

## Year 8 Mathematics

### Learning Programme 4

<p>The LORIC skill focus for this LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p><b>What will I be learning about in this Learning Programme?</b> In LP4 I will be learning about angles made by parallel lines and in polygons, area and perimeter of rectilinear shapes and circles and reflection.</p> <p><b>Where have I seen this learning before?</b> Year 7: angles at a point, adjacent angles on a straight line, vertically opposite angles, angles in triangles and quadrilaterals, perimeter, area of rectangles, parallelograms and triangles, round to powers of 10 and 1 significant figure.</p> <p><b>What could I use it for?</b> The knowledge and skills I will learn in this learning programme will allow me to use geometrical reasoning to calculate missing angles in polygons and Combine knowledge of area to determine the area of compound shapes.</p>	<p><b>Literacy:</b></p> <ul style="list-style-type: none"> <li>Capital letters must be used at the start of sentences and for the first letter of proper nouns</li> <li>Full stops must be used at the end of a sentence</li> <li>Question marks must be used at the end of a question</li> <li>Apostrophes should only be used for possession or omission</li> <li>Days of the week and months must be spelled correctly</li> <li>Key words must be spelled correctly</li> </ul>
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<p><b>In LP4.1, I will know:</b> 04/03/24 - (WK 1)</p> <p>how to calculate using order of operations; how to solve problems involving money, time and the calendar; how to convert metric units of length, weight and capacity.</p>	<p><b>Key Vocabulary</b></p> <p>Capacity</p>	<p><b>Homework</b></p> <p>LP3 consolidation Sparx Maths</p>
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<p><b>In LP4.2, I will know:</b> 11/03/24 - (WK 2)</p> <p>how to find angles between parallel lines and the transversal; how to identify and calculate with co-interior, alternate and corresponding angles.</p>	<p><b>Key Vocabulary</b></p> <p>Corresponding</p>	<p><b>Homework</b></p> <p>LP4:1 Topics plus consolidation Sparx Maths</p>
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<p><b>In LP4.3, I will know:</b> 18/03/24 - (WK 1)</p> <p>how to solve complex problems with parallel line angles; how to construct triangles and special quadrilaterals; how to identify and calculate with sides and angles in special quadrilaterals.</p> <p>Extended Task.</p>	<p><b>Key Vocabulary</b></p> <p>Co-interior</p>	<p><b>Homework</b></p> <p>LP4:2 Topics plus consolidation Sparx Maths</p>
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<p><b>In LP4.4, I will know:</b> 25/03/24 - (WK 2)</p> <p>how to use the properties of diagonals of quadrilaterals; how to use the sum of exterior angles of any polygon; how to use the sum of interior angles and calculate missing interior angles in regular polygons.</p>	<p><b>Key Vocabulary</b></p> <p>Exterior</p>	<p><b>Homework</b></p> <p>LP4:3 Topics plus consolidation Sparx Maths</p>
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<p><b>In LP4.5, I will know:</b> 15/04/24 - (WK 1)</p> <p>how to calculate the area of a trapezium; how to calculate the perimeter and area of compound shapes; how to calculate the circumference of a circle.</p>	<p><b>Key Vocabulary</b></p> <p>Circumference</p>	<p><b>Homework</b></p> <p>LP4:4 Topics plus consolidation Sparx Maths</p>
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<p><b>In LP4.6, I will know:</b> 22/04/24 - (WK 2)</p> <p>how to calculate the area of a circle; how to calculate the area of a circle and parts of a circle without a calculator; how to calculate the area of a circle and parts of a circle with a calculator.</p> <p>Extended Task.</p>	<p><b>Key Vocabulary</b></p> <p>Sector</p>	<p><b>Homework</b></p> <p>LP4:5 Topics plus consolidation Sparx Maths</p>
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<p><b>In LP4.7, I will know:</b> 29/04/24 - (WK 1)</p> <p>how to recognise line symmetry; how to reflect a shape in a horizontal or vertical line where the shapes touch the line; how to reflect a shape in a horizontal or vertical line where the shapes are not touching the line.</p>	<p><b>Key Vocabulary</b></p> <p>Symmetrical</p>	<p><b>Homework</b></p> <p>LP4:6 Topics plus consolidation Sparx Maths</p>
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<p><b>In LP4.8, I will know:</b> 06/05/24 - (WK 2)</p> <p>how to reflect a shape in a diagonal line where the shapes touch the line; how to reflect a shape in a diagonal line where shapes are not touching the line.</p>	<p><b>Key Vocabulary</b></p> <p>Reflection</p>	<p><b>Homework</b></p> <p>LP4:7 Topics plus consolidation Sparx Maths</p>
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<p><b>Resources to support learning:</b></p> <p>Pupils have access to knowledge organisers, Mathswatch and Sparx Maths to further support them in their Mathematics revision beyond the classroom. All weekly homework tasks will be set on Sparx Maths and all questions have a video to support. Pupils can access any topic in the Independent Practice section on Sparx Maths. Sparx Maths has been introduced to the pupils by their teachers and their login details should be written in their planner.</p>
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<p><b>FFET Award Challenge for this Learning Programme:</b></p> <p>Complete 4 XP Boost Tasks on Sparx Maths</p>
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