Key Stage Three Maths Curriculum Outline

Year 7 Curriculum

Assessments at Christmas and Easter cover the work seen solely in that term, the summer exams cover work from the entire year. In Year 7 we try to prepare all students for the same exams (Higher) but if it becomes apparent that pupils will struggle to find success in these tests then a Foundation exam is available. At the start of terms 2, 3 and 4 pupils in Years 7 and 8 do a "rich task", helping to develop problem solving and reasoning skills. This will help them in their GCSE exam, but also help develop "life-skills" including problem solving and resilience.

Timeline	Content and assessments	Skills/ Keywords
Term 1	FOUR RULES AND ROUNDING FRACTIONS, DECIMALS (Numbers 1,2 &3)	• To be able to show how I get my answer in series of steps from question to answer (show full working, using words if appropriate) • To make sure I read the question carefully and highlight any potential problems before I attempt to answer • To present my work neatly and clearly (e.g. equals signs in line) • To communicate correctly mathematically (e.g. NOT to write things like 3 + 4 = 7 x 5 = 35 when evaluating (3 + 4) x 5) • To think carefully before starting a question so that I have some idea how my answer will progress • To have a sensible estimate of the answer I expect to get BEFORE I attempt the question • To know when I can check if my answer is correct • To know how to check that my answer is sensible
Term 2	EXPRESSIONS AND FORMULAE (Algebra 2) PERIMETER, AREA AND VOLUME (Shape 1) AVERAGES (Data 1) **Assessment:**	
Term 3 - Term 4	SEQUENCES (Algebra 1) ANGLE FACTS AND RULES (Shape 2) STATISTICAL DIAGRAMS (Data 2) LINEAR EQUATIONS (Algebra 3) ACCURATE CONSTRUCTION (Shape 3) PERCENTAGES (Number 4) **Assessment:**	
Term 5	STRAIGHT LINE GRAPHS (Algebra 4)	

	TRANSFORMATIONS AND SYMMETRY (Shape 4) PROBABILITY (Data 3) RATIO (Number 5) End of year exams – covering the years topics **Assessment:**	• To relate new problems to knowledge and techniques I already know • To know how and when to ask for help when I have identified problems or misconceptions
Term 6	Exam feedback, Project on Pi, CIRCLES AND π (Shape 5) **Assessment:**	
How to support your son **Ensure pupils have the correct equipment:** Pen, Pencil, Ruler, Calculator. **Visit the faculty website** *for a weekly teaching schedule, online textbook, topic checklists, knowledge organisers, homework tasks and keywords lists*		

Year 8 Curriculum

Assessments at Christmas and Easter cover the work seen solely in that term, the summer exams cover work from the entire year.

In Year 8 a small number of pupils will follow a reduced Foundation scheme of work and sit Foundation exams, although this may not apply to all boys in the lower sets. At the start of terms 2, 3 and 4 pupils in Years 7 and 8 do a "rich task", helping to develop problem solving and reasoning skills. This will help them in their GCSE exam, but also help develop "life-skills" including problem solving and resilience.

Timeline	Content and assessments	Skills/ Keywords
Term 1 and Term 2	NEGATIVE NUMBERS (Number 1) SEQUENCES (Algebra 1) ANGLES AND CONSTRUCTION (Shape 1) PROBABILITY (Data 1) PRIMES , FACTORS AND MULTIPLES (Number 2) SIMPLIFYING ALGEBRA (Algebra 2) PRISMS (Shape 2) **Assessment:** Christmas Assessment	• To be able to show how I get my answer in series of steps from question to answer (show full working, using words if appropriate) • To make sure I read the question carefully and highlight any potential problems before I attempt to answer • To present my work neatly and clearly (e.g. equals signs in line) • To communicate correctly mathematically (e.g. NOT to write things like 3 + 4 = 7 x 5 = 35 when evaluating (3 + 4) x 5) • To think carefully before starting a question so that I have some idea how my answer will progress • To have a sensible estimate of the answer I expect to get BEFORE I attempt the question • To know when I can check if my answer is correct • To know how to check that my answer is sensible
Term 3 and Term 4	STRAIGHT LINES (Algebra 3) FRACTIONS/DECIMALS/ PERCENTAGES (Number 3) CONGRUENCY AND TRANSFORMATIONS (Shape 3) ?? EQUATIONS AND FORMULAE (Algebra 4) DATA COLLECTION AND PRESENTATION (Data 2) LARGE AND SMALL NUMBERS (Number 4) **Assessment:**	

