

HONLEY HIGH SCHOOL

CURRICULUM GUIDE 2023-2024

MATHEMATICS

HEAD OF DEPARTMENT: MISS J HALL

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STRIVE FOR THE HIGHEST





Maths Year 7 - Breakthrough

AUTUMN 1

Working with numbers <ul style="list-style-type: none"> - Number lines - Adding and subtracting two-digit numbers - Multiplying and dividing large numbers - Inverse operations 	Number Skills <ul style="list-style-type: none"> - Understanding decimals - Multiples - Multiplying by powers of 10 - Dividing with decimals - Factors 	Directed Number <ul style="list-style-type: none"> - Representing negatives on a number line - Calculations that cross zero - Addition and subtraction of negatives - Multiplication and division of negatives 	Prior Learning Knowledge of times tables (KS2) Order and compare numbers up to 10,000,000 (Year 6) Formal and mental methods for adding, subtracting, multiplying and dividing (KS2)
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AUTUMN 2

Fractions <ul style="list-style-type: none"> - Representing fractions - Equivalent fractions - Fractions of amounts - Adding and subtracting fractions 	Project Work Classes will work in teams to develop projects using maths in real life problems	Prior Learning Add and subtract fractions with the same denominator (Year 4) Add and subtract fractions with different denominators (Year 6)
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SPRING 1

Percentages and Decimals <ul style="list-style-type: none"> - Equivalent fractions, decimals and percentages - Ordering fractions, decimals and percentages - Percentages of amounts 	Introducing Algebra <ul style="list-style-type: none"> - Algebraic Manipulations - Simplifying algebraic expressions - Substitution - Solving one-step equations 	Prior Learning Use simple formulae (Year 6) Equivalent fractions and decimals (Year 5)
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SPRING 2

Measure, Perimeter and Area <ul style="list-style-type: none"> - Converting units of measure - Perimeter of 2D Shapes - Area of 2D Shapes - Multiplying and dividing fractions 	RAR <ul style="list-style-type: none"> - Revision and Retention - Bespoke intervention based on gaps in prior learning 	Prior Learning Convert between different units of measure (Year 4) Recognise and name common 2D Shapes and their properties (KS2) Use simple formulae (Year 6)
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SUMMER 1

Averages <ul style="list-style-type: none"> - Calculating mean, median, mode and range - Comparing averages - Frequency tables 	Probability <ul style="list-style-type: none"> - Probability scales - Sample space diagrams - Experimental probability 	Angles <ul style="list-style-type: none"> - Angle types - Angles at a point - Angles in triangles and quadrilaterals 	Statistical Diagram <ul style="list-style-type: none"> - Frequency tables - Bar charts - Line graphs - Pie charts 	Prior Learning Types of angles (Year 4) Introduction to basic angle facts (Year 6) Calculating the mean (Year 6)
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SUMMER 2

3D Shapes <ul style="list-style-type: none"> - 3 D Shapes - Nets - Plans and elevations - Volume of a cuboid 	Ratio <ul style="list-style-type: none"> - Simplifying ratio - Representing a ratio visually - Sharing into a ratio 	Prior Learning Name 3D Shapes (KS1) Scale factors (Year 6) Recipe problems (Year 6)
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CAREERS LINKS

Accountancy, Chef, Banking Insurance, Bookmaking, Risk Analyst, News Reporting, Analyst, Businessperson, Performance Analyst. Actuaries, Economist, Meteorologist, Carpenter, Welder, Construction, Architecture, Joinery, Games Designer, Software Design & IT, Engineering, Catering, Hairdressing

CHARACTER LINKS

Perseverance and determination skills are fostered (performance virtues) particularly when students do not arrive at the correct answer first time and when trial and error skills are needed. Project work encourages critical thinking, judgement and reasoning skills (intellectual virtues) to arrive at the outcome

KEY ASSESSMENT DATES

Summative assessments:
 December 2023
 June 2024



Maths Year 7 – Core & Accelerated

AUTUMN 1

Number Skills - Addition, subtraction, multiplication and division of integers and decimals - Multiples - Factors	Directed Number - Calculations that cross zero - Addition and subtraction of negatives - Multiplication and division of negatives	Fractions - Fractions of amounts - Adding and subtracting fractions - Working with mixed numbers	Prior Learning Knowledge of times tables (KS2) Order and compare numbers up to 10,000,000 (Year 6) Formal and mental methods for adding, subtracting, multiplying and dividing (KS2)
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AUTUMN 2

