

旭川医科大学

見 本

平成 24 年度一般入試前期日程

## 英 語 問 題 紙

### 注 意 事 項

1. 試験開始の合図があるまで、この問題紙を開いてはいけません。
2. 英語の問題紙は、9 ページあります。
3. 解答用紙は 4 枚あります。
4. 受験番号は、監督者の指示に従って、全ての解答用紙の指定された箇所に必ず記入しなさい。
5. 受験番号および解答以外のことを解答用紙に書いてはいけません。
6. 解答はすべて解答用紙の指定された欄に書くこと。裏面に書かないこと。
7. 解答用紙のみを提出しなさい。問題紙は持ち帰りなさい。

## 旭川医科大学 一般 前期

英 語 訂 正 表

ページ	問題	行	訂 正 前	訂 正 後
9	3	最終行	Describe such the	Describe the. (suchを削除して下さい)

問題 1 以下の英文を読み、問いに日本語で答えなさい。

### The Truth About Grit

It's the single most famous story of scientific discovery: in 1666, Isaac Newton was walking in his garden outside Cambridge, England — he was avoiding the city because of \*the plague — when he saw an apple fall from a tree. The fruit fell straight to the earth, as if tugged by an invisible force. (Subsequent versions of the story had the apple hitting Newton on the head.) (1)This mundane observation led Newton to devise the concept of universal gravitation, which explained everything from the falling apple to the orbit of the moon.

There is something appealing about such narratives. They reduce the scientific process to a sudden epiphany: There is no sweat or toil, just a new idea, produced by a genius. Everybody knows that things fall — it took Newton to explain why.

(2)Unfortunately, the story of the apple is almost certainly false; \*Voltaire probably made it up. Even if Newton started thinking about gravity in 1666, it took him years of painstaking work before he understood it. He filled entire \*vellum notebooks with his scribbles and spent weeks recording the exact movements of a \*pendulum. (It made, on average, 1,512 ticks per hour.) The discovery of gravity, in other words, wasn't a flash of insight — it required decades of effort, which is one of the reasons Newton didn't publish his theory until 1687, in the "Principia."

Although biographers have long celebrated Newton's intellect — he also pioneered calculus — it's clear that his achievements aren't solely a byproduct of his piercing intelligence. Newton also had an astonishing ability to persist in

the face of obstacles, to stick with the same stubborn mystery — why did the apple fall, but the moon remain in the sky? — until he found the answer.

In recent years, psychologists have come up with a term to describe this mental trait: (3)grit. Although the idea itself isn't new — "Genius is 1 percent inspiration and 99 percent perspiration," Thomas Edison famously remarked — the researchers are quick to point out that grit isn't simply about the willingness to work hard. Instead, it's about setting a specific long-term goal and doing whatever it takes until the goal has been reached. It's always much easier to give up, but people with grit can keep going.

While stories of grit have long been associated with self-help manuals and life coaches — Samuel Smiles, the author of the influential Victorian text "Self-Help" preached the virtue of perseverance — these new scientific studies rely on new techniques for reliably measuring grit in individuals. As a result, they're able to compare the relative importance of grit, intelligence, and innate talent when it comes to determining lifetime achievement. Although this field of study is only a few years old, (4)it's already made important progress toward identifying the mental traits that allow some people to accomplish their goals, while others struggle and quit. Grit, it turns out, is an essential (and often overlooked) component of success.

"I'd bet that there isn't a single highly successful person who hasn't depended on grit," says Angela Duckworth, a psychologist at the University of Pennsylvania who helped pioneer the study of grit. "Nobody is talented enough to not have to work hard, and that's what grit allows you to do."

The hope among scientists is that a better understanding of grit will allow educators to teach the skill in schools and lead to a generation of grittier children. Parents, of course, have a big role to play as well, since there's evidence that even offhand comments — such as how a child is praised — can

significantly influence the manner in which kids respond to challenges. And it's not just educators and parents who are interested in grit: the United States Army has supported much of the research, as it searches for new methods of identifying who is best suited for the stress of the battlefield.

The new focus on grit is part of a larger scientific attempt to study the personality traits that best predict achievement in the real world. While researchers have long focused on measurements of intelligence, such as the IQ test, as the crucial marker of future success, these scientists point out that most of the variation in individual achievement — what makes one person successful, while another might struggle — has nothing to do with being smart. Instead, it largely depends on personality traits such as grit and conscientiousness. It's not that intelligence isn't really important — Newton was clearly a genius — but that having a high IQ is not nearly enough.

