



St Katherine's School

Maths Curriculum Guide

Year 7

Students are assessed every 12 weeks, with an in class assessment covering topics from recent units. This is followed by specific feedback and guidance to make improvements in areas of weakness.

Students are expected to complete 1 task on Hegarty Maths and 30 games on TTRockstars every week. The Hegarty Maths task will be set based on a topic which has previously been taught, and the TTRockstars programme will automatically progress based on efficiency of students' answers.

Parents should encourage the completion of both of these tasks and can assist with the deepening of understanding of topics by giving their child the opportunity to explain what they have learnt and how it can be applied.

1	2	3	4	5	6	7	8
	Sequences		Understand and use algebraic notation		Equality and Equivalence		Place value, ordering integers and decimals
9	10	11	12	13	14	15	
Place value, ordering integers and decimals		Fraction, decimal and percentage equivalence			Solving problems with addition and subtraction		
16	17	18	19	20	21		
Solving problems with multiplication and division			Fractions & Percentages of amounts	Operations and equations with directed number			
22	23	24	25	26	27		
Operations and equations with directed number	Addition and subtraction of fractions			Constructing, measuring and using geometric notation			
28	29	30	31	32	33		
Constructing, measuring and using geometric notation	Developing Geometric Reasoning			Developing number sense			
34	35	36	37	38	39		
Sets and probability		Prime numbers and proof					

Assessment

Subject		Maths	
Assessment type	Frequency	Control	Weighting
Baseline Assessment	Start of term 1	Exam conditions in class	10%
Knowledge Quiz	Every week 1	Exam conditions in class	0%
Topic Test	Every week 2	Exam conditions in class	45%
End of term assessment	3 times a year, at the end of every term	Exam conditions in class	45%

Year 8

Students are assessed every 12 weeks, with an in class assessment covering topics from recent units. This is followed by specific feedback and guidance to make improvements in areas of weakness.

Students are expected to complete 1 task on Hegarty Maths and 30 games on TTRockstars every week. The Hegarty Maths task will be set based on a topic which has previously been taught, and the TTRockstars programme will automatically progress based on efficiency of students' answers.

Parents should encourage the completion of both of these tasks and can assist with the deepening of understanding of topics by giving their child the opportunity to explain what they have learnt and how it can be applied.

1	2	3	4	5	6	7	8
Review and Improve			Fractions			Percentages	
9	10	11	12	13	14	15	
Percentages			Assessment	Algebra 2			
16	17	18	19	20	21		
Algebra 2				Geometry - circles and area			
22	23	24	25	26	27		
Geometry - circles and area		Assessment	Ratio, Proportion and Rates of Change				
28	29	30	31	32	33		
Ratio, Proportion and Rates of Change			Statistics				
34	35	36	37	38	39		
Geometry - 3D shapes			Assessment				

Assessment

Subject		Maths	
Assessment type	Frequency	Control	Weighting
Baseline Assessment	Start of term 1	Exam conditions in class	10%
Knowledge Quiz	Every week 1	Exam conditions in class	0%
Topic Test	Every week 2	Exam conditions in class	45%
End of term assessment	3 times a year, at the end of every term	Exam conditions in class	45%

Year 9

Students are assessed at the end of every unit with an in class assessment, every 2 to 3 weeks (depending on the length of the unit). This is followed by specific feedback and guidance to make improvements in areas of weakness.

Students are expected to complete retrieval homework on Hegarty Maths which is set weekly. Parents can support their child by ensuring they complete this, as well as encouraging them to have a go at the Mem-Ri tests on Hegarty. Parents will have a copy of their child's unit test results so they can work on any gaps or weak areas, using Hegarty to support.