Percentages and Decimals - Equivalent fractions, decimals and percentages - Ordering fractions, decimals and percentages - Percentages of amounts	Algebra - Algebraic Manipulations - Simplifying algebraic expressions - Substitution - Solving one-step equations	Project Work Classes will work in teams to develop projects using maths in real life problems	Prior Learning Add and subtract fractions with the same denominator (Year 4) Add and subtract fractions with different denominators (Year 6)
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SPRING 1

Developing Algebra - Expanding brackets - Factorising expressions - Solving two-step equations - Solving equations with unknowns on both sides	Measure, Perimeter and Area - Converting units of measure - Perimeter of 2D Shapes - Area of 2D Shapes - Multiplying and dividing fractions	Prior Learning Convert between different units of measure (Year 4) Recognise and name common 2D Shapes and their properties (KS2) Use simple formulae (Year 6)
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SPRING 2

Averages - Calculating mean, median, mode and range - Comparing averages - Frequency tables	RAR - Revision and Retention - Bespoke intervention based on gaps in prior learning	Prior Learning Calculating the mean (Year 6)
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SUMMER 1

Probability - Experimental probability - Probability Trees - Venn diagrams	Angles - Measuring and drawing angles - Basic angle facts - Angles in quadrilaterals and triangles	Statistical Diagram - Bar Charts - Scatter diagrams - Stem and Leaf diagrams - Pie charts	Prior Learning Types of angles (Year 4) Introduction to basic angle facts (Year 6)
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SUMMER 2

3D Shapes - Plans and elevations - Surface area - Volume of cubes and cuboids	Ratio - Simplifying ratio - Writing ratio in the form 1:n - Sharing into a ratio	Prior Learning Name 3D Shapes (KS1) Scale factors (Year 6) Recipe problems (Year 6)
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Accountancy, Chef, Banking Insurance, Bookmaking, Risk Analyst, News Reporting, Analyst, Businessperson, Performance Analyst. Actuaries, Economist, Meteorologist, Carpenter, Welder, Construction, Architecture, Joinery, Games Designer, Software Design & IT, Engineering, Catering, Hairdressing

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KEY ASSESSMENT DATES

Summative assessments:
 December 2023
 June 2024

NITIMUR IN EXCELSIS – STRIVE FOR THE HIGHEST



Maths Year 8

AUTUMN 1

Ratio and Scale <ul style="list-style-type: none"> - Simplifying ratio - Sharing into a ratio 	Multiplicative Change <ul style="list-style-type: none"> - Direct proportion - Scale diagrams - Currency conversion - Similar shapes 	Multiplying and Dividing Fractions <ul style="list-style-type: none"> - Mixed numbers - Simple algebraic fractions 	Prior Learning Multiplicative relationships (Year 7) Convert metric units (Year 7)
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AUTUMN 2

Working in the Cartesian Plane <ul style="list-style-type: none"> - Simple straight line graphs - Gradient - $y = mx + c$ 	Representing Data <ul style="list-style-type: none"> - Scatter graphs - Frequency tables - Two-way tables 	Tables and Probability <ul style="list-style-type: none"> - Sample space diagrams - Venn diagrams 	Prior Learning Represent functions graphically (Year 7) Language of probability (Year 7) Probability scale (Year 7)
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SPRING 1

Brackets, Equations & Inequalities <ul style="list-style-type: none"> - Expanding brackets - Factorising - Solving equations and inequalities 	Sequences and Indices <ul style="list-style-type: none"> - Nth term - Index laws 	Prior Learning Form and solve one-step and two-step equations (Year 7) Recognise linear and non-linear sequences (Year 7) Generate sequences (Year 7)
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SPRING 2

