KEY STAGE 3 – YEAR 8 – MATHS

CURRICULUM MAP

Autumn Term		Spring Term		Summer Term	
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Key Themes	**Key Themes**	**Key Themes**	**Key Themes**	**Key Themes**	**Key Themes**
Review simplifying expressions and expanding linear brackets and double brackets Review simple factorising and extend to quadratic factorising Review simple linear equations and extend to solving with single brackets, negatives e.g. 3 (x - 4) = 4 – (2x + 5) Solve more complex equations using trial and improvement methods – not on syllabus but useful for iteration in year 9 etc… Revise substitution Use complex formulae and extend to changing the subject of a formula Review sequences and nth term	Review finding area and perimeter of all planar shapes including circles Find areas and perimeters when dimensions given as variables and in terms of pi Find volumes of prisms and extend to pyramids or spheres if appropriate Finding surface areas of cuboids and extending to cylinders if appropriate Rounding and converting between units including m to m^3 and cm^3 to ml 2D and 3D shapes, in particular quadrilaterals and their properties. Geometric reasoning, emphasising need to give a reason for each stage of a calculation. Geometric proof Introducing similarity and using to solve simple problems	Equivalence between Fractions, Decimals and Percentages Probability – equally likely outcomes, mutually exclusive events. The use of listing outcomes and possibility spaces Relative frequency and the use of experimental data to estimate probabilities Probability trees including the terms independent and conditional And / Or rule Using Venn diagrams and Frequency trees to solve probability problems Use of notation such as P(A), P(A'), P(AUB), P(A∩B) and related vocabulary Union, Intersection, Compliment and "given that"	Review adding, multiplying, dividing fractions Review equivalence between fractions, decimals and percentages Increasing and decreasing amounts by given proportion Multiplier method of above Using multiplier method, or otherwise, to solve proportion problems finding original amount. Compound interest problems and other problems involving repeated proportional changes Review simplifying ratios, sharing in a given ratio and then extend to more complex problems Use ratio and scale factors in enlargement problems – simple similar shapes	Use Standard Form, negative and positive and solving on a calculator Investigate and apply the index rules Extend if appropriate to fractional and negative indices and their associated laws Recognise a surd, simplify and calculate with surds	Construct bisectors and certain angles using compass and ruler. Investigate and use Pythagoras' Theorem to solve problems Bearings
Assessment / Composite Tasks	**Assessment / Composite Tasks**	**Assessment / Composite Tasks**	**Assessment / Composite Tasks**	**Assessment / Composite Tasks**	**Assessment / Composite Tasks**
Unit Test 8.1	Unit Test 8.2	Unit Test 8.3	Unit Test 8.4	Unit Test 8.5	Unit Test 8.6