



## Curriculum Aim – BIOLOGY / Combined Science



<p><i>The aim of Science is to inspire and foster a lifelong love of Science and a desire to make a positive difference to the world. Students will apply a natural curiosity to develop evidence-based understanding of the world around us and embrace the challenges that learning Science brings through mistakes and determination.</i></p>	<p><b>KS 3 Intent (Science)</b></p> <ul style="list-style-type: none"><li>• Build on problem solving skills in a practical, safe environment</li><li>• Promote investigative skills and a passion for science</li><li>• Understand key scientific concepts (for GCSE) through the topics at KS 3, past and current issues</li><li>• Learn about specific scientists and their impact on society</li><li>• Learn the relevance of science to everyday life, STEM day with The Bloodhound SSC</li><li>• Prepare students to think like a scientist (modelling through the teacher)</li><li>• Support prior learning at KS 2</li><li>• Encourage evidence-based thinking (in a society of increasingly fake news)</li><li>• Teach Biology/Chemistry/Physics</li></ul>
	<p><b>KS 4 Intent (AQA Combined Science or Separate)</b></p> <ul style="list-style-type: none"><li>• Build on practical skills (25% of the GCSE)</li><li>• Each student has the opportunity to study combined science or the separate sciences in year 11</li><li>• Analyse data to draw own conclusions</li><li>• Develop mathematical skills specific to science</li><li>• Foster an awareness to being a global citizen</li><li>• Promote literacy and comprehension with scientific vocabulary and exam command words</li><li>• Introduction to 20-minute tests at the end of each topic to develop revision strategies</li><li>• Link to living organisms (body/health/risks)</li></ul>
	<ul style="list-style-type: none"><li>• Develop an understanding from KS4 to apply to the eight topic course using evidence based thinking</li><li>• Develop independence in studying (apply key words, mathematical skills, exam technique)</li><li>• Enrichment through residential trip to Dale Fort (Ecology) and building and understanding of the impact of humans on the environment</li><li>• Learn the specific medical advances (gene technology), lifestyle risk, farming – energy and eco systems</li><li>• Develop investigative skills, allowing them to question biological concepts, plan methods to test theories and critically evaluate their chosen methods</li><li>• Broaden an understanding of current advancements globally in Biology by reading scientific journals and magazines and critically evaluating the research</li></ul>

<u>Curriculum Implementation</u>	<ul style="list-style-type: none"><li>• Curriculum docs</li><li>• Lesson provision</li><li>• Year 11 open evening</li></ul>
<u>Curriculum Impact</u>	<p>Assessed through:</p> <ul style="list-style-type: none"><li>• Student outcomes</li><li>• Learning walks and observations</li><li>• Work scrutiny</li><li>• Termly data analysis through Alps connect and Sisra</li><li>• Department/HOF meeting minutes</li><li>• KS 5 uptake</li><li>• Summative/Formative assessment</li></ul> <p><b>Strong Impact if:</b></p> <ul style="list-style-type: none"><li>• Excellent outcomes (results)</li><li>• Post 16 pathways in Biology are successful</li><li>• Excellent behaviour in lessons and attitude to learning</li><li>• Students take pride in their work, presenting it to a high standard</li><li>• All students accessing curriculum (differentiation)</li></ul>