



KS3 Mathematics is devised according to the OAK Curriculum. KS4 Mathematics is devised according to the AQA curriculum.

Year	Focus	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Develop foundational knowledge of place value, number lines, addition and subtraction, multiplication and division, Powers, Roots, Primes, negative numbers, fractions, and percentages. Practice estimating and calculating.	Place Value & Number System Develop knowledge of and ability to expand numbers, order integers, compare decimals, multiply and divide by positive and negative numbers.	Addition & Subtraction Understand number bonds, perimeter, angles, mean and range; develop ability to interpret word problems. Begin multiplication work.	Multiplication & Division Understand inverses and how to divide decimals. Understand area & Volume. Power & Roots – understand square & cube roots; and Prime factors.	Order of Operations Understand order of operations with the four rules, including indices, brackets, integers, and decimals. Begin being able to order negative numbers.	Negative Numbers Understand addition, subtraction, multiplication, and division of negative numbers. Begin algebraic thinking by simplifying and solving 'unknown value'.	Fractions & Percentages Know how to multiply and divide fractions. Know how to express one number as a %, increase & decrease. Introduction to using a calculator.
	Assessments:	GL Progress Test – Maths A	Learning Check 1: Summative Assessment 1	Learning Check 2: Spring 1 Topics	Learning Check 3: Spring 2 Topics	Learning Check 4: Summer 1 Topics	GL Progress Test – Maths B Summative Assessment 2
	Extra-Curricular:	Maths Club – Lunchtime	Maths Club – Lunchtime	Maths Club – Lunchtime	Maths Club – Lunchtime	Maths Club – Lunchtime	Maths Club – Lunchtime
	Unit: Place value KS3 Maths Oak National Academy (thenational.academy)	Unit: Comparing and ordering fractions and decimals (positive and negative) KS3 Maths Oak National Academy (thenational.academy) Unit: Perimeter and area KS3 Maths Oak National Academy (thenational.academy)		Lunchtime Unit: Arithmetic procedures with integers and decimals KS3 Maths Oak National Academy (thenational.academy) Lesson: Securing understanding of factors, multiples, squares and cubes KS3 Maths Oak National Academy (thenational.academy)		Lunchtime Lunchtime • Unit: Arithmetic procedures with integers and decimals KS3 Maths Oak National Academy (thenational.academy) • Unit: Comparing and ordering fractions and decimals (positive and negative) KS3 Maths Oak National Academy (thenational.academy) • Unit: Understanding multiplicative relationships: percentages and proportionality KS3 Maths Oak National Academy (thenational.academy)	
8	Expand on foundational knowledge by developing	Decimals & Rounding	Constructing & Expressions	Equations & Reasoning	Polygons & Data	Area & Ratio	The Cartesian Grid

