



YEAR 12 TERM 2

‘An ambitious curriculum that meets the needs of all’

Medium Term Planning - Topic: Adaptations for nutrition

Curriculum Intent	<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"> Modes of nutrition <ul style="list-style-type: none"> Autotrophic Heterotrophic – saprotrophic, parasitic, holozoic The human digestive system Adaptations to different diets Parasites
Skills/National Curriculum Links	
Spiritual, moral, social, and cultural development	<p>SMSC: n/a</p> <p>PSHE/British Values: Discussion of diets, healthy dentition</p> <p>Skills Builder: Interpretation of data</p>
Numeracy	Nothing explicit in this topic
Literacy	<p>Vocabulary Tier 2: Parasite, herbivore, carnivore, omnivore, ruminant, ingestion, digestion, absorption, egestion, oesophagus, stomach, molar, premolar, incisor, canine</p> <p>Vocabulary Tier 3: Autotroph, photoautotroph, chemoautotroph, heterotroph, saprotrophic, holozoic, parasitic, detritivore, serosa, mucosa, submucosa, peristalsis, endopeptidase, exopeptidase, gastric pits, goblet cells, zymogen / chief cells, bile, enterokinase, duodenum, ileum, colon, dentition, diastema, carnassial, rumen, mutualistic, scolex, proglottid, primary host, secondary host, endoparasite, ectoparasite</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 Curriculum Delivery	Learning Outcomes (Knowledge)	<p>To be able to:</p> <ul style="list-style-type: none">• Describe the differences between autotrophic and heterotrophic organisms• Describe different types of heterotrophic organisms• Describe extracellular digestion, carried out by saprotrophs• Describe feeding strategies of unicellular and more complex animals• Distinguish between the processes of ingestion, digestion, absorption, and egestion in humans• Describe digestion with reference to enzymes which break down carbohydrates, proteins and fats• Describe the structure and function of the main parts of the human digestive system• Describe how the ileum is specialised for absorption• Describe the absorption of the products of digestion• Describe dentition and gut function in a ruminant and carnivore, in relation to their diets• Describe how parasites have adapted to obtain nourishment from their host <p>Red denotes interleaving; aspects of knowledge covered previously.</p>
Current learning to be developed in the future within:		<p>Photosynthesis Respiration Homeostasis and the kidney</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>