

CURRICULUM OVERVIEW

Please contact your child's subject teacher or Head of Department for answers to subject related questions

SUBJECT	BTEC SCIENCE	YEAR GROUP	KS4
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Y10	Lesson Content	Subject Assessment Methods	Opportunities for Home Learning
HALF TERM 1	<u>Biology and Our Environment</u> <ol style="list-style-type: none"> 1. Introduction to BTEC course 2. Cells and Genetics <u>Chemistry and Our Earth</u> <ol style="list-style-type: none"> 1. Chemical Substances- structure, properties and differences <u>Energy and the Universe</u> <ol style="list-style-type: none"> 1. Energy transformations and efficiency 	<p>BTEC Science is the alternative we offer to traditional GCSE Sciences. There are no formal examinations. Assessment is in the form of regular assignments, <u>all of which must be completed to the required standard to achieve a pass merit or distinction level.</u> There are a total of 17 assignments to be completed in Year 10, covering aspects of Biology, Chemistry and Physics. Students will receive regular feedback on their progress and must be self motivated to ensure they complete all assignments fully.</p> <p>Note: This course is provided for those students who are unlikely to achieve C grades at GCSE level and is not recommended for those wishing to study any course with a link to Science in the future.</p>	<p>It is expected that students will keep their folders fully up to date and catch up on work missed. All students are actively encouraged to complete all aspects of each assignment, and in particular to attempt any distinction level criteria. This forms a large part of the extension work and home learning, as these criteria are designed to be completed with minimal teacher input.</p> <p>http://www.edexcel.com/quals/firsts/science/Pages/default.aspx Edexcel website for specification</p> <p>Future study/career pathways at Post 16/Higher Education This course is not recommended for those who wish to study further Science.</p>
HALF TERM 2	<u>Biology and Our Environment</u> <ol style="list-style-type: none"> 1. Identification of Organisms- classification, organisation, keys <u>Chemistry and Our Earth</u> <ol style="list-style-type: none"> 1. Structures of the elements 2. The yield of industrial processes <u>Energy and the Universe</u>	<p>BTEC Science is the alternative we offer to traditional GCSE Sciences. There are no formal examinations. Assessment is in the form of regular assignments, <u>all of which must be completed to the required standard to achieve a pass merit or distinction level.</u> There are a total of 17 assignments to be completed in Year 10, covering aspects of Biology, Chemistry and Physics. Students will receive regular feedback on their progress and must be self motivated to ensure they complete all assignments fully.</p> <p>Note: This course is provided for those students who are unlikely to achieve C grades at GCSE level and is not recommended for those wishing to study any course with a link to Science in the future.</p>	<p>Future study/career pathways at Post 16/Higher Education This course is not recommended for those who wish to study further Science.</p>

	1. The electromagnetic spectrum		
HALF TERM 3	<u>Biology and Our Environment</u> 1. Interdependence of Organisms- food webs, chains, predator/ prey adaptations <u>Chemistry and Our Earth</u> 1. Investigating periodic groups 1+7 <u>Energy and the Universe</u> 1. The use of waves for communication		
HALF TERM 4	<u>Biology and Our Environment</u> 1. Investigating human impact on environment- pollution, acid rain, planning an investigation, planning river sampling <u>Chemistry and Our Earth</u> 1. Investigating rates of chemical reactions <u>Energy and the Universe</u> 1. Using measuring instruments to check values predicted by Ohm's law		
HALF TERM 5	<u>Biology and Our Environment</u> 1. Effects of different factors on Human Health- disease, drugs, social		

	<p>issues such as sunbeds, loud music</p> <p><u>Chemistry and Our Earth</u></p> <p>1. Investigating the effects of humans on the planet</p> <p><u>Energy and the Universe</u></p> <p>1. The Solar System</p>		
HALF TERM 6	<p><u>Biology and Our Environment</u></p> <p>1. The Control Mechanisms of the Human Body- hormones, nerves and homeostasis</p> <p><u>Chemistry and Our Earth</u></p> <p>1. Investigating the natural factors that affect our planet</p> <p><u>Energy and the Universe</u></p> <p>1. Evidence that the universe is changing</p>		
Y11	Lesson Content	Subject Assessment Methods	Opportunities for Home Learning
HALF TERM 1	<p>Crime Scene Investigation Module</p> <p>Introduction to methods</p> <p>Fingerprinting</p> <p>Footprints</p> <p>DNA</p> <p>Chromatography</p> <p>Blood splatter</p>	AS ABOVE	AS ABOVE

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HALF TERM 2	Investigating a crime scene- carrying out forensic investigations		
HALF TERM 3	Analysing Evidence from Crime Scenes Using analytical techniques to prove guilt		
HALF TERM 4	Evidence and the Courts- how CSI supports the Criminal Justice System		
HALF TERM 5	CSI and the community- explaining the importance of the Forensic Science Service to the general public		
HALF TERM 6			