

Subject Spotlight Lesson Plan

Title of Session	Subject Spotlight: Diagnosing Bacterial infections
Description:	Infectious diseases are caused by pathogenic (disease-causing) microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another. Infectious diseases are estimated to kill over 17 million people worldwide each year. How can we diagnose these infections and ensure the right medication is given to patients? What are the problems with giving the wrong antibiotics to treat an infection? And what are the possible ways in which diagnosing these diseases caused by bacteria could be performed quicker? The workshop will introduce students to bacteria and infection, discussing different types of common infections such as Urinary Tract Infections and Wound infections, and the symptoms which will come with those infections.

Duration of session:	~40 mins	Target Audience:	Y12/13
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Regional Progression Framework - Learning Outcomes:
LO1 - Awareness of HE and the different opportunities available. Be able to challenge any myths relating to HE.
LO2 - Identify the link between GCSE attainment and progression opportunities and how these can support life or career goals
LO5 - Learner knows how to research different routes into HE and how to make an application
Gatsby Benchmarks:
7. Encounters with Further and Higher Education - All students should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.

Timings:	Activity/Task/Information:	Instructions for teacher:	Resources needed:
00:00-01:13	<ul style="list-style-type: none"> Introduction – WP fellow introduces themselves and the workshop 		Work booklet needed for the whole session
01:13-07:49	<ul style="list-style-type: none"> Starter Activity – True or False 	As the video instructs students are given 5 minutes to complete this activity. Answers are provided at 05:43	
07:50-12:35	<ul style="list-style-type: none"> Activity 1 – What are Bacterial Infections? 	Pause the video at 12:34 and give students 1 minute to fill in question 1 in the workbook using their own words, to help consolidate information from the video.	
12:36-18:20	<ul style="list-style-type: none"> Activity 2- What are signs and symptoms of bacterial infection? 	Activity starts at 13:06, this is question 2 in the booklet. Students should use their booklets to help them complete this activity to label the diagram with different signs and symptoms. As the video instructs students will have 5 minutes to complete this activity. Answers are provided at 17:30.	
18:21- 26:14	<ul style="list-style-type: none"> How is bacteria different to a virus? 	Pauses the Video at 24:37 and allow students to fill in booklet question regarding the difference between viruses and Bacteria	Please direct students to additional resources below to find out more about studying Biological Sciences.

Overview of all resources:	
Pen and pencil	
Bacterial infections work booklet	
Resources to share with students	For more info about Bacterial Infections: https://www.bbc.co.uk/bitesize/guides/zxr7ng8/revision/3 What can I do with a Biology degree? https://www.prospects.ac.uk/careers-advice/what-can-i-do-with-my-degree/biology Studying Biological Sciences: https://www.ucas.com/explore/subjects/biological-sciences