

## Mathematics Curriculum Intent and Overview

To inspire the next generation to enjoy a deep understanding of mathematics and to become both independent and resilient learners who can apply their reasoning and problem-solving skills to life beyond De La Salle School.

Focus	Intent
Mastery	To develop a deeper understanding of mathematics which enables students to become fluent in mathematics.
Challenge	To challenge and stretch students in every lesson.
Embedding knowledge	To develop students' retrieval skills to embed cumulative knowledge.
Independent Learning	To develop students to become independent learners.
Problem Solving Skills	To develop reasoning and problem-solving skills to apply their mathematical skills to solve real life problems.
Progress Tracking	To closely monitor and track student progress throughout their five years at De La Salle School to ensure every student makes at least expected progress.
Academic Achievement	To continuously improve on the examination success for all our students.
Inspiration	To inspire the next generation of mathematicians to be prepared for life beyond De La Salle School

	Autumn Term	Spring Term	Summer Term
7	<ul style="list-style-type: none"> <li>● Sequences</li> <li>● Algebraic Notation</li> <li>● Equality and Equivalence</li> <li>● Place Value and Ordering</li> <li>● Fractions, Decimals and Percentage Equivalence</li> </ul>	<ul style="list-style-type: none"> <li>● Solving Problems with Addition and Subtraction</li> <li>● Solving Problems with Multiplication and Division</li> <li>● Fractions and Percentages of Amounts</li> <li>● Directed Number</li> <li>● Addition and Subtraction of Fractions</li> </ul>	<ul style="list-style-type: none"> <li>● Construction and Measuring</li> <li>● Geometric Reasoning</li> <li>● Developing Number Sense</li> <li>● Sets and Probability</li> <li>● Prime Numbers and Proof</li> </ul>
8	<ul style="list-style-type: none"> <li>● Ratio and Scale</li> <li>● Multiplicative Change</li> <li>● Multiplying and Dividing Fractions</li> <li>● Working in the Cartesian Plane</li> <li>● Representing Data</li> <li>● Tables and Probability</li> </ul>	<ul style="list-style-type: none"> <li>● Brackets, Equations and Inequalities</li> <li>● Sequences</li> <li>● Indices</li> <li>● Fractions and Percentages</li> <li>● Standard Index Form</li> <li>● Number Sense</li> </ul>	<ul style="list-style-type: none"> <li>● Angles in Parallel Lines and Polygons</li> <li>● Area of Trapezia and Circles</li> <li>● Line Symmetry and Reflection</li> <li>● The Data Handling Cycle</li> <li>● Measures of Location</li> </ul>

	<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<p>9 Higher</p> <p>New SOW commenced September 2022</p>	<ul style="list-style-type: none"> <li>● Calculations and Rounding</li> <li>● Indices, Roots and Order of Operations</li> <li>● Factors, Multiples and Primes</li> <li>● Standard Form</li> <li>● Algebra: introduction</li> <li>● Equations</li> <li>● Inequalities</li> </ul>	<ul style="list-style-type: none"> <li>● Formulae</li> <li>● Sequences and Straight-Line Graphs</li> <li>● Averages and Range</li> <li>● Representing and Interpreting Data</li> <li>● Fractions</li> <li>● Percentages</li> </ul>	<ul style="list-style-type: none"> <li>● Percentages (continued)</li> <li>● Ratio and Proportion</li> <li>● Probability</li> <li>● Perimeter, Area and Circles</li> <li>● Volume and Surface Area</li> <li>● Polygons and Angles</li> </ul>
<p>9 Intermediate</p> <p>New SOW commenced September 2022</p>	<ul style="list-style-type: none"> <li>● Calculations and Rounding</li> <li>● Indices, Roots and Order of Operations</li> <li>● Factors, Multiples and Primes</li> <li>● Standard Form</li> <li>● Algebra: introduction</li> </ul>	<ul style="list-style-type: none"> <li>● Equations</li> <li>● Inequalities</li> <li>● Sequences</li> <li>● Straight-Line Graphs</li> </ul>	<ul style="list-style-type: none"> <li>● Averages and Range</li> <li>● Representing and Interpreting Data</li> <li>● Fractions</li> <li>● Percentages</li> </ul>
<p>9 Foundation</p> <p>New SOW commenced September 2022</p>	<ul style="list-style-type: none"> <li>● Integers and Place Value</li> <li>● Decimals</li> <li>● Indices, Powers and Roots.</li> <li>● Factors, Multiples and Primes</li> <li>● Algebra: introduction</li> <li>● Expanding and Factorising Single Brackets</li> </ul>	<ul style="list-style-type: none"> <li>● Expressions and Substitution</li> <li>● Tables</li> <li>● Charts and Graphs</li> <li>● Pie Charts</li> </ul>	<ul style="list-style-type: none"> <li>● Pie Charts (continued)</li> <li>● Scatter Graphs</li> <li>● Fractions</li> <li>● Fractions, Decimals and Percentages Conversions</li> <li>● Percentages</li> </ul>
<p>10 Foundation</p>	<ul style="list-style-type: none"> <li>● Sequences</li> <li>● Properties of Shapes</li> <li>● Angles of Polygons</li> <li>● Statistics and Sampling</li> <li>● Averages</li> </ul>	<ul style="list-style-type: none"> <li>● Probability</li> <li>● Area and Perimeter</li> <li>● 3D Shapes and Volume</li> </ul>	<ul style="list-style-type: none"> <li>● Real Life Graphs</li> <li>● Straight Line Graphs</li> <li>● Quadratic Graphs</li> </ul>

