

YEAR 10 BIOLOGY SEMESTER 1

TITLE: HEALTH AND DISEASE

LESSON	TITLE	OBJECTIVES	Check your progress		
			MEG 2	MEG 5	MEG 8
1	Viral diseases	<ul style="list-style-type: none"> -Describe the symptoms of some viral diseases -Describe the transmission and control of some viral diseases -Explain how some viral diseases are spread 	Describe the symptoms of some viral, bacterial, fungal and protest diseases	Describe the transmission and control of different diseases	Compare and contrast bacterial and viral diseases Evaluate control measures for malaria
2	Bacterial diseases	<ul style="list-style-type: none"> -Describe the symptoms of some bacterial diseases -Explain how some bacterial diseases can be controlled -Compare and contrast bacterial and viral diseases 			
3	Fungal diseases	<ul style="list-style-type: none"> -Recall the name and symptoms of a fungal disease -Describe the transmission and treatment of rose black spot -Explain how rose black spot affects the growth of a plant 			
4	Malaria	<ul style="list-style-type: none"> -Recall that malaria is a protest disease -Describe the life cycle of the malarial vector 			
5	Protecting the body	-Describe how the body protects itself from pathogens	Describe hoe the body protects itself from pathogens	Explain the role of the immune system	Explain the impact on antibiotic-resistant bacteria

		<ul style="list-style-type: none"> -Explain how the body protects itself from pathogens -Explain how communicable diseases can be spread 			
6	Immunity – white blood cells	<ul style="list-style-type: none"> -Describe phagocytosis -Explain how antibody production can lead to immunity -Explain the specificity of immune system responses 			Explain the specificity of antibodies
7	Antibiotics and painkillers	<ul style="list-style-type: none"> -Describe the uses of antibiotics and painkillers -Explain how antibiotics and painkillers can be used to treat diseases -Explain the limitations of antibiotics 	Describe the use of antibiotics and painkillers	Explain how antibiotics and painkillers treat disease	Explain the limitations of antibiotics
8	Building immunity – vaccinations	<ul style="list-style-type: none"> -Recall how vaccinations prevent infection -Explain how mass vaccination programmes reduce the spread of disease -Evaluate the Global use of vaccination 	Recall why vaccinations are used	Explain how vaccinations trigger an immune response	Evaluate the Global use of vaccinations
9	Making new drugs and Monoclonal antibodies	<ul style="list-style-type: none"> -Recall some traditional drugs and their origins -Describe how new drugs are developed -Explain why ‘double-blind’ trials are conducted -Describe uses of monoclonal antibodies 			

		-Explain how monoclonal antibodies are produced -Evaluate the use of monoclonal antibodies			
10	Plant diseases	-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 plant diseases and defences	Explain the identification and symptoms of some plant diseases Explain some plant diseases	Explain the use of monoclonal antibodies in identifying plant pathogens
11	Plant defences	-Recall some physical plant defence responses -Explain how plant defence systems help them to survive			
12	Revision				
<p><u>KEY TERM LIST:</u> Bacteria, virus, fungi, fungal, vaccination, antiretroviral drug Diarrhoea, Salmonella, gonorrhoea Mulch, pruning, spores Protest, vector Cilia, goblet cells, sebaceous glands Antibody, antitoxin, immunity, lymphocyte, phagocyte, white blood cell Antiviral, aspirin, opiates, penicillin Immunity, vaccine, vaccination Dose, efficacy, placebo, hybridoma, monoclonal antibodies Chlorosis Antibacterial chemicals, rust, mimicry</p>					
<p><u>MATHEMATICAL SKILLS:</u> Translate information between graphical and numerical forms Use an appropriate number of significant figures Calculate areas of triangles and rectangles, surface areas and volumes of cubes</p>					

Sampling techniques
Minimising bias in results