Term	Working Towards	Foundation	Higher
Week 1-3	2 Week revise and recap Baseline GL assessment	2 Week revise and recap Baseline GL assessment	2 Week revise and recap Baseline GL Assessment
1	Unit 1 - Number, powers, roots, decimals and rounding to 10, 100, 1000 Unit 2a - Fractions	Unit 1 - Number work: Indices, roots, place value, factors, multiples and primes Unit 2 - Manipulating algebra and substitution	Unit 1 - Checking, rounding indices, roots, reciprocals, factors, multiples, primes, standard form and surds Unit 2 - Setting up, rearranging and solving equations. Sequences. Iterative methods
2	Unit 2b - Percentages Unit 3 - Tables & charts, questionnaires, pictograms, line graphs, bar charts, stem & leaf	Unit 2 - Manipulating algebra and substitution Unit 3 - Tables, charts, pie charts and other forms of representing data	Unit 2 - Setting up, rearranging and solving equations. Sequences. Iterative methods Unit 3 - Representing data and calculating averages and ranges
3	Unit 4 - Measurement & units, circles, 2D shapes, Symmetry, Simple constructions	Unit 4 - Fractions, decimals and percentages. Working with percentage increases and multipliers	Unit 4 - Calculating with fractions and percentages, ratio and proportion Unit 5a - Angles in parallel lines, and polygons.
4	Unit 5 - Perimeter and area, angles, 3D forms	Unit 5a - Equations and inequalities Unit 5b - Sequences Unit 6 - Properties of shapes, parallel lines and angle facts. Interior and exterior angles of polygons	Unit 5a - Angles in parallel lines, and polygons. Unit 5b - Pythagoras and right angled trigonometry
5	Unit 6a - Algebraic notation and simplifying Unit 6b - Expressions, substituting into formulae	Unit 6 - Properties of shapes, parallel lines and angle facts. Interior and exterior angles of polygons Unit 7 - Statistics, sampling and the averages	Unit 6a/b - Straight line graphs Unit 6c - Graphs of circles, quadratics, cubics and other graphs
6	Unit 7 - Probability scale and theoretical probability	Unit 7 - Statistics, sampling and the averages	Unit 6c - Graphs of circles, quadratics, cubics and other graphs Unit 7 - Perimeter, area and circles

Assessment

Subject		Maths	
Assessment type	Frequency	Control	Weighting
End of unit tests - 1 hour	Every 2-3 weeks	Exam conditions	60%
End of year test - 2 x 1 hour paper	Once at the end of the year	Exam conditions	40%

Year 10

Students are assessed at the end of every unit with an in class assessment, every 2 to 3 weeks (depending on the length of the unit). This is followed by specific feedback and guidance to make improvements in areas of weakness.

Students are expected to complete retrieval homework on Hegarty Maths which is set weekly. Parents can support their child by ensuring they complete this, as well as encouraging them to have a go at the Mem-Ri tests on Hegarty. Parents will have a copy of their child's unit test results so they can work on any gaps or weak areas, using Hegarty to support.

Term	Working Towards	Foundation	Higher
1	<p>Unit 1 - Number, powers, roots, decimals and rounding to 10, 100, 1000</p> <p>Unit 2a - Fractions</p>	<p>Unit 7 - Statistics and sampling. Averages and measures of spread.</p> <p>Unit 8 - Perimeter, area, 3D shapes and volume.</p>	<p>Unit 7 - 3D forms and volume, cylinders, cones and spheres, accuracy and bounds</p> <p>Unit 8 - Transformations, loci, constructions and bearings</p>
2	<p>Unit 2b - Percentages</p> <p>Unit 3 - Tables & charts, questionnaires, pictograms, line graphs, bar charts, stem & leaf</p>	<p>Unit 8 - Perimeter, area, 3D shapes and volume.</p> <p>Unit 9 - Straight line graphs and real life graphs.</p>	<p>Unit 8 - Transformations, loci, constructions and bearings</p> <p>Unit 9 - Solving quadratic and simultaneous equations</p>
3	<p>Unit 4 - Measurement & units, circles, 2D shapes, Symmetry, Simple constructions</p>	<p>Unit 10 - Transformations</p> <p>Unit 11 - Ratio and Proportion.</p>	<p>Unit 10 - Probability</p> <p>Unit 11 - Multiplicative reasoning</p>
4	<p>Unit 5 - Perimeter and area, angles, 3D forms</p>	<p>Unit 12 - Pythagoras and Trigonometry</p>	<p>Unit 12 - Similarity and congruence in 2D and 3D</p> <p>Unit 13 - Graphs of trig functions and further trigonometry</p>
5	<p>Unit 6a - Algebraic notation and simplifying</p> <p>Unit 6b - Expressions, substituting into formulae</p>	<p>Unit 13 - Probability</p>	<p>Unit 13 - Graphs of trig functions and further trigonometry</p>
6	<p>Unit 7 - Probability scale and theoretical probability</p> <p>Revision of Units 1 - 7. End of Year 10 Mock and MAD Time</p>	<p>Unit 14 - Multiplicative reasoning.</p> <p>Revision of Units 1 - 14. End of Year 10 Mocks and MAD time</p>	<p>Unit 14 - Collecting data, cumulative frequency, box plots and histograms</p> <p>Revision of Units 1 - 14. End of Year 10 Mocks and MAD Time</p>

