



Curriculum Map cover sheet

Subject: Maths	Year Group: 7	Key Stage 3
Links to prior learning This follows on from primary school work on the topics of: • Place value • Number properties • Basic arithmetic • Perimeter and area • Fractions, decimals and percentages • Transformations	Retrieval Practice • Regular use of mini-whiteboards for formative assessment. • Weekly retrieval practice of skills identified as weak in prior assessments. • Online homework has built in retrieval practice, spaced repetition and interleaving to aid retention of ideas.	Adaptive teaching strategies • Students put into sets from the start of year 7 meaning smaller class sizes for those with more mathematical needs. • Scaffolding provided if necessary plus stretch and challenge. • Use of mini-whiteboards allows teachers to adapt to the needs of students based on the feedback received and to support or stretch as necessary. • Use of online homework data allows teachers to address misconceptions found in home learning.
Literacy • Students will read and interpret mathematical problems, use and spell mathematical vocabulary accurately, and write clear explanations and justifications for their answers using full sentences. • Develop skills in reading mathematical texts and extracting key information from worded problems. • Practice setting out mathematical	Oracy • Students will explain their reasoning and solutions verbally, using precise mathematical language. • Participate in group discussions to justify answers, challenge ideas, and build shared understanding. • Develop confidence in presenting mathematical arguments and solutions to	Numeracy • Students will develop fluency and confidence with number operations, including mental and written methods for whole numbers, decimals, and fractions. • Apply numeracy skills to solve real-life problems involving money, measures, time, and data.

workings logically and coherently.	the class.	• Use estimation, rounding, and checking strategies to ensure accuracy and efficiency in calculations. • Convert between fractions, decimals, and percentages, and use ratio and proportion to solve contextual problems. • Strengthen number sense through regular practice of mental arithmetic and use of known number facts. • It's Maths!
Careers across the Curriculum Students will explore how mathematical skills are essential for a wide range of careers, including those in science, engineering, finance, technology, construction, healthcare, and the creative industries. Lessons will include real-life contexts and problem-solving activities linked to different professions to help pupils see the value of maths beyond the classroom	Wider Curriculum opportunities • Maths clubs • Trips to Bletchley • Students will have opportunities to participate in maths competitions and enrichment activities such as UKMT Maths Challenge, puzzle weeks, 24 game competition, fostering a love of problem-solving and teamwork • Science: Students use mathematical skills to analyse experimental data, calculate rates (such as speed or reaction rates), and apply algebraic formulas in physics and chemistry. • Geography: Maths is used to interpret data sets, read scales on maps, and understand statistical representations of climate or population. • Computing: Logic, algorithms, and data handling in maths directly support programming and computational thinking. • Art & Design: Geometry and transformations are applied in design, pattern making, and understanding	Super Curriculum Link to super curriculum document

	perspective.	
Assessment and feedback • Formative assessment used each and every lesson in the form of mini-whiteboards, cold calling, mini tests etc... and whole class/individual feedback given. • A summative assessment will be sat each half term and will be marked by the class teacher. Solutions will be provided and students will make notes/corrections and will be retaught content if needed. Students will be asked follow up questions based on their weaknesses immediately after and also in subsequent lessons to space out retrieval practice, you will see these in exercise books in green pen under the heading "Feedback Starter". Also, follow up questions may be given as mini-whiteboard tasks so as to see if further reteaching is necessary. • An end of year test will consolidate all knowledge throughout the year and feedback will be given on this test. • Students will be directed to their Personalised Learning Checklist (PLC) to direct them towards skills that they need to improve on following on from assessments.		



