




YEAR 12 TERM 3

‘An ambitious curriculum that meets the needs of all’

Medium Term Planning - Topic: Human impact on the environment

Curriculum Intent	
Skills/National Curriculum Links	<p>Developing knowledge from GCSE Biology or GCSE Combined Science, pupils will be taught, following National Curriculum guidelines, the following this topic:</p> <ul style="list-style-type: none"> • Why species are at risk • Conservation • Agricultural exploitation • Deforestation • Overfishing • Sustainability and decision making • Planetary boundaries
Spiritual, moral, social, and cultural development	<p>SMSC: Care for the environment, conservation behaviours</p> <p>PSHE/British Values: Sustainability</p> <p>Skills Builder: Independent investigation, critical analysis of data</p>
Numeracy	<p>Percentage change</p> <p>Interpretation of graphs and data tables</p>
Literacy	<p>Vocabulary Tier 2: extinct, endangered, vulnerable, deforestation, agriculture, trophy hunting, pollution, wetlands, conservation, ecotourism, erosion, fish farming, overfishing, climate change</p> <p>Vocabulary Tier 3: non-contiguous populations, gene banks, monoculture, coppicing, selective cutting, planetary boundaries, biogeochemical flows, novel entities, land system change, ocean acidification, atmospheric aerosols, biodiversity integrity, fresh water use, ozone depletion</p> <p>Reading: Students are given opportunity to develop their skills in specified tasks that develop disciplinary literacy. Throughout the A Level Biology course they develop their understanding of the requirements of exam questions and the key terminology in questions. In addition, they read practical methodology and translate this to actions in laboratory tasks.</p> <p>Writing: Students construct answers independently and through class teaching. Their answers range from single word answers to the planning and writing of 9-mark “extended writing” tasks that require linking of multiple concepts from a topic or across topics. These often develop students’ ability to construct written evaluations of contrasting situations, or data, where the use of comparative connectives are required.</p> <p>Oracy: Students are regularly given the opportunity to practice their scientific vocabulary in class discussion, through choral response, pair or group discussion and in giving instruction to others during practical activities.</p>
Becoming future ready	<p>Careers/Employability: A Level Biology students from Crompton House progress on to a wide range of undergraduate degrees, degree apprenticeships and into work. Opportunities to develop effective communication skills, concise written work, following written and verbal instructions as well as extending their problem solving skills are all key skills identified by business leaders for future success.</p>
Adaptation	<p>Throughout this topic, quality first teaching will provide adaptive teaching accessible to all students:</p> <p>By product: Assessments have opportunities for students to achieve all grades, with structured questions and opportunities for development of extended writing for all abilities.</p> <p>By Intervention: by providing different levels of supervision and support in theory and in practical lessons.</p> <p>By Progressive Questioning: exploring pupils’ understanding through interactive dialogue.</p> <p>By Grouping: according to prior attainment, gender, social preference.</p> <p>By Task: Pupils are involved in the identification of targets which are meaningful to them and in the selection of an appropriate task to develop specific skills further.</p> <p>By Offering Optional Activities: In class or as homework, to extend learning.</p> <p>This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work.</p>
QFT/SEND Provision	
Implementation	<p>To be able to:</p> <ul style="list-style-type: none"> • Explain how species become endangered and extinct

Curriculum Delivery	<ul style="list-style-type: none"> • Describe how gene pools are conserved in the wild and in captivity • Understand the conflict between agricultural production and conservation, as illustrated by deforestation and overfishing • Describe how environmental monitoring may contribute to evidence-based political decision making • Describe the concept of planetary boundaries • Explain the status of each planetary boundary • Describe how technological innovations, such as the production of biofuels and seawater desalination may contribute to avoiding planetary boundaries 	
Learning Outcomes (Knowledge)	<p>Red denotes interleaving; aspects of knowledge covered previously.</p>	
Current learning to be developed in the future within:	<p>Populations and ecosystems Photosynthesis</p>	
Assessment	<p>Refer to assessment maps for formative and summative assessment opportunities.</p>	
Impact	<p>Attainment and Progress – Refer to assessment results / data review documentation.</p>	