

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
<b>Autumn</b>	<b>Proportional Reasoning</b>						<b>Representations</b>					
	Ratio and scale		Multiplicative change		Multiplying and dividing fractions		Working in the Cartesian plane			Collecting and representing data		Tables
<b>Spring</b>	<b>Algebraic techniques</b>						<b>Developing Number</b>					
	Brackets, equations and inequalities				Sequences	Indices	Fractions and percentages			Standard index form		Number sense
<b>Summer</b>	<b>Developing Geometry</b>						<b>Reasoning with Data</b>					
	Angles in parallel lines and polygons		Area of trapezia and circles		Line symmetry and reflection		The data handling cycle				Measures of location	

## Autumn 1 – Proportional Reasoning

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Ratio and Scale</b> <ul style="list-style-type: none"> <li>Understand ratio and its link to multiplication</li> <li>Circumference of a circle</li> <li>Use ratio notation</li> <li>Reduce ratios to simplest form</li> <li>Solve ratio problems</li> </ul>		<b>Multiplicative Change</b> <ul style="list-style-type: none"> <li>Use scale factors, linking to ratio, to solve simple direct proportion problems</li> <li>Scale diagrams and maps</li> </ul>		<b>Multiplying and dividing fractions</b> <ul style="list-style-type: none"> <li>Multiplying and dividing a fraction by an integer</li> <li>Multiplying and dividing a fraction by a fraction</li> </ul>	
<b>Notes/Links/Interleaving</b> <ul style="list-style-type: none"> <li>Revisit area</li> <li>Revisit equations</li> <li>Revisit addition and subtraction of fractions</li> <li>Link to fractions of an amount</li> <li>Revisit drawing angle</li> </ul>			<b>Additional Higher Content</b> <ul style="list-style-type: none"> <li>Ratio in the form 1: <math>n</math></li> <li>Comparing ratios</li> <li>Area of a circle</li> <li>Multiplying and dividing mixed numbers</li> </ul>		

## Autumn 2 – Representation

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Working in the Cartesian plane</b> <ul style="list-style-type: none"> <li>Plotting and interpreting straight line graphs</li> <li>Equations of lines parallel to the axes</li> <li>Model situations by translating them into expressions, formulae and graphs</li> </ul>			<b>Representing data</b> <ul style="list-style-type: none"> <li>Scatter graphs and correlation</li> <li>Designing and using one and two-way tables</li> <li>Listing outcomes</li> </ul>		<b>Probability</b> <ul style="list-style-type: none"> <li>Using sample space diagrams</li> <li>Using tables</li> </ul>
<b>Notes/Links/Interleaving</b> <ul style="list-style-type: none"> <li>Revisit negatives</li> <li>Link to solving linear equations</li> <li>Revisiting Venn diagrams and set notation</li> <li>Links to representing data and using graphs in other areas of the curriculum</li> </ul>			<b>Additional Higher Content</b> <ul style="list-style-type: none"> <li>Finding the equation of a straight line</li> <li>Finding the mid-point of a line segment</li> <li>Drawing quadratic graphs</li> <li>Product rule for counting</li> </ul>		

Spring 1 – Algebraic Techniques

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Brackets, equations and inequalities</b> <ul style="list-style-type: none"> <li>• Multiplying out single brackets</li> <li>• Forming and using expressions, formulae and identities</li> <li>• Forming and solving equations and inequalities with and without brackets</li> </ul>				<b>Sequences</b> <ul style="list-style-type: none"> <li>• Using more complex rules e.g. with brackets and squared terms</li> </ul>	<b>Indices</b> <ul style="list-style-type: none"> <li>• Writing expressions with powers</li> </ul>
<b>Notes/Links/Interleaving</b> <ul style="list-style-type: none"> <li>• Equations set in the context of earlier contexts – shapes, angles, probability, ratio etc.</li> </ul>			<b>Additional Higher Content</b> <ul style="list-style-type: none"> <li>• Factorising into a single bracket</li> <li>• Expanding binomials</li> <li>• Solving equations with unknowns on both sides</li> <li>• Find the rule for the nth term of a linear sequence</li> </ul>		

Spring 2 – Developing number

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Fractions and percentages</b> <ul style="list-style-type: none"> <li>• Revisit fraction, decimal and percentage equivalence</li> <li>• One number as a percentage of another</li> </ul>		<b>Standard index form</b> <ul style="list-style-type: none"> <li>• Conversion between numbers in ordinary and standard form</li> <li>• Comparing numbers in standard form</li> </ul>		<b>Number sense</b> <ul style="list-style-type: none"> <li>• Developing mental strategies</li> <li>• Measures and units</li> <li>• Estimation, including rounding to a given number of decimal places</li> <li>• Revisit order of operations</li> </ul>	
<b>Notes/Links/Interleaving</b> <ul style="list-style-type: none"> <li>• Revisit formal methods for calculation</li> </ul>			<b>Additional Higher Content</b> <ul style="list-style-type: none"> <li>• Finding the original given any percentage</li> <li>• Simple surds</li> <li>• Calculating with standard form</li> <li>• Negative and simple fractional indices</li> <li>• Converting area units</li> <li>• Error interval notation</li> </ul>		

**Summer 1 – Developing geometry**

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Angles in parallel lines and polygons</b> <ul style="list-style-type: none"> <li>Review Y7 angles rules</li> <li>Parallel lines and angles</li> <li>Revisit geometric notation</li> <li>Angles in special quadrilaterals</li> <li>Angles in a polygon</li> </ul>			<b>Area of a trapezia and circles</b> <ul style="list-style-type: none"> <li>Review area of shapes covered in year 7</li> <li>Area of a trapezium</li> <li>Area of a circle and parts of a circle</li> <li>Using significant figures</li> <li>Area of compound shapes</li> </ul>		<b>Line symmetry and reflection</b> <ul style="list-style-type: none"> <li>Line symmetry in polygons and other shapes</li> <li>Reflections of shapes in horizontal, vertical and diagonal lines</li> </ul>
<b>Notes/Links/Interleaving</b> <ul style="list-style-type: none"> <li>Revisit fractions</li> <li>Revisit shape properties</li> <li>Revisit equations of lines</li> </ul>			<b>Additional Higher Content</b> <ul style="list-style-type: none"> <li>Standard constructions including perpendiculars</li> <li>Diagonal properties of quadrilaterals</li> </ul>		

**Summer 2 – Reasoning with data**

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>The data handling cycle</b> <ul style="list-style-type: none"> <li>Collecting data</li> <li>Interpreting statistical diagrams</li> <li>Dual bar charts</li> <li>Constructing and interpreting pie charts</li> </ul>				<b>Measures of location and dispersion</b> <ul style="list-style-type: none"> <li>Median and mean revisited, including finding the total</li> <li>Mean for grouped data</li> <li>The mode</li> <li>Choosing the appropriate average</li> <li>Revisit finding the range</li> <li>Comparing distributions</li> </ul>	
<b>Notes/Links/Interleaving</b> <ul style="list-style-type: none"> <li>Use algebraic substitution to form lists for averages and the range</li> <li>Links to data collection in other areas of the curriculum</li> </ul>			<b>Additional Higher Content</b> <ul style="list-style-type: none"> <li>Mean of grouped data</li> <li>Finding unknown data values given the mean or changes in the mean</li> </ul>		