	ability to use a protractor and compass. Know how to manipulate and simplify expressions. Understand linear equations, reasoning, polygons, angles, discrete data & the Cartesian Grid.	Develop ability to expand and round decimals as well as multiply and divide decimals. Understand rounding to the nearest, to significant figures and mixed rounding.	Use a compass to construct triangles, bisecting and perpendicular angles. Know how to add, subtract, multiply & divide expressions.	Develop ability to solve multi-step equations with unknowns on both sides. Understand double number lines, ratio tables and inverse proportion.	Understand angles in parallel lines. Develop ability to solve geometric problems with equations. Introduce statistics, Pie Charts, Mean, Median, Mode.	Understand perimeter and area. Develop ability to calculate area of triangles, parallelograms, trapeziums, and polygons. Interpret & simplify ratios.	Understand X and Y axis, including in a quadrant. Understand coordinates and practice plotting and interpreting coordinates, including positive and negative.
-	Assessments:	Learning Check 1: Autumn 1 Topics	Learning Check 2: Summative Assessment 1	Learning Check 3: Spring 1 Topics	Learning Check 4: Spring 2 Topics	Learning Check 5: Summer 1 Topics	GL Progress Test – Maths part 1 & 2 Summative Assessment 2
	Extra-Curricular:	Maths Competition	Maths Competition	Maths Competition	Maths Competition	Maths Competition	Maths Competition
	C6	Unit: Decimals KS2 Maths Oak National Academy (thenational.academy) Lesson: Rounding integers to significant figures KS3 Maths Oak National Academy (thenational.academy)	Unit: Constructions KS3 Maths Oak National Academy (thenational.academy)	Unit: Expressions and equations KS3 Maths Oak National Academy (thenational.academy) Unit: Direct and indirect proportion KS3 Maths Oak National Academy (thenational.academy)	Unit: Angles and parallel lines KS3 Maths Oak National Academy (thenational.academy) Lesson: Solving geometric problems using linear equations KS3 Maths Oak National Academy (thenational.academy) Unit: Percentages and statistics KS2 Maths Oak National Academy (thenational.academy)	Unit: Perimeter and area KS3 Maths Oak National Academy (thenational.academy) Unit: Ratio KS3 Maths Oak National Academy (thenational.academy)	Unit: Coordinates [KS3 Maths] Oak National Academy (thenational.acad emy)
9	Strengthen foundational knowledge of measuring and construction, polygons and angles, reasoning, and discrete data. Develop knowledge of inequalities, standard form, graphs, congruency, and Pythagoras.	Constructing & Inequalities Construct triangles and bisecting angles. Understand Loci and perpendicular. Know how to form and solve inequalities, including compound inequalities.	Form, Graphs, Angles Calculate with standard form. Understand distance-time & speed- time graphs. Find average speed. Know quadrilaterals and symmetry.	Graphs & Equations Practice plotting graphs, including quadratic. Interpret graphs & tables. Know gradient and intercept. Know how to solve simultaneous equations using a graph.	Congruence & Similarity Know congruency, congruent triangles, tessellation, and column vectors. Know rotational and reflective symmetry; linear & area scale.	Triangles & Reasoning Know how to find the shorter side and perimeter. Understand Isosceles. Identify proportions. Explore exchange rates and enlarging shapes.	Circles & Data Discover Pi, find circumferences and areas. Draw and analyse Pie Charts. Compare data and explore misleading data. Use mean, median and mode.
	Assessments:	Learning Check 1: Autumn 1 Topics	Learning Check 2:	Learning Check 3: Spring 1 Topics	Learning Check 4: Spring 2 Topics	Learning Check 5: Summer 1 Topics	GL Progress Test -

	Extra-Curricular:	Maths Competition	Summative Assessment 1 Maths Competition	Maths Competition	Maths Competition	Maths Competition	Maths part 1 & 2 Summative Assessment 2 Maths Competition
	C6	Lesson: Constructing triangles KS3 Maths Oak National Academy (thenational.academy) Lesson: Perpendicular bisector of a line segment KS3 Maths Oak National Academy (thenational.academy) Lesson: Inequalities and substitution (Part 1) KS3 Maths Oak National Academy (thenational.academy) Lesson: Forming and solving inequalities (Part 1) KS3 Maths Oak National Academy (thenational.academy) (thenational.academy)	Lesson: Sorting large numbers KS3 Maths Oak National Academy (thenational.academy) Lesson: Multiplying and dividing in standard form [KS3 Maths Oak National Academy (thenational.academy) Lesson: Addition and Subtraction in standard form KS3 Maths Oak National Academy (thenational.academy) Lesson: Lines of symmetry KS3 Maths Oak National Academy (thenational.academy) Lesson: Comparing quadrilaterals KS3 Maths Oak National Academy (thenational.academy)	Lesson: Representing simultaneous equations graphically (Part 1) KS3 Maths Oak National Academy (thenational.academy) Lesson: y = mx + c KS3 Maths Oak National Academy (thenational.academy) Drawing Quadratics Video – Corbettmaths Drawing Quadratics (corbettmaths.com)	Lesson: Congruence and triangles (Part 1) KS3 Maths Oak National Academy (thenational.academy) Lesson: Congruence and triangles (Part 2) KS3 Maths Oak National Academy (thenational.academy) Lesson: Translating objects KS3 Maths Oak National Academy (thenational.academy)	Lesson: Length of the hypotenuse KS3 Maths Oak National Academy (thenational.academy) Lesson: Length of a shorter side KS3 Maths Oak National Academy (thenational.academy) Lesson: Multiplicative relationships and direct proportion KS3 Maths Oak National Academy (thenational.academy)	Lesson: Circumference of a circle KS3 Maths Oak National Academy (thenational.acad emy) Lesson: Area of a circle KS3 Maths Oak National Academy (thenational.acad emy) Lesson: Comparing data KS3 Maths Oak National Academy (thenational.acad emy)
10	Become competent in Mathematics necessary for real-life scenarios and the working world, including angles, fractions, decimals, rounding, statistics, and measuring. Assessments:	Consolidate knowledge and application of angles, diagrams, bearings, factors and multiples, basic algebra, fractions, and linear graphs.	Consolidate knowledge and application of decimals, rounding, collecting & representing data, sequencing.	Consolidate knowledge and application of percentages, area, perimeter, circumference, and real-life graphs.	Consolidate knowledge and application of ratio, proportion, polygons, equations, indices, and standard form.	Consolidate knowledge and application of probability, transformation, congruence, similarity and 2D & 3D shapes. Learning Check 5:	Consolidate knowledge and application of percentages, measures, statistics, constructions and Loci. MOCK EXAMS
	Extra-Curricular:	Further Maths Club Maths Competitions	Further Maths Club Maths Competitions	Summative Assessment 1 Further Maths Club Maths Competitions	Spring 2 Topics Further Maths Club Maths Competitions	Summer 1 Topics Further Maths Club Maths Competitions	Further Maths Club Maths Competitions
11	Confidently know and independently apply knowledge of	Revise knowledge of and practice application of probability, volume, and	Revise knowledge of and practice application of inequalities, Pythagoras'	Revise knowledge of and practice application of algebra and graphs,	Revise knowledge of and practice application of trigonometry, solving	Revise knowledge of and practice application of growth	