Fractions and Percentages <ul style="list-style-type: none"> - Multipliers - Reverse percentages 	Standard Form <ul style="list-style-type: none"> - Powers of 10 - Writing in standard form - Calculating in standard form 	Number Sense <ul style="list-style-type: none"> - Rounding to decimal places - Error intervals - Metric units 	Prior Learning Percentage of amounts (Year 7) Equivalent fractions, decimals and percentages (Year 7) Round numbers to powers of 10 (Year 7)
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SUMMER 1

Angles in Parallel Lines and Polygons <ul style="list-style-type: none"> - Angles on parallel lines' - Angles in polygons - Constructions 	Area of Trapezia and Circles <ul style="list-style-type: none"> - Area of a trapezium - Area of a circle - Perimeter and area of compound shapes 	Line Symmetry and Reflection <ul style="list-style-type: none"> - Reflecting shapes 	Prior Learning Area (Year 7) Properties of triangles and quadrilaterals (Year 7) Angle facts (Year 7)
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SUMMER 2

The Data Handling Cycle <ul style="list-style-type: none"> - Questionnaires - Pictograms and bar charts - Pie charts - Comparing distributions 	Measures of Location <ul style="list-style-type: none"> - Mean, median and mode - Mean from a table 	Prior Learning Interpret pie charts (Year 7) Line and bar charts (Year 7)
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KEY ASSESSMENT DATES

Summative assessment w/c 12 June 2024



Maths Year 9

AUTUMN 1

Three-Dimensional Shapes <ul style="list-style-type: none"> - Nets of 3D shapes - Surface area - Volume 	Constructions and Congruency <ul style="list-style-type: none"> - Loci - Constructions - Congruent triangles 	Prior Learning Area of 2D shapes (Year 8) Geometric notation (Year 7) Name and construct polygons (Year 7)
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AUTUMN 2

Straight Line Graphs <ul style="list-style-type: none"> - Comparing gradients and intercepts - Real-life graphs - Parallel and perpendicular lines 	Forming and Solving <ul style="list-style-type: none"> - Solve equations and inequalities with unknowns both sides - Substitution - Rearranging formulae 	Testing Conjectures <ul style="list-style-type: none"> - Conjectures with number and algebra - Expanding a pair of binomials - Expanding three binomials 	Prior Learning Form and solve equations (Year 7) Solve inequalities (Year 8) Plotting graphs (Year 8)
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SPRING 1

Numbers <ul style="list-style-type: none"> - Rational numbers - Surds 	Using Percentages <ul style="list-style-type: none"> - Reverse percentages - Repeated percentage change 	Maths and Money <ul style="list-style-type: none"> - Interest - Wages and taxes - Exchange rates 	Prior Learning Percentage increase and decrease (Year 8) Number sense (Year 8) Using multipliers (Year 8) Calculations with money (Year 8)
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SPRING 2

Deduction <ul style="list-style-type: none"> - Parallel lines - Multi-step angle problems 	Rotation and Translation <ul style="list-style-type: none"> - Rotating shapes - Vector translations 	Pythagoras' Theorem <ul style="list-style-type: none"> - Find missing sides using Pythagoras' Theorem - Pythagoras' in 3-D 	Prior Learning Angles in parallel lines (Year 8) Angle facts (Year 7) 3-dimensional shapes (Year 9)
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SUMMER 1

Enlargement and Similarity <ul style="list-style-type: none"> - Enlarging shapes - Negative and fractional enlargements - Similar triangles 	Ratio and Proportion <ul style="list-style-type: none"> - Direct and inverse proportion - Best buy problems - Ratio and algebra 	Rates <ul style="list-style-type: none"> - Speed, distance, time - Density, mass, volume - Rates of change 	Prior Learning Scale factors (Year 8) Working with ratio (Year 8)
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SUMMER 2

Probability <ul style="list-style-type: none"> - Relative frequency - Expected outcomes - Tree diagrams 	Representing Solutions <ul style="list-style-type: none"> - Drawing graphs - Representing inequalities - Factorising - Solutions using graphs 	Prior Learning Tables and Venns to find probabilities (Year 8)
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KEY ASSESSMENT DATES

