Year 10 : Term 5 Curriculum Plan

Maths	Dr Horne and Mr Jackson	Mrs Ferns and Mr Lee	
Week	**Learning**	**Learning**	**Activities**
Week beginning 8th June	Review and Independent Learning	Review and Independent Learning	Assignment set by class teacher who will review and mark
Week beginning 15th June	**Quadratics** Students will factorise quadratic expressions in the form $ax^2 + bx + c$. They will set up and solve quadratic equations by factorising and completing the square. Students will solve equations that need rearranging and solve quadratic equations using the quadratic formula.	**Equations** Students will use function machines. They will solve equations with integer coefficients, in which the unknown appears on either side or on both sides of the equation.	Lesson/online lesson (with independent learning assignment) Learning loop (Hegarty Maths quiz linked to the content of the lesson)
Week beginning 22nd June	**Simultaneous Equations** Students will find the exact solutions of two simultaneous equations in two unknowns. They will use elimination or substitution to solve simultaneous equations. They will solve both linear and non- linear simultaneous equations	**Sequences** Students will find a specific term using position–to-term or term-to-term rules. They will generate linear sequences of numbers and sequences derived from diagrams. They will find the nth term for a pattern sequence and of an arithmetic sequence. Students will continue a quadratic sequence and use the nth term to generate terms	Lesson/online lesson (with independent learning assignment) Learning loop (Hegarty Maths quiz linked to the content of the lesson)

Week beginning 29th June	**3D Pythagoras and 3D trigonometry** Students will understand, recall and use trigonometric relationships and Pythagoras' Theorem in right angled triangles and use these to solve problems in 3D configurations	**Prime Numbers** Students will recognise and describe prime numbers. They will find the prime factor decomposition of positive integers and write as a product using index notation. Students will find the HCF/LCM using prime factors including finding HCF and LCM given the prime factorisation of two numbers.	Lesson/online lesson (with independent learning assignment) Learning loop (Hegarty Maths quiz linked to the content of the lesson)
Week beginning 6th July	**Statistics** Students will apply systematic listing strategies, including use of the product rule for counting. The will understand how to draw a tree diagram and use this to find probability and expected outcomes. They will calculate the probability of independent and dependent combined events.	**Standard form** Students will convert large and small numbers to and from standard form. They will multiply, divide, add and subtract in standard form. They will know how to interpret a calculator display using standard form and know how to enter numbers in standard form.	Lesson/online lesson (with independent learning assignment) Learning loop (Hegarty Maths quiz linked to the content of the lesson)
Week beginning 13th July	**Statistics 2** Students will estimate the size of a population using the capture-recapture method. They will draw and interpret cumulative frequency graphs and box plots to find median, quartiles, range and interquartile range and draw conclusions	**Ratio** Students will share a quantity in a given ratio, including three part ratios. They will apply ratio to real life problems, such as those involving conversion, comparison scaling.	Lesson/online lesson (with independent learning assignment) Learning loop (Hegarty Maths quiz linked to the content of the lesson)