Bishop Ellis Catholic Voluntary Academy

Mathematics Intent

At Bishop Ellis Catholic Voluntary Academy we aim to provide a high-quality mathematics education so that children have a profound understanding of God's world, the ability to reason mathematically, an appreciation of the magnificence and power of mathematics, and a sense of delight and inquisitiveness about the subject. We want children to develop a love of maths and be confident mathematicians by the end of Y6, beyond Bishop Ellis and up to GCSE and further.

We understand that mathematics is essential to everyday life, critical to science, technology, engineering and necessary for financial literacy and most forms of employment. We aim to ensure that our parents have a clear grasp of this importance as in the past there has been a sense of apathy about the subject from some.

Our curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge quickly and precisely
- reason mathematically by following a line of enquiry, inferring relationships and generalisations, and developing explanation or proof using mathematical language
- can solve problems by applying their mathematics to a variety of problems with increasing complexity, including breaking down problems into a series of simpler steps and being resolute in seeking solutions

We understand that mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. Our curriculum is, by necessity, organised into apparently distinct domains, but children make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

We expect that pupils should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the curriculum at broadly the same pace following the 5 big ideas of the mastery approach (fluency, variation, mathematical thinking, representation and structure and coherence).

Children who grasp concepts quickly are challenged through rich and sophisticated problems before any progression through new content. Those who are not sufficiently fluent with previous material will consolidate their understanding through additional practice, before moving on. We use the White Rose scheme of work supplemented with resources from NCETM and N-rich to deliver our maths curriculum, as well as the Mastering Number programme in Reception and KS1, which supports pupils with their fluency in the fundamentals of mathematics.

Bishop Ellis Long Term Plan: Maths 2024-25 (Based on White Rose Planning)

Children are taught key mathematical knowledge progressively.

For example:

- **Reception** – Children will be introduced to numbers and counting and will start to use basic mathematical language. An interest in maths and problem solving will be encouraged through maths games and fun activities. Children will be encouraged to talk about maths in the world around them. They will be able to count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Children will use quantities of objects to add and subtract 2 single-digit numbers and be confident with their number bonds to 5.
- **Year 2** – By the end of KS1, children have developed their confidence and mental fluency with whole numbers, counting and place value. They can work with numerals, words and the four operations (addition, subtraction, multiplication and division), including with practical resources (for example, concrete objects and measuring tools). Children should be confident with their number bonds to 20.
- **Year 6** – Children will be able to apply the maths knowledge they already know alongside developing new skills to help solve more complex problems. They work with numbers up to 10 million and begin to learn about algebra and ratio. They will be taught long division for dividing four-digit by two-digit numbers and be able to use brackets in calculations and explain remainders. Children will learn to multiply and divide with fractions and decimals and calculate percentages.

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Advent

2 days in school previous week	**Week 1 2.9.24**	**Week 2 9.9.24**	**Week 3 16.9.24**	**Week 4 23.9.24**	**Week 5 31.9.24**	**Week 6 7.10.24**	**Week 7 14.10.24**	**Week 8 28.10.24**	**Week 9 4.11.23**	**Wk 10 11.11.24**	**Wk 11 18.11.24**	**Wk 12 25.11.24** *4 day week – INSET* ***DATA DEADLINE 29.11***	**Wk 13 2.12.24**	**Wk 14 9.12.24**	**Wk 15 16.12.24**
Reception	Baselines week 1-5		Baselines week 1-5 Getting to know you		Match sort and compare		Talk about measure and patterns		It's me 1, 2, 3!		Circles and triangles	1, 2, 3, 4, 5		Shapes with 4 sides	
Year 1	Number: Place Value (within 10) – 16 lessons				Number: Addition and Subtraction (within 10) – 18 lessons					Assessment week	Geometry: Shape - 6 lessons		Number: Place value (within 20) – 13 lessons		
Year 2	Number: Place Value – 17 lessons				Number: Addition and Subtraction – 22 lessons						Geometry: Shape – 13 lessons			Measurement: Money – 11 lessons	
Year 3	Number: Place Value – 15 lessons			Number: Addition and Subtraction – 23 lessons					Number: Multiplication and Division A – 16 lessons		Assessment Week	Mult/div A cont. *Remaining lessons teach with Mult/div B if needed*	Measurement: Length and Perimeter – 13 lessons		Number: Multiplication and division B – 12 lessons
Year 34	Number: Place value – 19 lessons				Number: Addition and subtraction – 19 lessons				Number: Multiplication and division A – 16 lessons		Assessment Week	Number: Multiplication and division A – 16 lessons (cont)	Measurement: Area – 5 lessons	Number: Multiplication and division B – 15 lessons	
Year 4	Number: Place Value – 18 lessons				Number: Addition and Subtraction – 11 lessons		Measurement: Area – 5 lessons		Number: Multiplication and Division A – 14 lessons		Assessment Week	Measurement: Length and Perimeter – 10 lessons		Number: Multiplication and Division B – 16 lessons Consolidation	
Year 5	Number: Place Value – 15 lessons			Number: Addition and Subtraction – 9 lessons		Number: Multiplication and Division A – 11 lessons		Number: Fractions A - 18 lessons			Assessment Week	Fractions A cont.	Number: Multiplication and Division B – 12 lessons		Consolidation
Year 6	Number: Place Value – 9 lessons		Number: Addition, Subtraction, Multiplication & Division – 18 lessons		Assessment Week	Number: Addition, Subtraction, Multiplication & Division – 18 lessons (cont.)		Number: Fraction A – 10 lessons		Number: Fraction B – 8 lessons		Measurement: Converting Units - 6 lessons	Ratio (and proportion) – 11 lessons	Assessment Week	Ratio continued