Summative assessment:
June 2024



Higher Maths Year 10

AUTUMN 1

Linear Equations & Inequalities <ul style="list-style-type: none"> - Forming and solving equations & inequalities - Solving simultaneous equations 	Powers & Surds <ul style="list-style-type: none"> - Laws of indices - Calculating with surds - Rationalising the denominator 	Limits of Accuracy <ul style="list-style-type: none"> - Upper and lower bounds - Truncation 	Direct & Inverse Proportion <ul style="list-style-type: none"> - Direct and inverse proportion - Work rate 	Prior Learning <ul style="list-style-type: none"> - Forming and solving equations (Year 9) - Indices (Year 8) - Multiplicative reasoning (Year 8)
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AUTUMN 2

Quadratic Equations <ul style="list-style-type: none"> - Factorising quadratics - Using the quadratic formula - Completing the square 	Circle Theorems <ul style="list-style-type: none"> - Using circle theorems to find missing angles - Circle theorem proof 	Prior Learning <ul style="list-style-type: none"> - Brackets, equations & inequalities (Year 8) - Geometric reasoning (Year 7) - Deduction (Year 9)
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SPRING 1

Quadratic & Other Graphs <ul style="list-style-type: none"> - Plotting graphs - Understanding parallel and perpendicular lines - Using the equation of a circle 	Simultaneous Equations <ul style="list-style-type: none"> - Linear simultaneous equations - Non-linear quadratic equations - Solving simultaneous equations graphically 	Quadratic & Geometric Sequences <ul style="list-style-type: none"> - Linear sequences - Nth term of a quadratic sequence - Understanding geometric sequences 	Prior Learning <ul style="list-style-type: none"> - Straight line graphs (Year 9) - Linear equations & inequalities (Year 10) - Sequences (Year 8)
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SPRING 2

Ratio & Algebra <ul style="list-style-type: none"> - Using ratio with linear equations - Using ratio with quadratic equations 	Revision & Retention <ul style="list-style-type: none"> - Bespoke intervention based on prior learning. 	Prior Learning <ul style="list-style-type: none"> - Ratio & scale (Year 8) - Ratio & proportion problems (Year 9) - Quadratic equations (Year 10)
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SUMMER 1

Triangles <ul style="list-style-type: none"> - Pythagoras' Theorem - 2D trigonometry - Sine and Cosine rules 	Statistical Diagrams <ul style="list-style-type: none"> - Cumulative frequency graphs - Box plots - Histograms 	Algebraic Fractions <ul style="list-style-type: none"> - Algebraic fraction arithmetic - Solving algebraic fractions 	Bearings <ul style="list-style-type: none"> - Read and interpret bearings - Bearings with trigonometry 	Prior Learning <ul style="list-style-type: none"> - Pythagoras' theorem (Year 9) - The data handling cycle (Year 8) - Adding and subtracting fractions (Year 7)
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SUMMER 2

Probability <ul style="list-style-type: none"> - Tree diagrams - Conditional probability - Algebraic tree diagrams 	Iteration <ul style="list-style-type: none"> - Compound interest - Rearranging equations - Iterative processes 	Prior Learning <ul style="list-style-type: none"> - Sets & probability (Year 7) - Maths & money (Year 9) - Percentages (Year 8)
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CAREERS LINKS

Accountancy, chef, banking insurance, bookmaking, risk analyst, news reporting, analyst, businessperson, performance analyst. Actuaries, economist, meteorologist, carpenter, welder, construction, architecture, joinery, games designer, software design & IT, engineering, catering, hairdressing

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KEY ASSESSMENT DATES

Autumn assessment: Dec 23
Spring assessment: April 24
Mock exams: June 24

NITIMUR IN EXCELSIS – STRIVE FOR THE HIGHEST



Crossover Maths Year 10

AUTUMN 1

Linear Equations & Inequalities - Forming and solving equations & inequalities - Solving simultaneous equations	Powers & Surds - Laws of indices - Calculating with surds - Rationalising the denominator	Limits of Accuracy - Upper and lower bounds - Truncation	Direct & Inverse Proportion - Direct and inverse proportion - Work rate	Prior Learning Forming and solving equations (Year 9) Indices (Year 8) Multiplicative reasoning (Year 8)
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AUTUMN 2

