

Year 10 Science Curriculum Plan							
Unit	Core		Hinterland		NC Coverage	Assessment	Whole Education Opportunities
	Knowledge	Skills	Knowledge	Skills			
CB5 – Health, disease and the development of medicines	<ul style="list-style-type: none"> <li>Health and disease – communicable/non-communicable diseases.</li> <li>Cardiovascular disease – causes and treatment</li> <li>Types of pathogen, examples and how they can be spread</li> <li>How the body prevents disease infection</li> <li>Sexually transmitted diseases</li> <li>Immunisation – types of white blood cell</li> <li>Antibiotics – use and development</li> </ul>	<ul style="list-style-type: none"> <li>Interpreting tabular data</li> <li>Interpreting graph data</li> <li>Interpretation of key words</li> <li>Developing exam skills</li> <li>Comparing advantages and disadvantages of a situation</li> <li>Recalling stages to a method</li> <li>Calculate BMI and waist:hip ratio</li> <li>Calculate cross-sectional areas of bacterial cultures and clear agar jelly using <math>\pi r^2</math></li> </ul>	<ul style="list-style-type: none"> <li>Smallpox eradication - vaccine success</li> <li>guinea worm eradication – poverty and clean water access</li> <li>John Snow – the history of cholera outbreak</li> <li>HPV – how can a virus increase the chance of cancer?</li> <li>Cardiovascular treatments – pig heart</li> </ul>	<ul style="list-style-type: none"> <li>Understanding academic journal abstracts</li> <li>Applying knowledge to real-</li> </ul>	B5.1 to 5.22	<ul style="list-style-type: none"> <li>End of topic assessment (30 marks)</li> <li>PR points using mixed topic assessments</li> <li>PLC tests (10 marks each) – 4 in this topic</li> </ul>	<ul style="list-style-type: none"> <li>RSHE– STI’s myth buster quiz</li> <li>SMSC – Why is heart disease the number 1 killer?</li> <li>SMSC – Why are so many people vaccine hesitant and what are the consequences?</li> <li>Careers – epidemiologist</li> <li>Careers – Cardiologist</li> </ul>
CB6 – Plant structures and their functions	<ul style="list-style-type: none"> <li>Photosynthesis – equations, key words, factors affecting it.</li> <li>Absorbing water and mineral ions – methods of transport</li> <li>Transportation and translocation – key words, methods of transport</li> </ul>	<ul style="list-style-type: none"> <li>Following a scientific method</li> <li>Recognising trends in data</li> <li>Developing exam skills</li> <li>Interpreting graphs</li> <li>Plotting scatter graphs</li> <li>Analysing data and concluding scientific ideas</li> <li>Health and safety understanding</li> </ul>	<ul style="list-style-type: none"> <li>Evolution of carnivorous plants and their impact on the environment</li> <li>Plants diseases and development in genetic studies to help avoid extinction of some species of plants</li> </ul>	<ul style="list-style-type: none"> <li>Applying knowledge to real life situations</li> </ul>	B7.1 to B7.22	<ul style="list-style-type: none"> <li>End of topic assessment (30 marks)</li> <li>PR points using mixed topic assessments PLC tests (10 marks each) – 3 in this topic</li> </ul>	<ul style="list-style-type: none"> <li>SMSC – plants used in different cultures</li> <li>Careers – Plant geneticist</li> <li>Carrers – Landscape designer</li> <li>RSHE – Use of plants to produce medicines</li> </ul>
CB7 – Animal coordination, control and homeostasis	<ul style="list-style-type: none"> <li>Hormones – types, where produced – key words</li> <li>How hormones control metabolism and menstrual cycle</li> <li>Diabetes – how caused with reference to hormones</li> </ul>	<ul style="list-style-type: none"> <li>Interpretation of key words</li> <li>Developing exam skills</li> <li>Interpreting graph data</li> </ul>	<ul style="list-style-type: none"> <li>Eating habits in children that can lead to Type 2 diabetes (insulin related)</li> <li>Bacteria genetic engineered for production of insulin (links with Topic 3 genetics)</li> </ul>	<ul style="list-style-type: none"> <li>Applying knowledge to real life situations</li> <li>Links to different Biology topics</li> </ul>	B7.1 to B7.22	<ul style="list-style-type: none"> <li>End of topic assessment (30 marks)</li> <li>PR points using mixed topic assessments</li> <li>PLC tests (10 marks each) – 2 in this topic</li> </ul>	<ul style="list-style-type: none"> <li>SMSC – How hormones affect athletes and their performance; why doping is forbidden in sports</li> <li>Careers – Endocrinologist</li> <li>Carrers – Sports Nutritionist</li> <li>RSHE – Puberty and Hormones</li> </ul>