		• To relate new problems to knowledge and techniques I already know • To know how and when to ask for help when I have identified problems or misconceptions
Term 5	FURTHER TECHNIQUES (Algebra 5) FURTHER TECHNIQUES PYTHAGORAS (Shape 4) ?? AVERAGES AND RANGE (Data 3) **Assessment:** End of year exams	
Term 6	Term 6: Exam feedback and Project on Pythagoras	
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Year 9 Curriculum

For Year 9 we changed our strategy several years ago in line with the new GCSE. We split the year into four "terms" – term 1 is exclusively Number, term 2 Algebra, term 3 (January – March) is Shape and we finish with Data. The rationale here is to develop students' understanding of the work in an individual strand by going to greater depth. At the end of the year (in preparation for their summer exam) we bring the four strands together so that pupils can answer questions involving work they have seen throughout the whole year.

Pupils are assessed at the end of terms 1, 2 and 3 (solely on that term's work) and then the summer exam covers work from the whole year (including the external GL Assessment). The majority of boys study the Higher Scheme of work, but boys in the lowest groups on each side of the year group may follow a reduced Foundation scheme of work appropriate to their needs. Being in this class does NOT automatically mean that a pupil will follow a Foundation scheme of work in Years 10 and 11. We want to give as many boys as possible the chance to follow the Higher scheme at GCSE if appropriate.

Timeline	**Content and assessments**	**Skills/ Keywords**
Term 1	**Number** RECURRING DECIMALS PRIME FACTORISATION INDICES AND STANDARD FORM RECIPROCALS LONG MULTIPLICATION AND DIVISION PROPORTIONAL REASONING REPEATED PERCENTAGE CHANGE **Assessment:** End of Term Assessment	• To be able to show how I get my answer in series of steps from question to answer (show full working, using words if appropriate) • To make sure I read the question carefully and highlight any potential problems before I attempt to answer • To present my work neatly and clearly (e.g. equals signs in line) • To communicate correctly mathematically (e.g. NOT to write things like 3 + 4 = 7 x 5 = 35 when evaluating (3 + 4) x 5)
Term 2	**Algebra** HARDER SEQUENCES INEQUALITIES	

	SIULTANEOUS EQUATIONS DOUBLE BRACKETS SOLVING QUADRATIC EQUATIONS BY FACTORISING QUADRATIC CURVES CHANGING THE SUBJECT OF A FORMULA COORDINATE GEOMETRY **Assessment:** End of Term Assessment	• To think carefully before starting a question so that I have some idea how my answer will progress • To have a sensible estimate of the answer I expect to get BEFORE I attempt the question • To know when I can check if my answer is correct • To know how to check that my answer is sensible • To relate new problems to knowledge and techniques I already know • To know how and when to ask for help when I have identified problems or misconceptions
Term 3 – Term 4	**<u>Shape</u>** ANGLES IN POLYGONS CONSTRUCTION AND LOCI CIRCLES AND π PRISMS PYTHAGORAS TRIGONOMETRY TRANSFORMATIONS VECTORS **Assessment:** Easter Exam	
Term 5	**Data Handling and Probability** AVERAGES AND RANGE FROM FREQUENCY TABLES QUARTILES AND BOX PLOTS CUMULATIVE FREQUENCY GRAPHS TREE DIAGRAMS AND HARDER PROBABILITY **Assessment:**	
Term 6	• End of Year Exam and preparation for the GCSE Course	

	Assessment:	

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