

STUDENT WORKSHEET	NAME	FORM	DATE

What is Antibiotic Resistance?

Introduction

The use of antibiotics to fight bacterial infections has been one of the major medical advances of the 20th Century. However, the development of antibiotic resistance soon followed this success and is an ever increasing problem.

Watch the TED-Ed talk at: <http://ed.ted.com/lessons/how-antibiotics-become-resistant-over-time-kevin-wu>

Answer the questions below.



Questions

- Your body is made up of many cells. How many cells are bacteria made up from?
.....
- How many more bacterial cells do you have inside you than human cells?
.....
- How do antibiotics kill/neutralise bacteria?
.....
.....
- What key word means 'a change to the DNA'?
.....
- Why has antibiotic resistance developed quickly in hospitals?
.....
.....

TEACHERS NOTES

What is Antibiotic Resistance?

Teaching ideas

TED – Ed talks are a really useful resource in lessons, there are some longer programmes that could be watched on this topic such as:

<https://www.youtube.com/watch?v=ikZQP45Zbw> - Rise of the Superbug - Antibiotic-Resistant Bacteria: Dr. Karl Klose at TEDxSanAntonio

Extension

For this age group they will only have a qualitative knowledge of the steps involved in natural selection.

Answers

1. one cell
2. around 10 times
3. interrupt cell wall/protein synthesis
4. mutation
5. there is extensive usage of antibiotics