Curriculum Map cover sheet

Subject: Maths	Year Group: 8	Key Stage 3
Links to prior learning This follows on from primary school work and year 7 work on the topics of: • Estimation and rounding • Sequences • Equations • Proportion • Graphs of data • Mean average • Properties of shapes • Perimeter, area and volume	Retrieval Practice • Regular use of mini-whiteboards for formative assessment. • Weekly retrieval practice of skills identified as weak in prior assessments. • Online homework has built in retrieval practice, spaced repetition and interleaving to aid retention of ideas.	Adaptive teaching strategies • Students put into sets from the start of year 7 meaning smaller class sizes for those with more mathematical needs. • Scaffolding provided if necessary plus stretch and challenge • Use of mini-whiteboards allows teachers to adapt to the needs of students based on the feedback received and to support or stretch as necessary. • Use of online homework data allows teachers to address misconceptions found in home learning.
Literacy • Students will read and interpret mathematical problems, use and spell mathematical vocabulary accurately, and write clear explanations and justifications for their answers using full sentences. • Develop skills in reading mathematical texts and extracting key information from worded problems. • Practice setting out mathematical	Oracy • Students will explain their reasoning and solutions verbally, using precise mathematical language. • Participate in group discussions to justify answers, challenge ideas, and build shared understanding. • Develop confidence in presenting mathematical arguments and solutions to	Numeracy • Students will develop fluency and confidence with number operations, including mental and written methods for whole numbers, decimals, and fractions. • Apply numeracy skills to solve real-life problems involving money, measures, time, and data.

workings logically and coherently.	the class.	• Use estimation, rounding, and checking strategies to ensure accuracy and efficiency in calculations. • Convert between fractions, decimals, and percentages, and use ratio and proportion to solve contextual problems. • Strengthen number sense through regular practice of mental arithmetic and use of known number facts.
Careers across the Curriculum Students will explore how mathematical skills are essential for a wide range of careers, including those in science, engineering, finance, technology, construction, healthcare, and the creative industries. Lessons will include real-life contexts and problem-solving activities linked to different professions to help pupils see the value of maths beyond the classroom	Wider Curriculum opportunities • Maths clubs • Trips • Students will have opportunities to participate in maths competitions and enrichment activities such as UKMT Maths Challenge and puzzle weeks • Science: Students use mathematical skills to analyse experimental data, calculate rates (such as speed or reaction rates), and apply algebraic formulas in physics and chemistry. • Geography: Maths is used to interpret data sets, read scales on maps, and understand statistical representations of climate or population. • Computing: Logic, algorithms, and data handling in maths directly support programming and computational thinking. • Art & Design: Geometry and transformations are applied in design, pattern making, and understanding perspective.	Super Curriculum Link to super curriculum document

Assessment and feedback

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- An end of year test will consolidate all knowledge throughout the year and feedback will be given on this test.
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Curriculum Map cover sheet

Subject: Maths	Year Group 9	Key Stage 3
Links to prior learning This follows on from primary school work and year 7 and 8 work on the topics of: • Expressions • Shape • Graphs • Working with large and small numbers • Proportion	Retrieval Practice • Regular use of mini-whiteboards for formative assessment. • Weekly retrieval practice of skills identified as weak in prior assessments. • Online homework has built in retrieval practice, spaced repetition and interleaving to aid retention of ideas.	Adaptive teaching strategies • Students put into sets from the start of year 7 meaning smaller class sizes for those with more mathematical needs. • Scaffolding provided if necessary plus stretch and challenge • Use of mini-whiteboards allows teachers to adapt to the needs of students based on the feedback received and to support or stretch as necessary. • Use of online homework data allows teachers to address misconceptions found in home learning.
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Curriculum Map cover sheet

