Our Lady and St. Bede Catholic Academy



Subject Curriculum – Year 7 Theta

Big Ideas & Purpose

The aims of teaching and learning mathematics are to encourage and enable students to: recognise that mathematics permeates the world around us; appreciate the usefulness, power and beauty of mathematics and enjoy mathematics and develop patience and persistence when solving problems.

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Programme of Study	Analysing and displaying data Mode, median and range Displaying data Grouping data Averages and comparing data Line graphs and more bar charts Spreadsheets Number skills Mental maths Addition and subtraction Multiplication Division Finance: Time and money Negative numbers Factors, multiples and primes Square and triangle numbers	Expressions, functions and formulae Functions Simplifying expressions STEM: Substituting into formulae Writing formulae Decimals and measures Decimals and rounding Length, mass and capacity Scales and coordinates Working with decimals mentally Working with decimals Perimeter Area STEM: More units	Fractions Comparing fractions Simplifying fractions Working with fractions Fractions and decimals Understanding percentages Percentages of amounts Probability The language of probability Calculating probability Experimental probability FINANCE: Expected outcomes	Ratio and proportion Direct proportion Writing ratios Using ratios Scales and measures Proportions and fractions Proportions and percentages	Lines and angles Lines, angles and triangles Estimating, measuring and drawing angles Drawing triangles accurately STEM: Calculating angles Angles in a triangle Quadrilaterals Sequences and graphs Sequences Pattern sequences Coordinates Straight-line graphs Position-to-term rules	Transformations Congruency and enlargements Symmetry Reflection Rotation Translations and combined transformations

Key Assessments

- Assessments take place after every unit.
- Usually 2 per half term.

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 Year 7 will also take an end of year examination in the summer term.

Key Skills

- To provide opportunities for learner to demonstrate their knowledge of mathematics across a whole range of topic areas.
- To allow learners to develop their problem-solving strategies and provide the confidence and skills required to tackle unfamiliar challenges.

Links to Careers

Mathematics teaches accuracy and precision in work. The analytical and problem-solving skills you learn are valuable in many different careers, for example Accountancy, Finance, Teaching, Business, Medicine, Engineering, Architecture and Computer Studies.



Subject Curriculum – Year 7 Delta

Big Ideas & Purpose

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Programme of Study	Analysing and displaying data Two-way tables and bar charts Averages and range Grouped data More graphs Pie charts STEM: Scatter graphs and correlation Number skills Factors, primes and multiples Using negative numbers	Equations, functions and formulae Simplifying algebraic expressions Writing algebraic expressions STEM: Using formulae Writing formulae Brackets and powers Factorising expressions Fractions Working with fractions Adding and subtracting Fractions, decimals and percentages	Angles and shapes Angles and parallel lines Triangles Quadrilaterals Polygons Decimals Ordering Rounding Adding and subtracting decimals Multiplying Dividing Fractions, decimals and percentages FINANCE: Working with	HT4 Equations Solving one-step equations Solving two-step equations More complex equations Trial and improvement	HT5 Multiplicative reasoning STEM: Metric and imperial units Writing ratios Sharing in a given ratio Proportion Proportional reasoning Using the unitary method Perimeter, area and volume Triangles, parallelograms and trapeziums Perimeter and area of compound shapes Properties of 3D solids	HT6 Sequences and graphs Sequences The nth term Pattern sequences Coordinates and line segments Graphs
	numbers Multiplying and dividing Squares and square roots More powers and roots Calculations	percentages Multiplying and dividing Working with mixed numbers	FINANCE: Working with percentages		Properties of 3D solids Surface area Volume STEM: Measures of area and volume	

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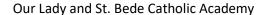
 Year 7 will also take an end of year examination in the summer term.

Key Skills

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- To allow learners to develop their problem-solving strategies and provide the confidence and skills required to tackle unfamiliar challenges.

Links to Careers

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Subject Curriculum – Year 7 Pi

Big Ideas & Purpose

The aims of teaching and learning mathematics are to encourage and enable students to: recognise that mathematics permeates the world around us; appreciate the usefulness, power and beauty of mathematics and enjoy mathematics and develop patience and persistence when solving problems.

 Key Assessments Assessments take place after every unit. With money Assessments take place after every unit. Year 7 will also take an end of year examination 	Programme of Study	Analysing and displaying data Tables and pictograms Bar charts Grouped data Mode and modal class Range and median Mean Calculating Adding Subtracting Multiplying Dividing Multiplying and dividing by 10, 100 and 1000 Using the four operations Positive and negative numbers	Expressions, functions and formulae Using functions Function machines Simplify expressions Writing expressions STEM: Using formulae Writing formulae Graphs Real-life graphs Coordinates Graphs of functions STEM: Scientific graphs	Factors and multiples Number rules and relationships Multiples Multiplication Division Solving problems Factors and primes Common factors and multiples Decimals and measures Estimates and measures Decimal numbers Metric units Adding and subtracting decimals Rounding Multiplying and dividing decimals FINANCE: Calculating	Angles and lines Right angles and lines Measuring angles Drawing and estimating angles Putting angles together 8Measuring and shapes Shapes Symmetry in shapes Regular polygons Perimeter Area	Fractions, decimals and percentages Comparing fractions Equivalent fractions Calculating with fractions Adding and subtracting fractions Introducing percentages FINANCE: Finding percentages	HT6 Transformations Reflection Translation Rotation STEM: Congruency
In the summer term	Key Assessments	Assessments take place after every unit.Usually 2 per half term.		with money		 Year 7 will also take an end of year examination in the summer term. 	

Architecture and Computer Studies.

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