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Lent

	Week 1 6.1.25	Week 2 13.1.25	Week 3 20.1.25	Week 4 27.1.25	Week 5 3.2.25	Week 6 10.2.25	Week 7 24.2.25	Week 8 3.3.25	Week 9 10.3.25	Wk 10 17.3.25	Wk 11 24.3.25 ***DATA DEADLINE 28.3***	Wk 12 31.3.25	Wk 13 7.4.25		
Reception	Alive in 5		Mass and capacity	Growing 6, 7, 8		Length, height and time		Building 9 and 10			Explore 3D Shapes		To 20 and beyond		
Year 1	Number: Place value (within 20) – 13 lessons (continued)	Measurement: Length and Height – 4 lessons	Measurement: mass and volume – 8 lessons		Number: Addition and Subtraction (within 20) – 11 lessons		Number: Place Value (within 50) – 9 lessons		Assessment week	Number: Multiplication and Division – 10 lessons		Number: Fractions – 9 lessons			
Year 2	Measurement: Length and Height – 6 lessons	Number: Multiplication and Division – 18 lessons				Measurement: mass, capacity & temp – 10 lessons		Number: Fractions – 16 lessons	Assessment week	Number: Fractions – 16 lessons		Measurement: Time – 8 lessons			
Year 3	Number: Multiplication and division B – 12 lessons (continued)			Geometry: Shape – 11 lessons		Number: Fractions A – 13 lessons			Assessment Week	Measurement: Mass, Capacity and temperature – 12 lessons			Measurement: Money – 6 lessons		
Year 34	Number: Multiplication and division B – 15 lessons (cont.)	Measurement: Length and perimeter – 11 lessons		Number: Fractions A – 15 lessons			Measurement: Mass and capacity – 11 lessons		Assessment Week	Number: Fractions B – 9 lessons		Measurement: Time – 10 lessons			
Year 4	Number: Multiplication and Division B – 16 lessons (cont)		Number: Fractions – 16 lessons				Number: Decimals A – 11 lessons		Assessment Week	Decimals A cont.	Measurement: Money – 7 lessons		Measurement: Time – 6 lessons		
Year 5	Number: Fractions B – 8 lessons		Statistics – 6 lessons	Number: Decimals and Percentages – 16 lessons			Measurement: Perimeter and area – 7 lessons	Assessment Week	Measurement: Converting Units – 7 lessons		Geometry: Shape – 11 lessons				
Year 6	Algebra – 11 lessons		Number: Decimals – 10 lessons		Assessment Week	Number: Fractions, Decimals & Percentages – 10 lessons		Measurement: Area, perimeter and volume – 9 lessons		Statistics – 7 lessons	Geometry: Shape – 12 lessons				

Pentecost

Bishop Ellis Long Term Plan: Maths 2024-25 (Based on White Rose Planning)

	Week 1 **28.4.25**	**Week 2** **5.5.25** *4 day week – Bank holiday*	**Week 3** **12.5.25**	**Week 4** **19.5.25**	**Week 5** **2.6.25**	**Week 6** **9.6.25**	**Week 7** **16.6.25**	**Week 8** **23.6.25** ***DATA DEADLINE 27.6***	**Week 9** **1.7.25**	**Wk 10** **7.7.25**
Reception	To 20 and beyond (cont)	How many now?	Manipulate, compose and decompose		Sharing and grouping		Visualise, build and map		Make connections	Consolidation
Year 1	Geometry: position and direction – 6 lessons	Measurement: Money – 5 lessons	Measurement: Time – 7 lessons		Number: place value (within 100) – 8 lessons		Assessment week	Consolidation (using gaps analysis) and investigations		
Year 2	Statistics – 8 lessons		Geometry: Position and direction – 6 lessons	SATs week	Consolidation from gaps analysis and investigations Consolidation					
Year 3	Measurement: Time – 13 lessons			Fractions B – 7 lessons		Statistics – 7 lessons	Assessment week	Consolidation (using gaps analysis and investiagtions)		
Year 34	Number: Decimals – 15 lessons		Measurement: Money – 10 lessons (cont.)		Geometry: Shape – 11 lessons		Assessment week	Geometry: Position and directions - 6 lessons	Statistics – 9 lessons	
Year 4	Number: Decimals B – 9 lessons		Geometry: Shape – 9 lessons		Geometry: Position and Direction – 6 lessons	Statistics – 5 lessons	Assessment Week	Consolidation		
Year 5	Geometry: Position and direction – 7 lessons	Number: Decimals – 13 lessons			Number: Negative numbers – 6 lessons	Measurement: Volume – 5 lessons	Assessment Week	Consolidation		
Year 6	Geometry: Position and direction – 6 lessons	**Revision of core knowledge**	KS2 SATS week	Themed projects/problem solving			KS3 Transition work			