

～2級 長文～

次の英文の内容に関して、(1)から(5)までの質問に対して最も適切なもの、または文を完成させるのに最も適切なものを1, 2, 3, 4 の中から一つ選びなさい。

Tools to Clean Our Teeth

Humans have long been searching for ways to clean their teeth. For example, toothpicks were found in ancient Egyptian tombs. A Chinese emperor in the 15th century used a tool which was similar to today's toothbrush. It consisted of a bone handle and pig's bristles*. However, both materials were expensive, so for a long time, only rich people used toothbrushes. Even in the early 1920's, only one in four Americans had a toothbrush.

It was after World War II that toothbrushes were put in the bathroom of most homes in the United States. By the beginning of the war, each troop had a dentist, and soldiers were educated on how to use their toothbrushes to take care of their teeth. After the war, the soldiers who returned home brought the habit of brushing their teeth back to their hometowns.

With the rapid increase in the demand for toothbrushes, the production volume also increased rapidly. It was made possible by the wonderful materials invented at that time. In the early 1900's, chemists found a way to produce a tough, easy-to-form material called celluloid. This cheap material was perfect for the handle of a toothbrush. Soon animal bristles were also replaced by nylon. Later, celluloid used for handles was replaced by a new kind of plastic. However, these changes caused a big problem. Many toothbrushes cannot be recycled because most of them are made of composite plastics*. It is very difficult to recycle them efficiently.

To solve this problem, some companies are returning to natural materials such as wood and animal bristles. A company in Portland, Oregon returned to the design that first appeared 100 years ago. It is a toothbrush whose handle is made of metal so that it can be used for many years and whose head can be replaced. If you replace it with a new one when its bristles have worn out, you can reduce the amount of waste to less than 30% of that of a regular toothbrush. On the other hand, some designers have recently tried to produce

a new toothbrush without using plastic. In the near future, a completely new type of toothbrush may appear.

* bristle : 剛毛

* composite plastic : 複合プラスチック

(1) The tool used by the Chinese emperor for his teeth was like

1. a toothpick made in ancient Egypt.
2. a toothbrush made of natural materials.
3. a toothbrush made in the U.S. in the 1920's.
4. a handle used by the rich.

(2) When did many Americans start using toothbrushes?

1. In the early 1900's.
2. In the early 1920's.
3. At the beginning of World War II .
4. After World War II .

(3) New materials invented in the 20th century

1. are not currently used for toothbrushes.
2. gave chemists great challenges.
3. boosted the rapid spread of toothbrushes.
4. were not used for daily necessities other than toothbrushes.

(4) Why do some companies use natural materials for toothbrushes?

1. To reduce the production cost.
2. To make eco-friendly products.
3. To attract fans of old products.
4. To extend the product life.

(5) Which of the following statements is true?

1. A toothbrush was a luxury item until the middle of the 20th century.
2. The soldiers took their toothbrushes with them when they entered the army.
3. Materials used in current toothbrushes are easy to recycle.
4. Some companies have begun to use celluloid for toothbrushes again.