

Prior learning	<ul style="list-style-type: none"> Year 7 – specialised cells Year 8 – unicellular organisms; dirty hand practical; breathing & respiration, plants Year 9 – cell structure, cell cycles & mitosis, plants Year 10 – circulatory system (the blood) 			
Lesson number	AQA spec	Title	Content	Assessment/Homework
1	4.2.2.6; 4.2.2.7	Health and disease	<ul style="list-style-type: none"> Recall the difference between health and disease. Describe the difference between communicable and non-communicable diseases Explain how some diseases interact. HIGHER TIER - Evaluate data about lifestyle and health. 	
2	4.2.2.6	Looking at risk factors	<ul style="list-style-type: none"> Recall the causes of some non-communicable diseases (risk factors). Understand the causal mechanisms for some risk factors of non-communicable diseases Describe and explain the impact of lifestyle on non-communicable diseases. 	
3	4.2.2.5; 4.2.2.6	Math's skills: Analysing and evaluating data	<ul style="list-style-type: none"> Translate and interpret information from results tables and graphs Use scatter diagrams to identify a correlation between two variables in terms of risk factors Identify trends and patterns in graphs HIGHER TIER - Evaluate the strength of evidence to determine its validity. 	
4	4.2.2.6; 4.2.2.7	Exploring non-communicable diseases (Cancer)	<ul style="list-style-type: none"> Identify risk factors for cancer. Describe how cancer develops Explain the differences between benign and malignant tumours Explain how a secondary tumour develops Use and analyse data to evaluate different types of cancer 	Skills Assessment 1: 15 marks

5	4.3.1.1	Studying pathogens	<ul style="list-style-type: none"> Define a pathogen and give examples Describe how viruses attack cells Describe how bacteria make you unwell Explain how the spread of communicable diseases can be controlled. Distinguish between endemic, epidemic and pandemics. 	
6	4.3.1.2	Viral diseases	<ul style="list-style-type: none"> Recall how viruses attack cells Describe the symptoms of some viral diseases (measles, HIV, TMV) Describe the transmission and control of these viral diseases. Explain how some viral diseases are spread. Describe the treatments for these diseases and how the spread can be controlled. Describe why is it difficult to produce drugs that kill viruses 	
7	4.3.1.3	Bacterial diseases	<ul style="list-style-type: none"> Recall how bacteria make you unwell Describe the symptoms of some bacterial diseases (salmonella and gonorrhoea). Explain how they can be controlled and treated. Compare and contrast bacterial and viral diseases. 	
8	4.3.1.4 4.3.1.5	Looking at fungal diseases and Protist disease (Malaria)	<ul style="list-style-type: none"> Describe the symptoms of a the fungal disease – rose black spot. Describe the transmission and treatment of rose black spot. Explain how rose black spot affects the growth of the plant. Recall that malaria is a protist disease. Describe the lifecycle of the malarial vector. Evaluate control methods for the spread of malaria. 	Assessment: 25 mark multiple choice quiz
9	4.3.1.6	Protecting the body	<ul style="list-style-type: none"> Describe how the body protects itself from pathogens (non-specific immune system response). HIGHER TIER - Explain how the body protects itself from pathogens. Explain how communicable diseases can be spread. 	

10	4.3.1.6	Exploring white blood cells	<ul style="list-style-type: none"> Describe phagocytosis. Describe antitoxin production. Explain how antibody production can lead to immunity. Explain the specificity of immune system responses 	
11	4.3.1.7	Building immunity (immunisations)	<ul style="list-style-type: none"> Describe how vaccinations prevent infection. Explain how mass vaccination programmes reduce the spread of a disease (herd immunity) HIGHER TIER - Evaluate the global use of vaccination. 	Skills Assessment 2: 15 marks
12	4.3.1.8	Using antibiotics and painkillers	<ul style="list-style-type: none"> Describe the uses of antibiotics and painkillers. Describe the discovery of Penicillin Recall why is it difficult to produce drugs that kill viruses Explain how antibiotics and painkillers can be used to treat diseases. Explain the limitations of antibiotic – antibiotic resistance. 	
13	4.3.1.9	Making new drugs	<ul style="list-style-type: none"> Recall some traditional drugs and their origins (aspirin, digitalis, penicillin). Describe how new drugs are developed. Explain why 'double-blind' trials are conducted. 	
END OF CHAPTER TEST FOR COMBINED STUDENTS				
14 TRIPLE ONLY		Growing microorganisms	<ul style="list-style-type: none"> Describe the techniques used to produce uncontaminated cultures of microorganisms. Describe how bacteria reproduce by binary fission. Maths skills: calculate the population of bacteria when given a mean dividing time Use microorganisms safely 	
15 TRIPLE ONLY		Testing new antibiotics	<ul style="list-style-type: none"> Describe how to carry out this experiment with due regards to health and safety Describe the ways in which you will be aseptic when conducting this experiment 	

16 TRIPLE ONLY		Required practical: Investigating disinfectants	<ul style="list-style-type: none"> • Make conclusions from data • Suggest further improvements and investigations. • Math skills: calculate zone of inhibition 	Skills Assessment 3: 15 marks (triple students only)
17 TRIPLE	4.3.2.1; 4.3.2.2	Monoclonal antibodies	<ul style="list-style-type: none"> • Describe what monoclonal antibodies are • Describe the uses of monoclonal antibodies. • Explain how monoclonal antibodies are produced. • Evaluate the use of monoclonal antibodies. 	
18 TRIPLE	4.1.2.3; 4.3.3.1; 4.3.3.2	Looking at plant diseases & defences	<ul style="list-style-type: none"> • Recall the causes of plant diseases. • Describe the symptoms and identification methods of some plant diseases. • Explain the use of monoclonal antibodies in identifying plant pathogens. • Recall some physical plant defence responses. • Explain how mechanical plant defence systems help them survive. • Explain how chemical plant defence systems help them survive. 	
END OF CHAPTER TEST FOR TRIPLE STUDENTS				
Where will we use these ideas again	<ul style="list-style-type: none"> • Year 10 – B5 Homeostasis • Year 11 – B7 Antibiotic resistance • Year 11 – B8 Decay & Farming 			