

## Alexander Fleming (B2)

### A – Before you start

*Answer the questions with a partner.*

1. What medicines do people normally keep in their homes in your country?
2. Do you take any medicine when you have a cold or influenza? If so, what?
3. When is it necessary to take antibiotics?
4. When shouldn't they be taken, in your opinion?

### B – Listen and answer

*Read these statements. Then listen (without reading) and write T (true) or F (false).*

1. Alexander Fleming worked as a doctor during World War I.
2. When treating soldiers' injuries, he was in favour of using antiseptics at all times.
3. After the war, he took up a new job at St. Mary's Hospital, in London.
4. He kept his laboratory in perfect order.
5. In the early 1920s, his discovery of an enzyme called lysozyme was greeted with enthusiasm.
6. He noticed the effect of a fungus on a plate of bacteria, on returning to work after an illness.
7. When he first published a report on his findings, there was little interest in it.
8. In 1945, Fleming received the Nobel Prize.

### C – Read and answer

*Read the article and answer the questions.*

1. What impact has the discovery of penicillin had on the treatment of disease?
2. How did Fleming prefer to treat the deep wounds of soldiers during World War I?
3. What did Fleming discover about the enzyme lysozyme?
4. How was it possible for one of Fleming's plates to become contaminated with a fungus?
5. How had the penicillium mould got into Fleming's laboratory?
6. What examples does the article give of serious diseases that penicillin is effective against?
7. Who finally realised the potential of penicillin? When?
8. How was it possible to treat large numbers of wounded soldiers with it during World War II?

### D – Learn it! Use it!

*Complete these sentences with words from the glossary. (You may have to adapt the expression in some way; e.g. change the verb tense, or change from singular to plural.)*

1. They decided to start their journey at \_\_\_\_\_ and to continue travelling till sunset.
2. We had to throw the bread away because it had gone \_\_\_\_\_.
3. The doctor advised the child's parents to take her to hospital if her condition \_\_\_\_\_.
4. The laboratory contained two long \_\_\_\_\_ with several pieces of apparatus on them.
5. Great care should be taken with chemicals. Handling them \_\_\_\_\_ can be very dangerous.
6. I was very nervous about the written exam, but it \_\_\_\_\_ to be really easy.

### **E – Ready for the B2 FIRST Certificate in English? (Reading and Use of English, Part 1)**

*Read the text and decide which word in brackets best fits each gap.*

One of the most serious problems <sup>1</sup> \_\_\_\_\_ (*in face of/facing/to face/faced with*) modern medicine is antibiotic resistance. Antibiotics are <sup>2</sup> \_\_\_\_\_ (*capable/able/possible/worthy*) of killing many types of bacteria. <sup>3</sup> \_\_\_\_\_ (*While/Therefore/Moreover/However*), over time, the bacteria change and develop resistance to a particular type of antibiotic. Alexander Fleming discovered very early <sup>4</sup> \_\_\_\_\_ (*in/on/before/down*) that this resistance developed when too little penicillin was used or when the treatment lasted for too <sup>5</sup> \_\_\_\_\_ (*little/less/short/small*) a time. Though most bacteria are killed by the antibiotic, some have mutations that <sup>6</sup> \_\_\_\_\_ (*stop/make/help/prevent*) them to survive. By a process of natural selection, these <sup>7</sup> \_\_\_\_\_ (*more/less/little/lower*) susceptible bacteria increase in number and develop resistance. It has been calculated that in 2019 at least 1.2 million people <sup>8</sup> \_\_\_\_\_ (*have died/were dead/are dead/died*) as a result of drug-resistant bacterial infections.

### **F – Write about it**

*Write about one of your country's most famous scientists. Include:*

- some biographical information;
- what branch of science he/she worked in;
- what discoveries he/she is famous for;
- what impact these discoveries had.

## **Answers**

### **B – Listen and answer**

1. T 2. F – He said antiseptics made some injuries worse. 3. F – He went back to his old job there. 4. F – He was very untidy. 5. F – There was no interest in it. 6. F – He had returned to work after a holiday. 7. T 8. T

### **C – Read and answer**

1. It changed the course of medicine and it has saved the lives of millions of people. 2. He preferred to wash them with saline solution. 3. He discovered that it could dissolve certain bacteria. 4. He had left the plates on a bench. 5. It had entered through an open window. 6. The article mentions scarlet fever, pneumonia and meningitis. 7. Its potential was realised by a group of scientists in Oxford in the early 1940s. 8. American pharmaceutical companies began producing it in large quantities.

### **D – Learn it! Use it!**

1. dawn 2. mouldy 3. worsened 4. benches 5. carelessly 6. turned out

### **E – Ready for the B2 FIRST Certificate in English?**

1. facing 2. capable 3. However 4. on 5. short 6. help 7. less 8. died