

Curriculum Map
Mathematics - Year 7

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Numbers and place value• Fraction arithmetic• Percentages• Convert between fractions, decimals, percentages• Angles at a point, on a straight line, in a triangle	Hegarty Maths Kerboodle text book
Autumn 2	<ul style="list-style-type: none">• Frequency tables, bar charts, pie charts, pictograms• Algebra (vocabulary, substitution, functions)• Standard units of measure (length, area, volume/capacity, mass, time, money).	Hegarty Maths Kerboodle text book

Curriculum Map
Mathematic - Year 8

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Properties of shapes• Interior and exterior angles of polygons• Congruence and similarity• Statistical charts and diagrams• Expand brackets; factorise a quadratic expression• Change the subject of a formula• Functions and inverse functions	Hegarty Maths Kerboodle text book
Autumn 2	<ul style="list-style-type: none">• Area of 2D shapes, composite shapes• Rounding and significant figures• Compound units• Solve linear equations	Hegarty Maths Kerboodle text book

Curriculum Map
Mathematics - Year 9

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Algebraic manipulation• Expanding and factorising (single and double brackets)• Vocabulary of algebra• Change the subject of a formula• Arithmetic with whole numbers and fractions• Convert between terminating decimals and fractions	Hegarty Maths Kerboodle text book
Autumn 2	<ul style="list-style-type: none">• Angles in parallel lines, triangles• Congruence and similarity (length, area, volume)• Solve quadratic equations (factorising, completing the square, using the formula)• Solve simultaneous equations (linear/linear, linear/quadratic)• Translate descriptions of situations into algebraic expressions and equations	Hegarty Maths Kerboodle text book

Curriculum Map
Mathematics - Year 10

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Solve quadratic equations• Gradients and intercepts of linear functions• Geometrical problems on coordinate axes• Plot and interpret graphs (including kinematics involving distance, speed and acceleration)• Gradients of graphs (including non-linear), areas under graphs• Round numbers to an appropriate degree of accuracy	Hegarty Maths Kerboodle text book
Autumn 2	<ul style="list-style-type: none">• Upper and lower bounds in calculations• Calculations with surds• Solve simultaneous equations (linear/linear and linear/quadratic)• Solve linear inequalities• Circle theorems• Numerical solutions to equations using iteration	Hegarty Maths Kerboodle text book

Curriculum Map
Mathematics - Year 11

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Circle theorems: application and proof• Algebraic proof• Numerical solutions to equations using iteration• Counting strategies (permutations and combinations); Capture/Recapture method• Vectors: addition, scalar multiplication, geometry, proof (parallel or co-linear)• Construction/loci	Hegarty Maths Kerboodle text book
Autumn 2	<ul style="list-style-type: none">• Revision for PQE in November	Hegarty Maths Kerboodle text book

Curriculum Map
Mathematics - Year 12

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Problem solving• Surds and indices• Quadratic functions• Equations and inequalities• Differentiation• Coordinate geometry• Integration	<p>https://2017.integralmaths.org/</p> <p>Moodle information: https://moodle.rainhammark.com/mod/resource/view.php?id=28314</p>
Autumn 2	<ul style="list-style-type: none">• Integration• Trigonometry• Vectors• Polynomials• Exponentials and logarithms• Graphs and transformations• Data collection	<p>https://2017.integralmaths.org/</p> <p>Moodle information: https://moodle.rainhammark.com/mod/resource/view.php?id=28314</p>

Curriculum Map
Core Mathematics - Year 12

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Representing the real world mathematically• Measures and scaling• Financial problem solving• Working with exponentials	https://2017.integralmaths.org/
Autumn 2	<ul style="list-style-type: none">• Roughly speaking• Probability and risk• Statistics	https://2017.integralmaths.org/

Curriculum Map

Further Mathematics - Year 12

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Radians• Introduction to complex numbers• Matrices and transformations• Matrices and inverses• Roots of polynomials• Sequences and series• Vectors and 3D space	<p>https://2017.integralmaths.org/</p> <p>https://moodle.rainhammark.com/mod/resource/view.php?id=28313</p>
Autumn 2	<ul style="list-style-type: none">• Complex numbers and geometry• Kinematics• Forces and motion• Statistical problem solving• Discrete random variables	<p>https://2017.integralmaths.org/</p> <p>https://moodle.rainhammark.com/mod/resource/view.php?id=28313</p>

Curriculum Map
Mathematics - Year 13

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Integration• Trigonometric identities• Further differentiation	<p>https://2017.integralmaths.org/</p> <p>Moodle information: https://moodle.rainhammark.com/mod/resource/view.php?id=29861</p>
Autumn 2	<ul style="list-style-type: none">• Parametric equations• Differential equations• Vectors• Numerical methods• Kinematics• Large Data Set (essay)	<p>https://2017.integralmaths.org/</p> <p>Moodle information: https://moodle.rainhammark.com/mod/resource/view.php?id=29861</p>

Curriculum Map

Further Mathematics - Year 13

	What is being learnt?	Remote learning links
Autumn 1	<ul style="list-style-type: none">• Maclaurin series• Polar coordinates• Motion under a variable force• Hyperbolic functions• Circular motion• Complex numbers	<p>https://2017.integralmaths.org/</p> <p>Moodle information: https://moodle.rainhammark.com/mod/resource/view.php?id=29860</p>
Autumn 2	<ul style="list-style-type: none">• Applications of integration• Hooke's Law• 1st Order differential equations• Complex numbers• Modelling oscillations	<p>https://2017.integralmaths.org/</p> <p>Moodle information: https://moodle.rainhammark.com/mod/resource/view.php?id=29860</p>