

Penicillin – ‘wonder drug’

Language

Vocabulary connected with medical research; pronunciation and practice of regular past simple verbs

Level

Elementary to pre-intermediate and above (equivalent to CEF level A1/A2–B1 and above)

Comment

This eLesson looks at the development of penicillin on the anniversary in May of the first trial of the antibiotic.

How to use the lesson

- 1 Ask students to think of the most important developments in medicine in the last 100 years, either as a whole class activity or in pairs / small groups, followed by class feedback. Tell students they are going to read a text about penicillin. Then ask students what they know about the discovery and development of penicillin.
- 2 Pre-teach any vocabulary that students might not know for exercise 1, eg *resistant, infection, bacteria, mould*. Give a brief time limit for the exercise, eg 1–2 minutes depending on students' level, to encourage fast reading. When the time limit is up, students can discuss their answers in pairs if appropriate. Take feedback.
- 3 Exercise 2 gives students practice in reading for detailed comprehension. If you feel your students might have problems with any of the words, you can refer them to the Glossary if appropriate. Students could compare their answers in pairs. Take feedback.
- 4 Exercise 3 focuses on vocabulary connected with medical research. Students choose the correct word to complete the sentence. You could let weaker students / groups refer to the Glossary. Students could compare their answers in pairs. Take feedback.
- 5 Exercise 4 focuses on pronouncing the past simple of regular verbs. Ask students to underline the regular verbs in the text. Then focus on the pronunciation of *ed*. If the final consonant sound of the verb is /t/ or /d/ (column 3) the pronunciation of *ed* is /ɪd/ and it makes an extra syllable. Otherwise, the final consonant sound is /d/ if it's voiced, or /t/ if it's unvoiced. To help your students notice the voicing, ask them to put their hands over their ears or on their throat while they say the infinitive of the verb and listen for / feel the voicing, eg on the /v/ of *live* (voiced) and the /k/ of *like* (unvoiced). In class feedback you could drill the pronunciation of the verbs if appropriate for your class. If so, make sure they don't add a syllable when saying the verbs in columns 1 and 2, eg /ɪvd/ not /ɪvɪd/.
- 6 Exercise 5 gives students practice of the regular past simple verbs in the context of the reading. Ask students to complete the sentences using the verbs from exercise 4. Students could compare their answers in pairs. Take feedback.
- 7 Exercise 6 gives students personalised speaking practice about penicillin and medical research. Set the discussion task for small groups if appropriate. If appropriate for your students, you could ask them to search on the Internet for other articles about medical research and discoveries. They could then share what they've learnt in the following class or write a short text for homework following the pattern in text about penicillin, eg why the research / discovery is important, who made the discovery, what problems they had etc. The best ones could be displayed in the classroom if appropriate.

Answer key

1

1 para 4 2 para 1 3 para 5 4 para 3 5 para 2

2

- 1 F (there was no effective treatment for infections)
- 2 F (Fleming discovered penicillin, but Florey's team developed the drug)
- 3 T
- 4 T (The first trial was on mice)
- 5 F (some, not all, bacteria became resistant)
- 6 T

3

- 1 infections
- 2 mould, bacteria
- 3 trial
- 4 cure
- 5 resistant
- 6 prescribe

4

sounds like /d/	sounds like /t/	sounds like /ɪd/
discovered, returned, named, killed, moved, used,	developed, published, worked, helped	infected, treated, tested, started, needed

5

- 1 discovered
 - 2 published
 - 3 killed
 - 4 moved
 - 5 worked
 - 6 used
 - 7 infected, treated
 - 8 tested, started
 - 9 needed, helped
- 6 Students' own answers / ideas.

Related websites

The following websites might be useful for either you or your students.

<http://www.abc.net.au/science/slab/florey/story.htm>

<http://inventors.about.com/od/pstartinventions/a/Penicillin.htm>

<http://news.bbc.co.uk/1/hi/health/4341313.stm>

http://www.historylearningsite.co.uk/alexander_fleming_and_penicillin.htm

<http://www.discoveriesinmedicine.com/Ni-Ra/Penicillin.html>

http://www.ox.ac.uk/research/medical_sciences/projects/penicillin.html