High Tunstall College of Science Curriculum Intent

Subject: SEPARATE Biology Year: 10

Thread 2 – Infection and Response

	Biology Thread 2	Progress		
Topic	**Key ideas**	**R**	**A**	**G**
Infection & Response	I can define the terms "communicable" and "non-communicable".			
	I can compare examples & causes of communicable and non-communicable diseases.			
	I can describe how to prevent the spread of pathogens.			
	I can describe the work of Semmelweis.			
	I can describe the 3 actions of white blood cells.			
	I can explain the importance of memory cells and describe autoimmune diseases			
	I can explain how Vaccinations work			
	I can compare the effect of antibiotics and painkillers and explain how they work.			
	I can explain antibiotic resistance and evaluate the use of antibiotics.			
	I can describe the main stages in drug development, and describe barriers in research and development.			
	I can compare the effect of mineral deficiencies to infectious diseases.			
	I can compare the chemical, physical and mechanical barriers of defence of different named plants			

Lesson	Learning Focus	Assessment	Key Words
1	Communicable Vs Non-communicable diseases?	Research task to answer the key questions of the lesson.	**Non-Communicable**
2	Stopping the spread.	Compile a fact file about Semmelweis and his work and suggest other methods other than hand washing, to prevent the spread of pathogens.	
3	The Immune Response	Choice of a level 1 or 2 test sheet to explain the action of white blood cells to result in immunity.	**Immune**
4	Vaccines	Create a flow chart or story board to explain how vaccinations result in immunity.	**Vaccine**
5	Antibiotics and Painkillers	Research task to answer the 9 key questions of the lesson, plus a graph analysis task.	**Antibiotic**
6	Drug Development	Complete a Bronze, Silver or Gold task explaining the main stages of a drug trial, and the purpose of a placebo.	
7	Plant disease identification	Describe the symptoms of plant diseases and explain how they can be identified.	**Deficiency**
8	Plant disease defence	Compare the chemical, physical & mechanical barriers of defence of different named plants.	
9	Review prior learning	Identify areas of strength and areas for improvement.	