

## Year 10 Higher Mathematics

### Learning Intentions Autumn Term 2

2024- 2025

	LESSON 1	LESSON 2	LESSON 3
WEEK 9 wc 4 <sup>th</sup> November	<ul style="list-style-type: none"> <li>• Write ratios in the form 1 : n or n : 1.</li> <li>• Compare ratios.</li> <li>• Find quantities using ratios.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve problems using ratios, using bar models where appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Convert between currencies and measures.</li> <li>• Recognise and use direct proportion.</li> </ul>
WEEK 10 wc 11 <sup>th</sup> November	<ul style="list-style-type: none"> <li>• Solve problems involving ratios and proportion.</li> </ul>	<ul style="list-style-type: none"> <li>• Work out percentage increases and decreases.</li> </ul>	<ul style="list-style-type: none"> <li>• Solve real-life problems involving percentages.</li> </ul>
WEEK 11 wc 18 <sup>th</sup> November	<ul style="list-style-type: none"> <li>• Calculate using fractions, decimals &amp; percentages.</li> </ul>	<ul style="list-style-type: none"> <li>• Convert a recurring decimal to a fraction, using an algebraic approach.</li> </ul>	<ul style="list-style-type: none"> <li>• Master the algebraic approach to convert any recurring decimal to a fraction.</li> </ul>
WEEK 12 wc 25 <sup>th</sup> November	<ul style="list-style-type: none"> <li>• Check, strengthen &amp; extend – fractions, ratio &amp; percentages.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw plans and elevations of 3D solids.</li> </ul>	<ul style="list-style-type: none"> <li>• Reflect a 2D shape in a mirror line.</li> <li>• Rotate a 2D shape about a centre of rotation.</li> <li>• Describe reflections and rotations.</li> </ul>
WEEK 13 wc 2 <sup>nd</sup> December	<ul style="list-style-type: none"> <li>• Enlarge shapes by fractional and negative scale factors about a centre of enlargement.</li> </ul>	<ul style="list-style-type: none"> <li>• Translate a shape using a vector.</li> <li>• Carry out and describe combinations of transformations.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw and use scales on maps and scale drawings.</li> <li>• Solve problems involving bearings.</li> </ul>
WEEK 14 wc 9 <sup>th</sup> December	<ul style="list-style-type: none"> <li>• Construct triangles using a ruler and compasses.</li> <li>• Construct the perpendicular bisector of a line.</li> </ul>	<ul style="list-style-type: none"> <li>• Construct the shortest distance from a point to a line using a ruler and compasses.</li> <li>• Bisect an angle using a ruler and compasses.</li> </ul>	<ul style="list-style-type: none"> <li>• Construct angles using a ruler and compasses.</li> <li>• Construct shapes made from triangles using a ruler and compasses.</li> </ul>

WEEK 15 wc 16 <sup>th</sup> December	<ul style="list-style-type: none"><li>• Draw a locus.</li></ul>	<ul style="list-style-type: none"><li>• Use loci to solve problems.</li></ul>	<ul style="list-style-type: none"><li>• Check, strengthen &amp; extend – transformations, constructions &amp; loci.</li></ul>
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