**Тема:** «Эпохальные изобретения в химии\биологии. Пенициллин»

**Цель:** Повторить грамматический материал по теме, продолжить изучать глоссарий по теме проф.блока.

**Задачи:** Отработать навык работы (в т.ч. перевода) с профессиональной лексикой по теме профессионального блока, повторить тематический материал, актуализировать имеющиеся знания.

**Специальность:** ОГСЭ.03

**Время выполнения:** 90 минут

1. **Study the new words.**
2. **Read the text.**
3. **Do the tasks.**
4. **Study the new words and give a translation:**

**Glossary:**

heralded

treatment

blood poisoning

compounds

fungi

capable of killing

inhibiting

poultice

moldy

wounds

rare

therapeutic benefits

to purify

1. **Read the text, do the tasks.**

### Alexander Fleming’s Discovery of Penicillin

Penicillin heralded the dawn of the antibiotic age. Before its introduction there was no effective treatment for infections such as pneumonia, gonorrhea or rheumatic fever. Hospitals were full of people with blood poisoning contracted from a cut or a scratch, and doctors could do little for them but wait and hope.

*Antibiotics are compounds produced by bacteria and fungi which are capable of killing, or inhibiting, competing microbial species.* This phenomenon has long been known; it may explain why the ancient Egyptians had the practice of applying a poultice of moldy bread to infected wounds. But it was not until 1928 that penicillin, the first true antibiotic, was discovered by Alexander Fleming, Professor of Bacteriology at St. Mary's Hospital in London.

Returning from holiday on September 3, 1928, Fleming began to sort through petri dishes containing colonies of Staphylococcus, bacteria that cause boils, sore throats and abscesses. He noticed something unusual on one dish. It was dotted with colonies, save for one area where a blob of mold was growing*. The zone immediately around the mold—later identified as a rare strain of Penicillium notatum—was clear, as if the mold had secreted something that inhibited bacterial growth.*

Fleming found that his "mold juice" was capable of killing a wide range of harmful bacteria, such as streptococcus, meningococcus and the diphtheria bacillus. He then set his assistants, Stuart Craddock and Frederick Ridley, the difficult task of isolating pure penicillin from the mold juice. It proved to be very unstable, and they were only able to prepare solutions of crude material to work with. Fleming published his findings in the British Journal of Experimental Pathology in June 1929, with only a passing reference to penicillin's potential therapeutic benefits. *At this stage it looked as if its main application would be in isolating penicillin-insensitive bacteria from penicillin-sensitive bacteria in a mixed culture.* This at least was of practical benefit to bacteriologists, and kept interest in penicillin going. Others, including Harold Raistrick, Professor of Biochemistry at the London School of Hygiene and Tropical Medicine, tried to purify penicillin but failed.

**Do the following tasks:**

1. **Translate the lines given in italics.**
2. **Find the equivalents to the following word combination in the text:**
3. Эффективное лечение
4. Препятствовать размножению микроорганизмов
5. **Первый настоящий антибиотик**
6. Разбираться в содержимом чашек Петри
7. Вредоносная бактерия
8. Пенициллин-устойчивая бактерия
9. Практическое преимущество бактериологов

1. **Give a proper translation to the following sentences:**
2. The bacteria that cause boils, sore throats and abscesses
3. The difficult task of isolating pure penicillin from the mold juice
4. It proved to be very unstable.
5. It looked as if its main application would be in isolating penicillin-insensitive bacteria from penicillin-sensitive bacteria in a mixed culture
6. **Fill the gaps with the proper words, using your glossary.**
7. These \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_won’t heal by themselves
8. Antibiotics are capable of killing, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_ microbial species.
9. Do not through the bread. But it is already\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. It was a \_\_\_\_\_\_\_\_\_\_\_\_case, when the infected wound recovered by itself
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_are hard to get rid off
12. The scientists need to\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_the vaccine before giving it to people
13. It is not a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_incident when an infection becomes resistant to antibiotics
14. Patric needs a very specific and thorough \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We need to calculate the actual dose.
15. The\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_was the most spread cause of death in the medieval times.
16. This invention\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_the beginning of human domination in the world of predatory bacterium.
17. **Listen to the text and answer the questions:**
18. What is the name of extract, that fungi produce?
19. How does penicillin work?
20. What is the danger of using antibiotics?

<https://www.youtube.com/watch?v=CNbnLgetqHs&ab_channel=TED-Ed>

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