



Sequence 1:	Sequence 2:	Sequence 3:
<p><b>Straight line graphs</b></p> <ul style="list-style-type: none"><li>• Lines parallel to the axes, <math>y = x</math> and <math>y = -x</math></li><li>• Using tables of values</li><li>• Compare gradients</li><li>• Compare intercepts</li><li>• Understand and use <math>y = mx + c</math></li><li>• Write an equation in the form <math>y = mx + c</math></li><li>• Find the equation of a line from a graph</li><li>• Interpret gradient and intercepts of real-life graphs</li><li>• Model real-life graphs involving inverse proportion</li><li>• Explore perpendicular lines</li></ul>	<p><b>Forming and solving equations</b></p> <ul style="list-style-type: none"><li>• Solve one- and two-step equations and inequalities</li><li>• Solve one- and two-step equations and inequalities with brackets</li><li>• Inequalities with negative numbers</li><li>• Solve equations with unknowns on both sides</li><li>• Solve inequalities with unknowns on both sides</li><li>• Solving equations and inequalities in context</li><li>• Substituting into formulae and equations</li><li>• Rearranging formulae (one-step)</li><li>• Rearrange formulae (two-step)</li><li>• Rearrange complex formulae including brackets and squares</li></ul>	<p><b>Testing conjectures</b></p> <ul style="list-style-type: none"><li>• Factors, Multiples and Primes</li><li>• True or False?</li><li>• Always, Sometimes, Never True</li><li>• Show that</li><li>• Conjectures about number</li><li>• Expand a pair of binomials</li><li>• Conjectures with algebra</li><li>• Explore 100 grid</li></ul>
Interleaving:	Deeper Learning:	Formative Assessment:
<ul style="list-style-type: none"><li>• Link equations of graphs to solving equations</li><li>• Revisit key topics through equations</li><li>• Review use of brackets</li><li>• Review geometric properties and rules</li></ul>	<ul style="list-style-type: none"><li>• Solve a pair of simultaneous equations using graphical methods</li><li>• Change the subject of a complex formula</li><li>• Explore the gradients of perpendicular lines</li></ul>	See Maths feedback guidelines



## Scheme of Learning:

**Year: 9                      Unit: Autumn 2**

<b>Sequence 1:</b>	<b>Sequence 2:</b>
<p style="text-align: center;"><b>Three dimensional shapes</b></p> <ul style="list-style-type: none"> <li>• Know names of 2-D and 3-D shapes</li> <li>• Recognise prisms (including language of edges/vertices)</li> <li>• Accurate nets of cuboids and other 3-D shapes</li> <li>• Sketch and recognise nets of cuboids and other 3-D shapes</li> <li>• Plans and elevates</li> <li>• Find area of 2-D shapes</li> <li>• Surface area of cubes and cuboids</li> <li>• Surface area of triangular prisms</li> <li>• Surface area of a cylinder</li> <li>• Volume of cubes and cuboids</li> <li>• Volume of other 3-D shapes – prisms and cylinders</li> <li>• Explore volumes of cones, pyramids and spheres</li> </ul>	<p style="text-align: center;"><b>Constructions and congruency</b></p> <ul style="list-style-type: none"> <li>• Draw and measure angles</li> <li>• Construct and interpret scale drawings</li> <li>• Locus of distance from a point</li> <li>• Locus of distances from a straight line/shape</li> <li>• Locus of equidistant from two points</li> <li>• Construct and perpendicular bisector</li> <li>• Construct and perpendicular from a point</li> <li>• Construct and perpendicular to a point</li> <li>• Locus of distance from two lines</li> <li>• Construct an angle bisector</li> <li>• Construct triangles from given information</li> <li>• Identify congruent figures</li> <li>• Explore congruent triangles</li> <li>• Identify congruent triangles</li> </ul>

<b>Interleaving:</b>	<b>Deeper Learning:</b>	<b>Formative Assessment:</b>
<ul style="list-style-type: none"> <li>• Revisit estimation</li> <li>• Revisit rounding to nearest integer, decimal places, significant figures</li> <li>• Revisit unit conversions, including area and volume units</li> </ul>	<ul style="list-style-type: none"> <li>• Explore volume of cones, spheres and complex shapes</li> <li>• Work out the surface area of any prism</li> <li>• Explore the locus of a path</li> </ul>	<p>See Maths feedback guidelines</p>