



# Half Term 2 Subject Overviews: What your child has been learning this half term

Head of year: Mr C Pattinson

# Y12

English Literature	Maths (Pure)	Maths (Applied)	Biology	Chemistry	Physics	Applied Science	Geography	History
<ul style="list-style-type: none"> <li>Frankenstein</li> <li>Poems of the decade</li> <li>Understanding features of genre and conventions in poetry</li> <li>Understanding different ways of reading texts</li> <li>How writers use and adapt language, form and structure in texts</li> </ul>	<ul style="list-style-type: none"> <li>Trigonometric ratios</li> <li>Sketching graphs of sin/cos/tan</li> <li>CAST diagram</li> <li>Trig identities</li> <li>Vectors in 2D</li> <li>Scalars</li> <li>Ratio theorem</li> <li>Comparing coefficients</li> <li>Differentiation</li> <li>Gradients of tangents and normals</li> <li>Modelling differentiation</li> </ul>	<ul style="list-style-type: none"> <li>Discrete probability distributions</li> <li>Discrete uniform distribution</li> <li>Binomial distribution</li> <li>Cumulative probabilities</li> <li>Probability mass functions</li> <li>Using calculator to find individual or cumulative binomial probabilities</li> </ul>	<ul style="list-style-type: none"> <li>Structure of nucleotides</li> <li>Forming and breaking phosphodiesters</li> <li>Structure of DNA</li> <li>Semi-conservative replication</li> <li>Genetic code</li> <li>Transcription and translation</li> <li>Role of membranes</li> <li>Fluid mosaic model</li> <li>Osmosis and diffusion</li> <li>Enzymes as catalysts</li> <li>Mechanisms of enzyme</li> <li>Enzyme inhibitors</li> </ul>	<ul style="list-style-type: none"> <li>Acid-base titrations</li> <li>Oxidation numbers</li> <li>Redox</li> <li>Electronegativity</li> <li>Hydrogen bonding</li> <li>Structure and bonding in covalent compounds</li> <li>Periodic table</li> <li>Ionisation energies</li> <li>Metallic bonding</li> <li>Variations in melting points</li> <li>Application of IUPAC</li> <li>Types of formulae</li> </ul>	<ul style="list-style-type: none"> <li>Conduction and resistance</li> <li>Semiconductors</li> <li>Series and parallel circuits</li> <li>Electrical circuit rules</li> <li>Potential dividers</li> <li>Emf and internal resistance</li> <li>Power in electric circuits</li> <li>Refraction</li> <li>Total internal reflection</li> <li>Lenses</li> <li>Image formation</li> <li>polarisation</li> </ul>	<ul style="list-style-type: none"> <li>Specialised cells</li> <li>Structure and function of the blood</li> <li>Pulmonary system</li> <li>Cardiovascular and respiratory disease</li> <li>Intermolecular forces</li> <li>Acid-base titrations</li> <li>Properties of period 2 and 3</li> <li>Diffraction and superposition</li> <li>Industrial application</li> <li>Calculating speed of waves on a string</li> </ul>	<ul style="list-style-type: none"> <li>Ecosystems and sustainability</li> <li>Ecosystems and processes</li> <li>Biomes</li> <li>Ecosystems in the British Isles over time</li> </ul>	<ul style="list-style-type: none"> <li>The creation of the Nazi state</li> <li>Churchill</li> <li>Churchills view of events 1929-1934</li> <li>Why Churchill was out of office</li> <li>Churchills attitude to the abdication, the Empire and India</li> <li>Churchill as a wartime Prime Minister</li> </ul>
Mr Barlow	Miss Wright		Mrs Poddington			Mrs Bradley	Mr Rainsley	
Art	CAMB TECH PE	A LEVEL PE	ICT	RE	French	Personal Development	Music	Health & Social Care
<ul style="list-style-type: none"> <li>A sense of place</li> <li>Portraiture</li> <li>Landscape</li> <li>Drawing</li> <li>Analysis of context</li> <li>Proportion</li> <li>Observation</li> <li>Colour theory</li> <li>Composition</li> <li>Mixed media</li> <li>Photography</li> <li>Photoshop</li> <li>Typography</li> <li>Graphic design</li> </ul>	<ul style="list-style-type: none"> <li>Synovial joints</li> <li>Muscle functions</li> <li>Muscular contractions</li> <li>Structure of muscle fibres</li> <li>Fibre types &amp; performance</li> <li>Applying skills, techniques &amp; tactics to a team sport</li> <li>Applying skills, techniques &amp; tactics to an individual</li> </ul>	<ul style="list-style-type: none"> <li>NEA written analysis</li> <li>Applied anatomy &amp; physiology; Cardiovascular system</li> <li>Sport psychology; Personality</li> <li>Sport psychology; Self-efficacy &amp; confidence</li> <li>Sport psychology; Anxiety</li> <li>Sport in society; Industrial &amp; post industrial</li> <li>Sport in society; Post WW2</li> </ul>	<ul style="list-style-type: none"> <li>Understanding business IT systems</li> <li>Types of servers</li> <li>Virtualisation</li> <li>Network characteristics</li> </ul>	<ul style="list-style-type: none"> <li>Philosophical language of soul, mind &amp; body in the thinking of Plato &amp; Aristotle</li> <li>Metaphysics of consciousness</li> <li>Fletcher's situation ethics (agape, the six propositions, four working principles &amp; conscience)</li> <li>Christian teaching on heaven, hell, purgatory and election</li> </ul>	<ul style="list-style-type: none"> <li>Different types of modern family</li> <li>Changes in relationship and marriage</li> <li>Concerns and problems within the family</li> <li>French educational system</li> <li>Expectations of pupils and how they deal with them</li> </ul>	<p>"A Call to Social Action" Project</p> <ul style="list-style-type: none"> <li>Presentation to a panel of local judges, with one group awarded as the "Social Action Champion."</li> <li>£400 of Dreamscheme money awarded to the winning group for project implementation.</li> <li>Development of employability skills</li> <li>Fostering positive relationships, personal and social development, raising aspirations, and building resilience through mentorship.</li> </ul>	<ul style="list-style-type: none"> <li>The set musical works of Hayden, Beethoven and Mozart</li> <li>Classical instrumental music</li> <li>Concert overture</li> <li>Symphonic poem</li> <li>Programme symphony</li> <li>Soloworks</li> </ul>	<ul style="list-style-type: none"> <li>Relationships in HSC or child care environments</li> <li>Factors that influence the building of relationships</li> <li>The cardiovascular system, malfunctions and their impact on individuals</li> <li>The respiratory system, malfunctions and their impact on individuals</li> <li>Types of dementia and the impact of diagnosis on individual</li> <li>Legislation and frameworks which support the care of individuals with dementia</li> </ul>
Miss Norman	Miss Smith		Ms Cooper	Miss Holliday	Mr Machard	Miss Holliday	Mr Newton	Mrs Fisher