**《阅读理解—说明文阅读》拓展提升任务**

2017北京高考

Measles (麻疹), which once killed 450 children each year and disabled even more, was nearly wiped out in the United States 14 years ago by the universal use of the MMR vaccine (疫苗). But the disease is making a comeback, caused by a growing anti-vaccine movement and misinformation that is spreading quickly. Already this year, 115 measles cases have been reported in the USA, compared with 189 for all of last year.

The numbers might sound small, but they are the leading edge of a dangerous trend. When vaccination rates are very high, as they still are in the nation as a whole, everyone is protected. This is called “herd immunity”, which protects the people who get hurt easily, including those who can’t be vaccinated for medical reasons, babies too young to get vaccinated and people on whom the vaccine doesn’t work.

But herd immunity works only when nearly the whole herd joins in. When some refuse vaccination and seek a free ride, immunity breaks down and everyone is in even bigger danger.

That’s exactly what is happening in small neighborhoods around the country from Orange County, California, where 22 measles cases were reported this month, to Brooklyn, N.Y., where a 17-year-old caused an outbreak last year.

The resistance to vaccine has continued for decades, and it is driven by a real but very small risk. Those who refuse to take that risk selfishly make others suffer.

Making things worse are state laws that make it too easy to opt out (决定不参加) of what are supposed to be required vaccines for all children entering kindergarten. Seventeen states allow parents to get an exemption (豁免), sometimes just by signing a paper saying they personally object to a vaccine.

Now, several states are moving to tighten laws by adding new regulations for opting out. But no one does enough to limit exemptions.

Parents ought to be able to opt out only for limited medical or religious reasons. But personal opinions? Not good enough. Everyone enjoys the life-saving benefits vaccines provide, but they’ll exist only as long as everyone shares in the risks.

1．The first two paragraphs suggest that \_\_\_\_\_.

A．a small number of measles cases can start a dangerous trend

B．the outbreak of measles attracts the public attention

C．anti-vaccine movement has its medical reasons

D．information about measles spreads quickly

2．Herd immunity works well when \_\_\_\_\_.

A．exemptions are allowed

B．several vaccines are used together

C．the whole neighborhood is involved in

D．new regulations are added to the state laws

3．What is the main reason for the comeback of measles?

A．The overuse of vaccine.

B．The lack of medical care.

C．The features of measles itself.

D．The vaccine opt-outs of some people.

4．What is the purpose of the passage?

A．To introduce the idea of exemption*.*

B．To discuss methods to cure measles.

C．To stress the importance of vaccination.

D．To appeal for equal rights in medical treatment.

2018北京高考

**Plastic-Eating Worms**

Humans produce more than 300 million tons of plastic every year. Almost half of that winds up in landfills (垃圾填埋场), and up to 12 million tons pollute the oceans. So far there is no effective way to get rid of it, but a new study suggests an answer may lie in the stomachs of some hungry worms.

*greater wax moth*

Researchers in Spain and England recently found that the worms of the greater wax moth can break down polyethylene, which accounts for 40% of plastics. The team left 100 wax worms on a commercial polyethylene shopping bag for 12 hours, and the worms consumed and broke down about 92 milligrams, or almost 3% of it. To confirm that the worms’ chewing alone was not responsible for the polyethylene breakdown, the researchers made some worms into paste (糊状物) and applied it to plastic films. 14 hours later the films had lost 13% of their mass—apparently broken down by enzymes (酶) from the worms’ stomachs. Their findings were published in *Current Biology* in 2017.

Federica Bertocchini, co-author of the study, says the worms’ ability to break down their everyday food—beeswax—also allows them to break down plastic. “Wax is a complex mixture, but the basic bond in polyethylene, the carbon-carbon bond, is there as well,” she explains. “The wax worm evolved a method or system to break this bond.”

Jennifer DeBruyn, a microbiologist at the University of Tennessee, who was not involved in the study, says it is not surprising that such worms can break down polyethylene. But compared with previous studies, she finds the speed of breaking down in this one exciting. The next step, DeBruyn says, will be to identify the cause of the breakdown. Is it an enzyme produced by the worm itself or by its gut microbes (肠道微生物)?

Bertocchini agrees and hopes her team’s findings might one day help employ the enzyme to break down plastics in landfills. But she expects using the chemical in some kind of industrial process—not simply “millions of worms thrown on top of the plastic.”

1．What can we learn about the worms in the study?

A．They take plastics as their everyday food.

B．They are newly evolved creatures.

C．They can consume plastics.

D．They wind up in landfills.

2．According to Jennifer DeBruyn, the next step of the study is to \_\_\_\_\_\_.

A．identify other means of the breakdown

B．find out the source of the enzyme

C．confirm the research findings

D．increase the breakdown speed

3．It can be inferred from the last paragraph that the chemical might \_\_\_\_\_\_.

A．help to raise worms

B．help make plastic bags

C．be used to clean the oceans

D．be produced in factories in future

4．What is the main purpose of the passage?

A．To explain a study method on worms.

B．To introduce the diet of a special worm.

C．To present a way to break down plastics.

D．To propose new means to keep eco-balance.

2019北京高考

By the end of the century, if not sooner, the world's oceans will be bluer and greener thanks to a warming climate, according to a new study.

At the heart of the phenomenon lie tiny marine microorganisms(海洋微生物) called phytoplankton. Because of the way light reflects off the organisms, these phytoplankton create colourful patterns at the ocean surface. Ocean colour varies from green to blue, depending on the type and concentration of phytoplankton. Climate change will fuel the growth of phytoplankton in some areas, while reducing it in other spots, leading to changes in the ocean's appearance.

Phytoplankton live at the ocean surface, where they pull carbon dioxide(二氧化碳) into the ocean while giving off oxygen. When these organisms die, they bury carbon in the deep ocean, an important process that helps to regulate the global climate. But phytoplankton are vulnerable to the ocean's warming trend. Warming changes key characteristics of the ocean and can affect phytoplankton growth, since they need not only sunlight and carbon dioxide to grow, but also nutrients.

Stephanie Dutkiewicz, a scientist in MIT's Center for Global Change Science, built a climate model that projects changes to the oceans throughout the century. In a world that warms up by 3℃, it found that multiple changes to the colour of the oceans would occur. The model projects that currently blue areas with little phytoplankton could become even bluer. But in some waters, such as those of the Arctic, a warming will make conditions riper for phytoplankton, and these areas will turn greener. “Not only are the quantities of phytoplankton in the ocean changing. ”she said, “but the type of phytoplankton is changing. ”

1. What are the first two paragraphs mainly about?

A. The various patterns at the ocean surface.

B. The cause of the changes in ocean colour.

C. The way light reflects off marine organisms.

D. The efforts to fuel the growth of phytoplankton.

2. What does the underlined word“vulnerable”in Paragraph 3 probably mean?

A. Sensitive. B. Beneficial C. Significant D. Unnoticeable

3. What can we learn from the passage?

A. Phytoplankton play a declining role in the marine ecosystem.

B. Dutkiewicz's model aims to project phytoplankton changes

C. Phytoplankton have been used to control global climate

D. Oceans with more phytoplankton may appear greener.

4. What is the main purpose of the passage？

A. To assess the consequences of ocean colour changes

B. To analyse the composition of the ocean food chain

C. To explain the effects of climate change on oceans

D. To introduce a new method to study phytoplankton