mathematics for real-life scenarios and the working world. Be mathematically ready for GCSE exams and achieve mathematical success to enter college / Sixth Form.	scatter graphs. Expand algebraic knowledge of quadratics and rearranging formulae.	theorem, simultaneous equations, algebra, and graphs. HIGHER tier: further equations.	sketching graphs, direct and inverse proportions. HIGHER tier: trigonometry.	quadratic equations, and quadratic graphs. HIGHER tier: vectors, sines and cosine rules.	& decay, and vectors. HIGHER tier: gradients, pre- calculus and algebraic fractions. Plus, exam preparation.	
Assessments:	Learning Check 1: Autumn 1 Topics	MOCK EXAMS	Learning Check 2: Spring 1 Topics	Learning Check 3: MOCK EXAMS	GCSE exams begin	
Extra-Curricular	After School Intervention	After School Intervention	After School Intervention	After School Intervention	After School Intervention	
C6:	Unit: 2D and 3D shape: compound shapes KS4	<u>Unit: Simultaneous</u> equations: 2 variables	Unit: Linear graphs KS4 Maths Oak National	3D Trigonometry Video - Corbettmaths		
Unit: Arithmetic procedures: index laws KS4 Maths Oak National Academy (thenational.academy) Unit: Rounding, estimation and bounds KS4 Maths Oak National Academy (thenational.academy)	Maths Oak National Academy (thenational.academy) Unit: Graphical representations of data: scatter graphs and time series KS4 Maths Oak National Academy (thenational.academy) Unit: Algebraic manipulation KS4 Maths Oak National Academy (thenational.academy)	KS4 Maths Oak National Academy (thenational.academy) Unit: Algebraic fractions [KS4 Maths Oak National Academy (thenational.academy) Unit: Graphical representations of data: scatter graphs and time series KS4 Maths Oak National Academy (thenational.academy)	Academy (thenational.academy) Unit: Non-linear graphs] KS4 Maths Oak National Academy (thenational.academy) Trigonometry Introduction Video – Corbettmaths Trigonometry – Missing sides Video – Corbettmaths Trigonometry – Missing Angles Video – Corbettmaths	Unit: Algebraic manipulation KS4 Maths Oak National Academy (thenational.academy) Sine Rule – Missing Sides Video – Corbettmaths Sine Rule Angles Video – Corbettmaths Vectors Video – Corbettmaths		