(From THE BOSTON GLOBE, by Jonah Lehrer)

\*the plague ペスト; \*Voltaire ヴォルテール [18世紀フランスの哲学者];

\*vellum 上質皮紙, ベラム; \*pendulum 振り子

問 1. 下線部(1)の “This mundane observation” が指す内容を述べなさい。

問 2. 下線部(2)の根拠として考えることができる事実を本文に即して述べなさい。

問 3. 下線部(3)の “grit” とはどのような精神的特性を意味するのか、本文に即して述べなさい。

問 4. 下線部(4)を, “it” が指す内容を明らかにして, 和訳しなさい。

問 5. “grit” に関する研究は何のために行われているのか, 本文中の具体例を挙げて述べなさい。

問題 2 Read the following text and answer the questions in English.

### The Sibling Effect

In Brazil recently, a team of scholars studied the medical data from an emergency room, looking at all the cases where children had been rushed in after swallowing coins. The scholars were curious — was swallowing coins more common for children who didn't have any brothers or sisters? In the end, they decided their sample size was too small to draw any conclusion.

This was far from the first time scholars had tried to find strange side effects of being an only child. In Italy, a couple of years ago, researchers tried to determine if female onlies were more likely to have an eating disorder in high school. (They weren't.) In Israel, one scholar noted that onlies had a higher incidence of asthma — at least compared to children who had 15 to 20 siblings. But compared to children with a normal number of siblings, there was barely any difference in the rate of asthma. Parents of onlies could stop worrying.

Meanwhile, over in the United Kingdom, researchers were studying whether onlies get fewer \*warts. Not that you need to know the answer, but what the heck — onlies do have somewhat fewer warts at age 11. However, Scottish researchers have informed us that onlies get more \*eczema.

It seems that research on onlies has gone \*batty. It's no surprise why. In the last two decades, the proportion of women having only one child has about doubled in the United States, and single-child families are now more common than two-child families.

Nobody knows what this means for the children, but it seems reasonable that it must mean *something*. We have this idea because we've always

stigmatized the exception, and onlies are a good example of that: way back in 1898, one of the pioneers of child psychology, G. Stanley Hall, wrote that “being an only child is a disease in itself.” Many scholars today cringe at this ridiculous statement, but the studies on warts and coin swallowing suggest some are still under the influence of Hall’s point of view.

Scientists have uncovered some things about onlies — where onlies measure out slightly differently than those with brothers and sisters. But these are not surprising discoveries. We know that onlies do a little bit better in school, on average — probably for the same reasons that oldest siblings do a tiny bit better than younger siblings. From a study in Australia we know that girl onlies average fifteen fewer minutes of physical activity per day, which probably explains the study in Germany that said preschool-aged onlies have slightly worse physical \*dexterity.

But that’s not what society worries about, when it comes to onlies. What we wonder is: “Do they know how to get along?” Nowhere is this question getting more scrutiny than in China, which has limited families in urban areas to one child since 1979. (Despite this policy, 42.7% of families in China today have two or more children.) When the policy was first implemented, critics argued that a country of onlies would destroy the character of the entire nation. Despite three decades of intense study on this question, the research in China is still very mixed. One report said onlies in middle school were *less* anxious and had *better* social skills. But another report stated that in high school it was just the opposite. The research on social skills is just as conclusive in China as the coin-swallowing research in Brazil.

Why are we seeing no clear effect? It’s surprising, because the *theory* that being an only child deprives a child of social skills makes so much logical sense. By growing up with siblings, a child has thousands upon thousands of



interactions to learn how to get along. According to this theory, children with siblings should be massively more skilled at getting along than children with no siblings.

Yet they aren't.

Maybe the mistake here was assuming that those thousands upon thousands of interactions with siblings amount to a single positive. Perhaps the opposite is true—that children learn poor social skills from those interactions, just as often as they learn good ones.

(Adapted from *NurtureShock: New Thinking about Children*  
by Po Bronson and Ashley Merryman)

\*warts いぼ, こぶ; \*eczema 湿疹, 皮膚病; \*batty おかしな, 変わっている;

\*dexterity 機敏さ, 器用さ

Question 1. What did the team of scholars in Brazil study?

Question 2. Describe the change concerning the birth of onlies in the United States in the last two decades.

Question 3. People believe that children with siblings should be socially more skilled than children with no siblings. Explain why.

Question 4. Read the following statements and mark T for true or F for false according to the text.

- A. The eating-disorder research in Italy did not prove that female onlies were more likely to develop an eating disorder in high school.
- B. The asthma research in Israel showed that onlies were less likely to have asthma than children with a normal number of siblings.
- C. Scientists working on scientific investigation of onlies heavily rely on Hall's statement about onlies.
- D. Scientific studies about onlies have revealed that in several respects, onlies behave rather differently from children with siblings.
- E. The finding that onlies do a little bit better in school than children with siblings does not necessarily support the idea that onlies are different from children with siblings.
- F. No reliable conclusions on the social skills of onlies can be drawn from the research in China.
- G. It has been proved that children with siblings are socially more skilled than onlies.

**問題 3** You have read many books. Some were good. Others were not. Write an essay in English about which book(s) you regard as a waste of your time or money. Describe such the book(s) in detail and explain why you feel so.