

Key Stage 3		PLUS	CORE	STAR
Learning Cycle 1	Term 1 - 2 (September - December)	<p><b>Number</b> Number problems and reasoning Place value, powers and estimating HCF and LCM Calculating with powers (indices) Zero, negative and fractional indices Powers of 10 and standard form Surds</p> <p><b>Building on:</b> Understanding of place value, powers, order of operations, factors and multiples</p> <p><b>Assessment:</b> Progress Check 1</p>	<p><b>Number</b> Number problems and reasoning Place value, powers and estimating HCF and LCM Calculating with powers (indices) Zero, negative and fractional indices Powers of 10 and standard form Surds</p> <p><b>Building on:</b> Understanding of place value, powers, order of operations, factors and multiples</p> <p><b>Assessment:</b> Progress Check 1</p>	<p><b>Number</b> Calculations Decimal numbers and rounding Squares, cubes and roots Index notation</p> <p><b>Building on:</b> Understanding of place value, powers, order of operations</p> <p><b>Assessment:</b> Progress Check 1</p>
		<p><b>Algebra</b> Algebraic indices (index laws) Expanding and factorising Equations (incl. substitution)</p> <p><b>Building on:</b> Using letters to make algebraic terms and expressions</p> <p><b>Assessment:</b> Assessment 1</p>	<p><b>Algebra</b> Algebraic indices (index laws) Expanding and factorising Equations (incl. substitution)</p> <p><b>Building on:</b> Using letters to make algebraic terms and expressions</p> <p><b>Assessment:</b> Assessment 1</p>	<p><b>Algebra</b> Algebraic expressions Simplifying algebraic expressions Expanding brackets Factorising single brackets Substitution</p> <p><b>Building on:</b> Using letters to make algebraic terms and expressions</p> <p><b>Assessment:</b> Assessment 1</p>

Key Stage 3		PLUS	CORE	STAR
Learning Cycle 2	Term 3 - 4 (January -March)	<p><b>Algebra</b> Formulae incl. rearranging Iteration Sequences</p> <p><b>Building on:</b> Substitution, solving equations, patterns in numbers</p> <p><b>Assessment:</b> No assessment</p>	<p><b>Algebra</b> Formulae incl. rearranging Iteration Sequences</p> <p><b>Building on:</b> Substitution, solving equations, patterns in numbers</p> <p><b>Assessment:</b> No assessment</p>	<p><b>Graphs, Tables and Charts</b> Frequency tables Two-way tables (including timetables) Bar/line charts + pictograms Time series Stem and leaf diagrams</p> <p><b>Building on:</b> Addition and subtraction, drawing, labelling and scaling axes</p> <p><b>Assessment:</b> No assessment</p>
		<p><b>Interpreting and Representing Data</b> Statistical diagrams 1 (bar charts, stem and leaf, frequency polygons, pie charts) Time series Averages and range</p> <p><b>Building on:</b> Previous use of mathematical charts for displaying and modelling data, calculating and comparing averages</p> <p><b>Assessment:</b> Assessment 2</p>	<p><b>Interpreting and Representing Data</b> Statistical diagrams 1 (bar charts, stem and leaf, frequency polygons, pie charts) Time series Averages and range</p> <p><b>Building on:</b> Previous use of mathematical charts for displaying and modelling data, calculating and comparing averages</p> <p><b>Assessment:</b> Assessment 2</p>	<p><b>Graphs, Tables and Charts</b> Pie charts Scatter graphs Line of best fit</p> <p><b>Building on:</b> Measuring and drawing angles, reading axes scales and plotting points</p> <p><b>Assessment:</b> Assessment 2</p>

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Learning Cycle 3	Term 5 - 6 (April - July)	<p><b>Interpreting and Representing Data (Cont.)</b>                      Scatter graphs                      Line of best fit                      Statistical diagrams 2 (two-way tables, histograms)</p> <p><b>Building on:</b>                      Reading axes scales and plotting points</p> <p><b>Fractions</b>                      Working with fractions</p> <p><b>Building on:</b>                      Number sense, multiples, multiplying and dividing</p> <p><b>Assessment:</b>                      No assessment</p>	<p><b>Interpreting and Representing Data (Cont.)</b>                      Scatter graphs                      Line of best fit                      Statistical diagrams 2 (two-way tables, histograms)</p> <p><b>Building on:</b>                      Reading axes scales and plotting points</p> <p><b>Fractions</b>                      Working with fractions</p> <p><b>Building on:</b>                      Number sense, multiples, multiplying and dividing</p> <p><b>Assessment:</b>                      No assessment</p>	<p><b>Fractions and Percentages</b>                      Working with fractions                      Operations with fractions                      Multiplying fractions                      Dividing fractions                      Fractions and decimals                      Fractions and percentages                      Calculating percentages of an amount (1 and 2)</p> <p><b>Building on:</b>                      Number sense, multiples, multiplying and dividing</p> <p><b>Assessment:</b>                      No assessment</p>
		<p><b>Fractions, Ratio and Percentages</b>                      Ratios                      Ratio and proportion                      Percentages                      Fractions, decimals and percentages</p> <p><b>Building on:</b>                      Place value, multiplying and dividing, cancelling fractions, earlier FDP knowledge</p> <p><b>Assessment:</b>                      End of Year Exams</p>	<p><b>Fractions, Ratio and Percentages</b>                      Ratios                      Ratio and proportion                      Percentages                      Fractions, decimals and percentages</p> <p><b>Building on:</b>                      Place value, multiplying and dividing, cancelling fractions, earlier FDP knowledge</p> <p><b>Assessment:</b>                      End of Year Exams</p>	<p><b>Averages and Range</b>                      Mean and range                      Mode, median and range                      Types of average                      Estimating Mean from frequency tables                      Fair (and biased) events and sampling</p> <p><b>Building on:</b>                      Multiplying and dividing, sorting data</p> <p><b>Assessment:</b>                      End of Year Exams</p>