KS3 Maths

Year 7			
Term	**Learning Programme**	**Assessments**	**Homework opportunities**
Autumn Term 1	**Unit** 1 and 5 – Properties of number: multiples, factors and primes, Order of operations, powers and roots **Unit** 2 – Angles **Unit** 3 – Sequences **Unit** 4 – Collecting data **Unit** 6 – Decimals	**Assessment 1 – Units 1 to 6**	Homework is linked to the Learning Programme. Homework is set by teachers to meet the needs of the classes that they teach. Homework can take a number of forms: exercise questions to consolidate understanding, revision questions, investigational work, research or planning tasks for subsequent lessons, on-line "My Maths" homework. The amount of homework set depends on the age and ability of the students. Parents are encouraged to monitor that homework is being completed by looking in their child's planner and in their exercise book on a regular basis.

Autumn Term 2	**Unit** 7 - Rounding and estimating **Unit** 8 - multiplication and division **Unit** 9 - symmetry **Unit** 10 - properties of 2D shapes **Unit** 11 - area and perimeter. **Unit** 12 - Constructions	**Assessment 2 – Units 7 to 12**	
Spring Term 1	**Units** 13, 14 and 15 - Introduction to algebra: simplifying expressions, substitution, functions machines, brackets. **Unit** 16 - Interpreting Data		
Spring Term 2	**Unit** 17 - Averages and range **Unit** 18 - negative numbers **Unit** 19 - Fractions: simplifying, convert to decimal, arithmetic with fractions, fractions of amounts. **Unit** 23 - Frac/Dec/% : converting between them, percentages of amounts, percentage change.	**Assessment 3 – Units 13 to 18**	
Summer Term 1	**Unit** 20 - Measures: converting metric units, interpreting scales, time. **Unit** 21 - Transformations:	**Assessment 4 – Units 19 to 23**	

	Reflection, Rotation and Translation **Unit** 22 - properties of 3D shapes.		
Summer Term 2	**Unit** 24 - Ratio and Proportion **Unit** 25, 26 and 27 – Advanced algebra solving equations straight line graphs **Unit** 28 - probability **Unit** 29 - interpreting charts.	**Assessment 5 – Units 24 to 29**	

Year 8			
Term	**Topic**		**Homework opportunities**
Autumn Term 1	**Unit** 1, 5 and 6 - Collecting and interpreting data: frequency tables for discrete and continuous data, two way tables, bar charts, pie charts, averages, stem and leaf diagrams and frequency diagrams. **Unit** 2 - Order of operations, powers and roots. **Unit** 3 - Angles **Unit** 4 - Sequences	**Assessment 1 – Units 1 to 6**	Homework is linked to the Learning Programme. Homework is set by teachers to meet the needs of the classes that they teach. Homework can take a number of forms: exercise questions to consolidate understanding, revision questions, investigational work, research or planning tasks for subsequent lessons, on-line "My Maths" homework. The amount of homework set depends on the age and ability of the students. Parents are encouraged to monitor that homework is being completed by looking in their child's planner and in their exercise book on a regular basis.

Autumn Term 2	**Unit** 7 – Multiples and factors **Unit** 8 - Decimals: rounding, ordering, converting to fractions, recurring decimals and multiplication and division. **Unit** 9 – Negative numbers **Unit** 10 - Properties of 2D and 3D shapes. **Unit** 11 - Transformations: reflection, rotation, translation and combinations of the three.	**Assessment 2 – Units 7 to 11**	
Spring Term 1	**Unit** 12 - Area (including circles), **Unit** 13 – Constructions **Unit** 14 and 15 - Algebra: substitution, simplification, brackets, factorising, algebraic fractions and functions.		
Spring Term 2	**Unit** 16 - scatter graphs **Unit** 17 - Probability **Unit** 18 - Fractions: equivalence, simplification, addition, subtraction, multiplication and division.	**Assessment 3 – Units 12 to 17**	

	Unit 19 - Percentages (including increase and decrease)		
Summer Term 1	**Unit** 20 - Ratio and proportion **Unit** 21 - Measures: conversions from metric to imperial, metric conversions, converting between area units and working with time. **Unit** 22 - Enlargements and scale.	**Assessment 4 – Units 18 to 22**	
Summer Term 2	**Unit** 23 - Plans and elevations, nets, volume, surface area. **Unit** 24, 25 and 26 - Advanced algebra: using formulae, substitution, changing the subject, solving equations (including with brackets), trial and improvement, straight line graphs and real life graphs.	**Assessment 5 – Units 23 to 26**	

Year 9			
Term	**Topic**		**Homework opportunities**
Autumn Term 1	**Unit 1** - Indices, standard form, rounding and estimating, decimals, using a calculator efficiently. **Unit 2** – Fractions (including arithmetic, ordering, comparing and equivalence), percentages (including increase and decrease and compound interest) and decimals. **Unit 3** – Ratio and proportion	**Assessment 1 – Units 1 to 3**	Homework is linked to the Learning Programme. Homework is set by teachers to meet the needs of the classes that they teach. Homework can take a number of forms: exercise questions to consolidate understanding, revision questions, investigational work, research or planning tasks for subsequent lessons, on-line "My Maths" homework. Homework in Year 9 includes a series of standard tasks set at the end of each unit, every two or three weeks. The amount of homework set depends on the ability of the students. Parents are encouraged to monitor that homework is being completed by looking in their child's planner and in their exercise book on a regular basis.
Autumn Term 2	**Unit 4** – Using time in real life contexts. **Unit 5** – Metric and Imperial measures (including converting between units, choosing the correct units, reading scales, Pythagoras' Theorem and Trigonometry)	**Assessment 2 – Units 4 and 5**	

Spring Term 1	**Unit 6** – Properties of 2D and 3D shapes, angles, similarity, loci and constructions and transformations. **Unit 8** – area, perimeter, volume, surface area and enlargements.	**Assessment 3 – Units 6 and 8**	
Spring Term 2	**Unit 7 – Algebra** – substitution, simplifications, solving equations, sequences, functions, straight line graphs, quadratic functions and equations and inequalities.	**Assessment 4 – Unit 7**	
Summer Term 1	**Unit 9 – Collecting data** – bar charts, pie charts, scatter graphs and interpreting frequency tables. **Unit 10 – Using data** – averages, stem and leaf diagrams, cumulative frequency, box plots and frequency polygons. **Unit 11 -** probability	**Assessment 5 – Units 9, 10 and 11**	
Summer Term 2	Now Year 9 students will start the GCSE scheme of work with a module on Algebra.	**GCSE Module 1 Assessment**	