Subject: Maths	Year Group 10 and 11	Key Stage 4
Links to prior learning Builds on all prior learning in key stages 1-3 across the 5 main strands: • Number • Algebra • Geometry • Statistics • Ratio and proportion	Retrieval Practice • Regular use of mini-whiteboards for formative assessment. • Weekly retrieval practice of skills identified as weak in prior assessments. • Online homework has built in retrieval practice, spaced repetition and interleaving to aid retention of ideas.	Adaptive teaching strategies • Students put into sets from the start of year 7 meaning smaller class sizes for those with more mathematical needs. • Scaffolding provided if necessary plus stretch and challenge. • Use of mini-whiteboards allows teachers to adapt to the needs of students based on the feedback received and to support or stretch as necessary. • Use of online homework data allows teachers to address misconceptions found in home learning.
Literacy • Students will read and interpret mathematical problems, use and spell mathematical vocabulary accurately, and write clear explanations and justifications for their answers using full sentences. • Develop skills in reading mathematical texts and extracting key information from worded problems. • Practice setting out mathematical	Oracy • Students will explain their reasoning and solutions verbally, using precise mathematical language. • Participate in group discussions to justify answers, challenge ideas, and build shared understanding. • Develop confidence in presenting mathematical arguments and solutions to	Numeracy • Students will develop fluency and confidence with number operations, including mental and written methods for whole numbers, decimals, and fractions. • Apply numeracy skills to solve real-life problems involving money, measures, time, and data.

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Careers across the Curriculum Students will explore how mathematical skills are essential for a wide range of careers, including those in science, engineering, finance, technology, construction, healthcare, and the creative industries. Lessons will include real-life contexts and problem-solving activities linked to different professions to help pupils see the value of maths beyond the classroom	Wider Curriculum opportunities • Maths clubs • Trips • Students will have opportunities to participate in maths competitions and enrichment activities such as UKMT Maths Challenge and puzzle weeks. • Science: Students use mathematical skills to analyse experimental data, calculate rates (such as speed or reaction rates), and apply algebraic formulas in physics and chemistry. • Geography: Maths is used to interpret data sets, read scales on maps, and understand statistical representations of climate or population. • Computing: Logic, algorithms, and data handling in maths directly support programming and computational thinking. • Art & Design: Geometry and transformations are applied in design, pattern making, and understanding perspective.	Super Curriculum Link to super curriculum document

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Key stage 3													
Year 7	1 Place value	2 Properties of number: factors, multiples, squares and cubes	3 Arithmetic procedures with integers and decimals	4 Expressions and equations	5 Plotting coordinates	6 Perimeter and area	7 Comparing and ordering fractions and decimals (positive and negative)	8 Arithmetic procedures with fractions	9 Understanding multiplicative relationships: fractions and ratio	10 Transformations		Algebra	
Year 8	1 Estimation and rounding	2 Sequences	3 Graphical representations of linear equations	4 Solving linear equations	5 Understanding multiplicative relationships: percentages and proportionality	6 Graphical representations of data	7 Numerical summaries of data	8 Perimeter, area and volume	9 Geometrical properties: polygons	10 Constructions		Geometry and measure	
Year 9	1 Geometrical properties: similarity and Pythagoras' theorem	2 Probability: possible outcomes	3 Probability: theoretical probabilities	4 Non-linear relationships	5 Expressions and formulae	6 Trigonometry	7 Standard form	8 Graphical representations				Number	
Key stage 4													Probability
Year 10	1 Algebraic manipulation	2 Simultaneous equations: 2 variables	3 Percentages	4 Arithmetic procedures: index laws	5 Standard form calculations	6 Surds	7 Sampling	8 Graphical representations of data: scatter graphs and time series	9 Comparisons of numerical summaries of data	10 Rounding, estimation and bounds	11 Ratio	Ratio and proportion	
	12 Linear graphs	13 Non-linear graphs	14 2D and 3D shape: compound shapes	15 Angles	16 Further transformations	17 Similarity	18 Circle theorems	19 Plans and elevations	20 Right-angled trigonometry	21 Bearings		Statistics	
Year 11	1 Algebraic fractions	2 Non right-angled trigonometry	3 2D and 3D shape: surface area and volume (pyramids, spheres and cones)	4 Conditional probability	5 Compound measures	6 Real-life graphs	7 Direct and inverse proportion	8 Functions and proof	9 Further sequences	10 Iteration	11 Graphical representations of data: cumulative frequency and histograms		
	12 Inequalities	13 Vectors	14 Loci and construction	15 Transformations of graphs									