11 Foundation	<ul style="list-style-type: none"> <li>● Transformations</li> <li>● Ratio</li> <li>● Proportion</li> <li>● Multiplicative Reasoning</li> <li>● Pythagoras</li> <li>● Trigonometry</li> <li>● Circles and Cylinders</li> </ul>	<ul style="list-style-type: none"> <li>● Similarity and Congruence in 2D</li> <li>● Plans and Elevations</li> <li>● Construction and Loci</li> <li>● Vectors</li> <li>● Quadratic Equations</li> <li>● Fractions and Reciprocals</li> </ul>	<ul style="list-style-type: none"> <li>● Indices and Standard Form</li> <li>● Rearranging Equations</li> <li>● Simultaneous Equations</li> <li>● Revision for the GCSE Examinations.</li> </ul>
9 Higher	<ul style="list-style-type: none"> <li>● Calculations, Place Value and Estimating</li> <li>● Rules of Indices</li> <li>● Factors, Multiples and Primes</li> <li>● Standard Form and Surds</li> <li>● Algebra – Introduction</li> <li>● Equations and Formulae</li> <li>● Sequences</li> </ul>	<ul style="list-style-type: none"> <li>● Averages and Range</li> <li>● Representing and Interpreting Data</li> <li>● Scatter Graphs</li> <li>● Fractions</li> <li>● Percentages</li> </ul>	<ul style="list-style-type: none"> <li>● Fraction, Decimals and Percentages</li> <li>● Ratio and Proportion</li> <li>● Collecting Data</li> </ul>
10 Higher	<ul style="list-style-type: none"> <li>● Cumulative Frequency and Box Plots</li> <li>● 3D Shapes and Transformations</li> <li>● Constructions, Loci and Bearings</li> <li>● Perimeter, Area and Circles</li> <li>● Volume and Surface Area</li> </ul>	<ul style="list-style-type: none"> <li>● Accuracy and Bounds</li> <li>● Probability</li> <li>● Compound Measures</li> <li>● Angles</li> <li>● Pythagoras' Theorem and Trigonometry</li> </ul>	<ul style="list-style-type: none"> <li>● Linear Graphs</li> <li>● Real Life Graphs and Coordinate Geometry</li> </ul>
11 Higher	<ul style="list-style-type: none"> <li>● Quadratic, Cubic and Other Graphs Solving Quadratic Equations</li> <li>● Simultaneous Equations</li> <li>● Inequalities</li> <li>● Congruent and Similar Shapes</li> <li>● Further Trigonometry Graphs of Quadratic and Cubic Functions</li> </ul>	<ul style="list-style-type: none"> <li>● Circle Theorems</li> <li>● Algebraic Fractions</li> <li>● Further Algebra</li> <li>● Vectors and Geometric Proof</li> <li>● Exponential Functions and Non-Linear Graphs</li> </ul>	<ul style="list-style-type: none"> <li>● Direct and Inverse Proportion</li> <li>● Graphs of Trigonometric Functions</li> <li>● Transformations of Graphs</li> <li>● Revision and Preparation for the GCSE Examinations</li> </ul>