Quadratic Equations - Factorising quadratics - Using the quadratic formula - Completing the square	Circle Theorems - Using circle theorems to find missing angles - Circle theorem proof	Prior Learning Brackets, equations & inequalities (Year 8) Geometric reasoning (Year 7) Deduction (Year 9)
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SPRING 1

Quadratic & Other Graphs - Plotting graphs - Understanding parallel and perpendicular lines - Using the equation of a circle	Simultaneous Equations - Linear simultaneous equations - Non-linear quadratic equations - Solving simultaneous equations graphically	Prior Learning Straight line graphs (Year 9) Linear equations & inequalities (Year 10)
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SPRING 2

Triangles - Pythagoras' Theorem - 2D trigonometry - Sine and Cosine rules	Revision & Retention - Bespoke class intervention based on prior learning.	Prior Learning Pythagoras' theorem (Year 9) Ratio & proportion problems (Year 9)
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SUMMER 1

Quadratic & Geometric Sequences - Linear sequences - Nth term of a quadratic sequence - Understanding geometric sequences	Ratio & Algebra - Using ratio with linear equations - Using ratio with quadratic equations	Bearings - Read and interpret bearings - Bearings with trigonometry	Statistical Diagrams - Cumulative frequency graphs - Box plots - Histograms	Prior Learning Sequences (Year 8) The data handling cycle (Year 8) Triangles (Year 10) Ratio & Proportion problems (Year 9)
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SUMMER 2

Algebraic Fractions - Algebraic fraction arithmetic - Solving algebraic fractions	Probability - Tree diagrams - Conditional probability - Algebraic tree diagrams	Prior Learning Sets & probability (Year 7) Probability (Year 9) Adding and subtracting fractions (Year 7)
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CAREERS LINKS

Accountancy, chef, banking insurance, bookmaking, risk analyst, news reporting, analyst, businessperson, performance analyst. Actuaries, economist, meteorologist, carpenter, welder, construction, architecture, joinery, games designer, software design & IT, engineering, catering, hairdressing

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KEY ASSESSMENT DATES

Autumn assessment: Dec 23
Spring assessment: April 24
Mock exams: June 24



Foundation Maths Year 10

AUTUMN 1

Percentages - Finding percentage of amounts - Percentage increase & decrease	Quadratic Equations - Expanding double brackets - Solving quadratics by factorising - Quadratic graphs	Angles in Parallel Lines - Angles - Bearings	Prior Learning Forming and solving equations (Year 9) Brackets, equations & inequalities (Year 8)
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AUTUMN 2

Statistical Diagrams - Pie charts - Sampling - Averages	Revision and Retention - Bespoke class intervention based on prior learning.	Prior Learning Geometric reasoning (Year 7) Deduction (Year 9) The data handling cycle (Year 8)
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SPRING 1

Right-Angled Triangles - Pythagoras' Theorem - 2D trigonometry	Probability - Two-way tables - Frequency trees - Tree diagrams	Prior Learning Straight line graphs (Year 9) Linear equations & inequalities (Year 10) Pythagoras' theorem (Year 9)
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SPRING 2

Ratio - Sharing into a ratio - Ratio as fractions	Revision & Retention - Bespoke class intervention based on prior learning.	Prior Learning Ratio & proportion problems (Year 9) Multiplicative reasoning (Year 8)
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SUMMER 1

Sequences - Linear sequences - Special sequences including Fibonacci	Simultaneous Equations - Solving linear simultaneous equations - Solving simultaneous equations graphically	Arcs and Sectors - Area and circumference of a circle - Length of an arc - Area of a sector	Prior Learning Sequences (Year 8) Area of circles and trapezia (Year 8)
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SUMMER 2

Compound Measures - Speed, distance, time - Mass, density, volume - Pressure, force, area	Non-Calculator Methods - Fraction arithmetic - Estimation - Error intervals	Prior Learning Sets & probability (Year 7) Probability (Year 9) Adding and subtracting fractions (Year 7)
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CAREERS LINKS

Accountancy, chef, banking insurance, bookmaking, risk analyst, news reporting, analyst, businessperson, performance analyst. Actuaries, economist, meteorologist, carpenter, welder, construction, architecture, joinery, games designer, software design & IT, engineering, catering, hairdressing

