Key Stage 3 Mathematics Curriculum Map

	HT1	HT2	HT3	HT4	HT5	HT6
Year 7	**Number** Converting between FDP Equivalent fractions Improper and mixed fractions Ordering FDP **Negative Number** Introduction to negative numbers Adding and subtracting negative numbers Multiplying and dividing negative numbers	**Traditional Algebra** Order of operations Simplifying expressions Substitution Creating expressions and solving equations **Angles** Measuring and drawing angles Basic angle facts Angles in quadrilaterals and properties of quadrilaterals	**Coordinates** Plotting co-ordinates in all four quadrants Plotting linear graphs, including horizontal and vertical lines. **Handling Data** Bar Charts Pie Charts Averages and range Interpreting statistics	**Fractions** Add and subtract fractions Find a fraction of a quantity **Decimals** Rounding, adding and subtracting decimals. Multiplying and dividing decimals by powers of 10 Multiplying and dividing decimals	**Probability** The probability scale Theoretical probability Experimental probability **Measurement** Constructing triangles Nets Metric units **Perimeter, Area and Volume** Area, perimeter, volume and surface area of 2D and 3D shapes	**Percentages** Writing one number as a percentage of another. Finding a percentage of a quantity. **Transformations** Reflections Rotations Translations **Number Patterns** Fibonacci Nth term
Year 8	**Factors and Indices** Highest Common Factor Lowest Common Multiple Prime Factor Decomposition Reciprocals **Pythagoras' Theorem** Discover Pythagoras' Theorem Use Pythagoras' Theorem	**Algebra** Construct, solve linear equations. Substitution. Simplify or transform algebraic expressions. Use formulae **Circles** Parts of a circle. Circumference and area **Handling Data** Averages from grouped data Scatter graphs. Lines of Best Fit	**Ratio and proportion** Relationship between ratio and proportion. Shape and ratio maps and scale drawings **FDP** Convert between FDP percentages of amounts Increase and decrease by a percentage. Percentage change.	**Algebra 2** Substitution nth term y = mx + c real-life problems	**Transformations** Reflections, rotations, translations and enlargements Combination of transformations **Prisms** Area of 2D shapes Surface Area and Nets Changing between units Volume	**Angles and bearings** Angle facts Bearings Interior and exterior angles of polygons **Probability** Outcomes Probability Spaces
Year 9	**Speed, Distance and time** Speed Distance / Time graphs **Percentages** Use multipliers Repeated increase and decrease. Reverse percentages	**Algebra** Solving linear equations Construct and solve non-linear equations Solve simultaneous equations Simple linear inequalities Factorisation Square a linear expression **Probability** Tree diagrams for conditional events Relative Frequency	**Constructions** Construct triangles, perpendicular bisector, angle bisector. 60^0, 30^0 and 45^0 angles. **Trigonometry** Define trigonometric ratios. Use trigonometry to find sides and angles. Bearings **Enlargement** Negative scale factors Similar area & volume	**Handling Data** Range and modal class. Bar, line and pie charts. Scatter graphs. Construct frequency tables and find the MMMR **Rounding/Standard Form** Multiply and divide by any integer power of 10. Understand bounds. Write numbers in standard form. Use rounding to make estimates. X and ÷ by numbers between 0 and 1.	**Bronze number** Fractions to decimals, comparing %, % change, rounding, HCF/LCM, index laws, operations with fractions **Examinations and activities week**	**Bronze algebra** Graphs (gradients, real-life, quadratic), inequalities, subject of a formula, sequences

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