Assessment

Subject		Maths	
Assessment type	Frequency	Control	Weighting
End of unit tests - 1 hour	Every 2-3 weeks	Exam conditions	40%
End of year mock exam - 3 x 1.5 hour papers	Once at the end of the year	Exam conditions	60%

Year 11

Students are assessed at the end of every unit with an in class assessment, every 2 to 3 weeks (depending on the length of the unit). This is followed by specific feedback and guidance to make improvements in areas of weakness. Students are expected to complete retrieval homework on Hegarty Maths which is set weekly. Parents can support their child by ensuring they complete this, as well as encouraging them to have a go at the Mem-Ri tests on Hegarty. Parents will have a copy of their child's unit test results so they can work on any gaps or weak areas, using Hegarty to support.

Term	Working Towards	Foundation	Higher
1	<p>Unit 1 - Number, powers, roots, decimals and rounding to 10, 100, 1000</p> <p>Unit 2 - Fractions & Percentages</p>	<p>Unit 15 - Plans and Elevations, constructions and loci.</p>	<p>Unit 15 - Cumulative frequency, box plots and histograms.</p>
2	<p>Unit 3 - Tables & charts, questionnaires, pictograms, line graphs, bar charts, stem & leaf</p>	<p>Unit 16 - Quadratic equations and graphs.</p>	<p>Unit 16 - Circle theorems</p>
3	<p>Unit 4 - Measurement & units, circles, 2D shapes, Symmetry, Simple constructions</p> <p>Unit 5 - Perimeter and area, angles, 3D forms</p>	<p>Unit 17 - Circles, cylinders and cones.</p>	<p>Unit 17 - Rearranging complex formulae and proof.</p>
4	<p>Unit 6 - Algebraic notation and simplifying, expressions, substituting into formulae</p>	<p>Unit 18 - Fractions and reciprocals. Indices and standard form.</p> <p>Unit 19 - Similarity, congruence and vectors.</p>	<p>Unit 18 - Vectors and geometric proof</p>
5	<p>Unit 7 - Probability scale and theoretical probability</p> <p>Revision & Preparation for GCSE Exams</p>	<p>Unit 20 - Rearranging formulae, cubics and reciprocal graphs.</p> <p>Revision & Preparation for GCSE Exams</p>	<p>Unit 19 - Direct and inverse proportion, exponential graphs and area under curve.</p> <p>Revision & Preparation for GCSE Exams</p>
6	<p>Revision & Preparation for GCSE Exams</p>	<p>Revision & Preparation for GCSE Exams</p>	<p>Revision & Preparation for GCSE Exams</p>

Assessment

Subject		Maths	
Assessment type	Frequency	Control	Weighting
End of unit tests - 1 hour	Every 2-3 weeks	Exam conditions	30%
Mock exams - each mock is 3 x 1.5 hour paper	Three times during the year (Nov, Feb, April.)	Exam conditions	70%