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KEY ASSESSMENT DATES

Mock exams: June 24

NITIMUR IN EXCELSIS – STRIVE FOR THE HIGHEST



Maths Year 11 - Higher

AUTUMN 1

Expanding and Factorising - Expand and factorise single and double brackets - Solve equations by factorisation - Complete the square Quadratic formula	Changing the Subject - Rearranging formula Iteration	Functions - Function machines - Inverse and composite functions - Quadratic inequalities - Trigonometric functions	Prior Learning Working in the Cartesian plane Y8 Straight line graphs Y9
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AUTUMN 2

Gradients and Lines - Coordinate geometry - Parallel lines - Perpendicular lines -	Non-Linear Graphs - Quadratic, cubic and reciprocal graphs - Equations of circles Equations of tangents	Prior Learning Algebraic notation Y7 Representing solutions Y10 Trigonometry Y10 Brackets, Equations and Inequalities Y8
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SPRING 1

Using Graphs - Distance/time graphs - Speed/time graphs - Area under a curve	Multiplicative Reasoning - Direct and inverse proportion - Pressure and density	Geometric Reasoning - Vectors - Circle theorems - Trigonometry	Prior Learning Enlargement and Congruency Y10 Testing conjectures Y9
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SPRING 2

Algebraic Reasoning - Sequences - Simultaneous equations - Algebraic proof	Listing and Describing - Product rule for counting - Systematic listing	Transforming and Constructing - Transformations - Loci - Graph transformations	Show That - 'Show that' with number, shape, algebra and data - Congruency	Prior Learning Enlargement and Congruency Y10 Testing conjectures Y9
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SUMMER 1

Revision and practice papers	Prior Learning Throughout the course
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CAREERS LINKS

Accountancy, chef, banking insurance, bookmaking, risk analyst, news reporting, analyst, businessperson, performance analyst. Actuaries, economist, meteorologist, carpenter, welder, construction, architecture, joinery, games designer, software design & IT, engineering, catering, hairdressing

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KEY ASSESSMENT DATES

Fortnightly exam practice embedded throughout each unit.
 27 November to 8 December
 23: Year 11 Mock Exams



Maths Year 11 - Crossover

AUTUMN 1

Expanding and Factorising <ul style="list-style-type: none"> - Expand and factorise single and double brackets - Solve equations by factorisation - Complete the square - Quadratic formula 	Changing the Subject <ul style="list-style-type: none"> - Rearranging formula - Iteration 	Functions <ul style="list-style-type: none"> - Function machines - Inverse and composite functions - Quadratic inequalities - Trigonometric functions 	Prior Learning Working in the Cartesian plane Y8 Straight line graphs Y9
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AUTUMN 2

Gradients and Lines <ul style="list-style-type: none"> - Coordinate geometry - Parallel lines - Perpendicular lines 	Non-Linear Graphs <ul style="list-style-type: none"> - Quadratic, cubic and reciprocal graphs - Equations of circles - Equations of tangents 	Prior Learning Algebraic notation Y7 Representing solution Y10 Trigonometry Y10 Brackets, Equations and Inequalities Y8
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SPRING 1

Using Graphs <ul style="list-style-type: none"> - Distance/time graphs - Speed/time graphs - Area under a curve 	Multiplicative Reasoning <ul style="list-style-type: none"> - Direct and inverse proportion - Pressure and density 	Geometric Reasoning <ul style="list-style-type: none"> - Vectors - Circle theorems - Trigonometry 	Prior Learning Enlargement and Congruency Y10 Testing conjectures Y9
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SPRING 2

Algebraic Reasoning <ul style="list-style-type: none"> - Sequences - Simultaneous equations - Algebraic proof 	Listing and Describing <ul style="list-style-type: none"> - Product rule for counting - Systematic listing 	Transforming and Constructing <ul style="list-style-type: none"> - Transformations - Loci - Graph transformations 	Show That <ul style="list-style-type: none"> - 'Show that' with number, shape, algebra and data - Congruency 	Prior Learning Enlargement and Congruency Y10 Testing conjectures Y9
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SPRING 2

