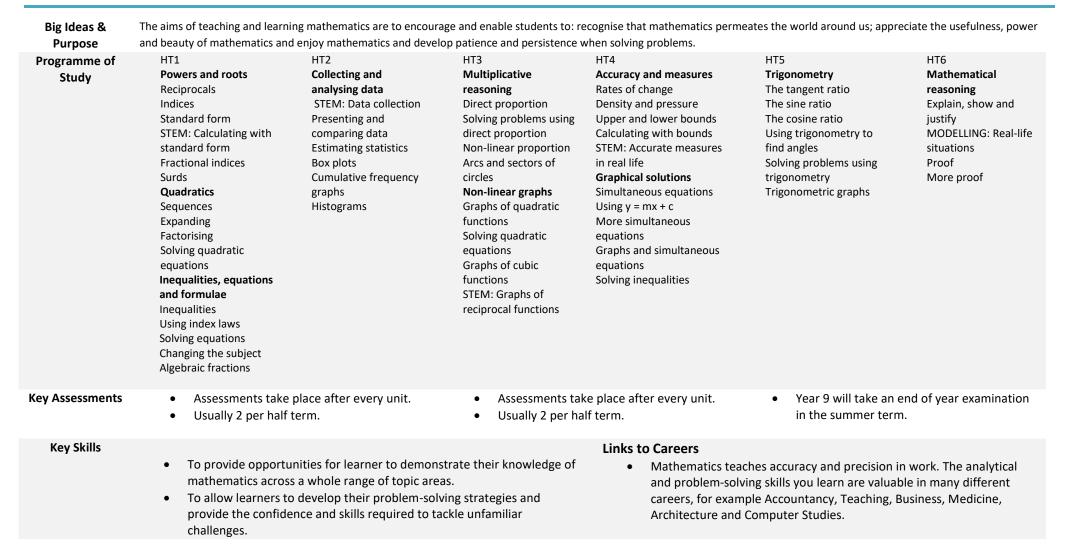
Our Lady and St. Bede Catholic Academy

## Subject Curriculum – Year 9 Theta

Programme of	HT1	HT2	HT3	HT4	HT5	HT6	
Study	Indices and standard form Indices Calculations and estimates STEM: Standard form Expressions and formulae Substituting into expressions Writing expressions and formulae STEM: Using formulae Rules of indices and brackets Expanding double brackets	Dealing with data Planning a survey Collecting data Calculating averages Display and analyse data Writing a report Multiplicative reasoning Enlargement Negative and fractional scale factors FINANCE: Percentage change Rates of change Problem-solving	Constructions Using scales Basic constructions Constructing triangles Loci Equations, inequalities and proportionality Solving equations Using equations Trial and improvement Using and solving Inequalities STEM: Proportion Simultaneous equations	<b>Circles, Pythagoras and</b> <b>prisms</b> Circumference of a circle Area of a circle Pythagoras' theorem Prisms and cylinders STEM: Errors and bounds <b>Sequences and graphs</b> nth term of arithmetic sequences Non-linear sequences Graphing rates of change Using y = mx + c More straight-line graphs More simultaneous equations Graphs of quadratic functions Non-linear graphs	<b>Probability</b> Experimental probability Probability diagrams Independent events	<b>Comparing shapes</b> Congruent and simila shapes Ratios in triangles The tangent ratio The sine ratio The cosine ratio	
(ey Assessments	<ul><li>Assessments take place after every unit.</li><li>Usually 2 per half term.</li></ul>		<ul><li>Assessments take place after every unit.</li><li>Usually 2 per half term.</li></ul>		<ul> <li>Year 9 will take an end of year examination in the summer term.</li> </ul>		
Key Skills	<ul> <li>To provide opportunities for learner to demonstrate their knowle mathematics across a whole range of topic areas.</li> <li>To allow learners to develop their problem-solving strategies and provide the confidence and skills required to tackle unfamiliar challenges.</li> </ul>			<ul> <li>Links to Careers</li> <li>Mathematics teaches accuracy and precision in work. The analytical and problem-solving skills you learn are valuable in many different careers, for example Accountancy, Teaching, Business, Medicine, Architecture and Computer Studies.</li> </ul>			



## Subject Curriculum – Year 9 Delta



## Subject Curriculum – Year 9 Pi



Big Ideas & Purpose	The aims of teaching and learni power and beauty of mathema			cognise that mathematics perme tence when solving problems.	ates the world around us; app	reciate the usefulness,
Programme of Study	HT1 Number calculations Adding and subtracting Multiplying Dividing Multiplying and dividing negative numbers Squares, cubes and roots More powers Calculations Sequences and equations Algebraic expressions Using the nth term Finding the nth term Solving equations	HT2 Statistics Planning a survey Statistics from tables Comparing data Pie charts and scatter graphs FINANCE: Misleading graphs Writing a report Fractions, decimals and percentages Equivalent proportions Recurring decimals Adding and subtracting fractions Multiplying fractions Dividing fractions Comparing proportions FINANCE: Percentage change	HT3 Geometry in 2D and 3D Angles Maps and scales Constructions 3D solids MODELLING: Pythagoras' theorem Algebraic and real- life graphs Reading graphs Plotting graphs Distance-time graphs Midpoints Intercepts and gradients	HT4 <b>Multiplicative reasoning</b> STEM: Using ratios Using proportions Problem-solving with proportions Measures and conversions <b>Algebraic and geometric</b> <b>formulae</b> Substituting into formulae More complex formulae Formulae in geometry Compound shapes Circles	HT5 <b>Probability</b> Probability experiments Sample space diagrams MODELLING: Two- way tables Tree diagrams	HT6 Polygons and transformations Quadrilaterals Triangles Transformations Enlargement Congruent shapes
Key Assessments	<ul><li>Assessments take place after every unit.</li><li>Usually 2 per half term.</li></ul>		<ul><li>Assessments take place after every unit.</li><li>Usually 2 per half term.</li></ul>		<ul> <li>Year 9 will take an end of year examination in the summer term.</li> </ul>	
Key Skills	<ul><li>mathematics across</li><li>To allow learners to</li></ul>	inities for learner to demons s a whole range of topic area o develop their problem-solv ence and skills required to ta	as. ving strategies and	thes accuracy and precision ing skills you learn are valua ple Accountancy, Teaching, Computer Studies.	able in many different	