Curriculum Map

Subject: Maths **Year group: Year 8**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content ***Declarative Knowledge – 'Know What'***	**Algebra** Sequences; Rules of algebra; Using formulae and expressions; Changing the subject of the formula; Expanding brackets; Factorising expressions; Equations; Straight line graphs;	**Statistics and Probability** Frequency tables; Averages and range; Scatter graphs; Pie charts; Stem and leaf diagrams; Probability; Venn diagrams;	**Number** Properties of number; Prime decomposition; Rounding including significant figures; Estimation; Standard form; Fractions; Negative numbers; Use of a calculator; Percentages; Fractions, decimals and percentages	**Number/Geometry and Measure** Ratio and proportion; Area and perimeter; Geometric reasoning; Angles; Units of measurement;	**Geometry and Measure** Circles; Compound area; Volume; Surface area; Transformations;	**Consolidation and Extension Topics** Constructions; Loci; Pythagoras' Theorem; Bearings; Scale Drawings; Formulae
Skills ***Procedural Knowledge – 'Know How'***	Find and use the nth term of a linear sequence; Simplifying algebraic expressions; Use index notation; Substitute into a range of formulae;. Solve equations to find unknown values; Plot straight line graphs; Understand the gradient and y-intercept of a straight line graph	Calculate averages from data in a frequency table; Plot and interpret scatter graphs, Understand correlation and use interpolation; Draw and interpret pie charts; Calculate theoretical and experimental probabilities; Calculate the expected number of times an event will occur; Calculate probabilities from a venn diagram;	Learn how to state give a number as a product of its prime factors; Find the HCF and LCM of 2 numbers; Estimate calculations by rounding to 1 significant figure; Calculate with fractions and negative numbers; Increase and decrease quantities by a percentage; Convert between and compare fractions, decimals and percentages;	Solve problems using ratios; Learn about properties of 2D shapes including angles, area and perimeter; Use angle properties to calculate missing angles; Convert between metric units of measurement;	Calculate the area and circumference of a circle; Calculate the area of compound shapes; Learn how to find the volume of a cuboid and other prisms; Learn how to calculate surface area of a cuboid; Learn how to complete all transformations on a given shape	Learn how to construct accurate diagrams; Construct the perpendicular bisector of a line; Learn how to bisect an angle; Calculate the length of missing sides of right angled triangles; Learn how to draw, measure and calculate bearings; Make and interpret scale drawings; Change the subject of a formula
Key Questions						

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Assessment	Algebra Assessment	Data Assessment	N/A	Number Assessment	End of Year Assessment	N/A
Literacy/Numeracy/ SMSC/Character	Understanding and interpreting worded questions.	Understanding and interpreting worded questions.	Understanding and interpreting worded questions.	Understanding and interpreting worded questions Using correct language when giving reasons.	Understanding and interpreting worded questions	Understanding and interpreting worded questions.