記号をマークしなさい。

- A. Dweck's findings can be extended beyond fifth graders.
- B. Even experts have developed their intuition through making errors.
- C. Experts are people who have always reached the right answer through examining all the data.
- D. People with deep knowledge and good skills rely on their emotions.
- E. Trial and error creates a certain set of feelings that allow you to make a correct decision.

問 6 この英文のタイトルとして最もふさわしいものをA～Eから一つ選び、解答欄の記号をマークしなさい。

- A. Hard Work Pays
- B. How to Teach Fifth Graders
- C. Learning through Mistakes
- D. The Fear of Failure
- E. The Secret of Smartness

[V] 空所(1)～(5)に入る最も適当なものを、それぞれA～Eから一つ選び、解答欄の記号をマークしなさい。

Interviewer: Hello Chef Murakami. Let's begin today's program by talking about your philosophy of cooking. It seems to me that your style has changed over the years.

Chef Murakami: Yes that's true. When I first started out, my goal was to establish a unique identity as a creative chef, and I thought that (1).

Interviewer: In other words, you thought chefs were like magicians who demonstrated their skills by changing the natural shape and taste of ingredients.

Chef Murakami: Yes, exactly. But gradually I began to find that approach a little arrogant. Now I think that the true work of a great chef is (2).

Interviewer: So, if I sum up your philosophy of cooking, it has changed from one in which (3), to one where you think (4)?

Chef Murakami: Yes, (5).

- A. a master chef was one who always added another taste dimension to every ingredient
- B. bringing out the taste that already exists within any ingredient
- C. that's a nice way to sum it up
- D. the ingredients you work with are gifts from God
- E. you thought of a chef as God