Revision and Practice Papers	Prior Learning Throughout the course
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CAREERS LINKS

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KEY ASSESSMENT DATES

Fortnightly exam practice embedded throughout each unit.
 27 November to 8 December 23:
 Year 11 Mock Exams



Maths Year 11 - Foundation

AUTUMN 1

Number Sense <ul style="list-style-type: none"> - Rounding - Addition, subtraction, multiplication, and division problems - Problems with time 	Algebra <ul style="list-style-type: none"> - Simplifying expressions - Expanding brackets - Solving equations 	Negative Numbers <ul style="list-style-type: none"> - Calculating with negative numbers - Order of operations 	Prior Learning Brackets, equations, and inequalities Y8 Number Sense Y8 Forming and Solving Y9
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AUTUMN 2

Fractions and Decimals <ul style="list-style-type: none"> - Ordering fractions and decimals - Fraction arithmetic - Multi-step problems with fractions and decimals 	Ratio and Percentages <ul style="list-style-type: none"> - Percentage of amounts - Percentage increase and decrease - Sharing into a ratio 	Prior Learning Algebraic notation Y7 Representing solutions Y10 Trigonometry Y10 Brackets, Equations and Inequalities Y8 Ratio and Fractions Y9
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SPRING 1

Area and Volume <ul style="list-style-type: none"> - Area of 2D shapes - Volume of cubes and cuboids - Volume of prisms 	Data and Probability <ul style="list-style-type: none"> - Averages - Charts and graphs - Probability 	Geometric Reasoning <ul style="list-style-type: none"> - Angle facts - Angles on parallel lines - Angles in polygons 	Prior Learning Enlargement and Congruency Y10 Testing conjectures Y9 3D Shapes Y9 Delving into Data Y10
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SPRING 2

Algebraic Reasoning <ul style="list-style-type: none"> - Sequences - Forming and solving equations and inequalities - Simplifying expressions 	Transforming and Constructing <ul style="list-style-type: none"> - Transforming shapes - Constructions 	Listing and Describing <ul style="list-style-type: none"> - Sample space diagrams - Venn diagrams - Scatter graphs 	Show That <ul style="list-style-type: none"> - 'Show that' with number, shape, algebra and data 	Prior Learning Enlargement and Congruency Y10 Testing conjectures Y9 Forming and Solving Y9
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SUMMER 1

Revision and practice papers	Prior Learning Throughout the course
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KEY ASSESSMENT DATES

Fortnightly exam practice embedded throughout each unit.
 27 Nov to 8 Dec 2023
 Year 11 Mock Exams

NITIMUR IN EXCELSIS – STRIVE FOR THE HIGHEST



Maths Year 10 - Statistics

AUTUMN 1

Types of Data	Population and Sampling	Sampling Methods	Planning and Collecting Data	Prior Learning Representing Data Y8 The Data Handling Cycle Y8
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AUTUMN 2

Qualitative and Discrete Data	Prior Learning The Data Handling Cycle Y8
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SPRING 1

Continuous Data	Prior Learning Measures of Location Y8
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SPRING 2

Continuous Data (cont.)	Tabulation	Measures of Central Tendency	Prior Learning Representing Data Y8
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SUMMER 1

Measures of Central Tendency (cont.)	Measures of Dispersion	Prior Learning Representing Data Y8 The Data Handling Cycle Y8
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SUMMER 2

Box Plots, Skewness and Representing Outliers	Prior Learning Representing Data Y8 The Data Handling Cycle Y8
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CAREERS LINKS

Accountancy, chef, banking insurance, bookmaking, risk analyst, news reporting, analyst, businessperson, performance analyst. Actuaries, economist, meteorologist, carpenter, welder, construction, architecture, joinery, games designer, software design & IT, engineering, catering, hairdressing

CHARACTER LINKS

Perseverance and determination skills are fostered (performance virtues) particularly when students do not arrive at the correct answer first time and when trial and error skills are needed. Project work encourages critical thinking, judgement and reasoning skills (intellectual virtues) to arrive at the outcome.

KEY ASSESSMENT DATES

Autumn assessment: Dec '23
Spring assessment: April '24
Mock exams: June '24