

Maths Curriculum

Cameley Primary School

2022 - 2023



Our Intent for Maths at Cameley C of E VC Primary School

At Cameley, the intention of our maths curriculum is to develop young mathematicians who are confident and aware of their own knowledge. We want children to enjoy maths and experience the wonder and variety of problems and applications that it presents. We aim to develop mathematicians who are inquisitive, ask questions and relish the process of solving problems.

"Millions saw the apple fall, but Newton asked why."

Bernard Baruch, American financier, philanthropist and statesman

Our maths curriculum is designed to ensure our children have the skills to flourish in a future world of economy, industry and finance as they move into adulthood.

We want their journey as mathematicians to be long, varied, exciting and to end in magnificence!

"The study of mathematics, like the Nile, begins in minuteness but ends in magnificence."

Charles Caleb Colton, English cleric, writer and collector

We strive for high levels of academic success whilst also recognising that test scores are not the only judge of a greater level of understanding - but we also do not believe that the two are mutually exclusive. To this end we have adopted a mastery approach to teaching maths and use the White Rose scheme to deliver this.

"Mathematics is not about numbers, equations, computations, or algorithms: it is about understanding."

William Paul Thurston, American mathematician

Our maths curriculum will provide a variety of concrete, pictorial and abstract representations of mathematical processes to children of all ages. We believe that these variations will develop a greater depth of understanding from an earlier age. Teachers will encourage the use of technically accurate language from the beginning of the children's mathematical journey as we believe that embedding the use of this vocabulary is essential in creating confident mathematicians. We recognise the huge importance of the children developing firm foundations and fluency in number and place value - and as such we have adopted a curriculum that places emphasis on these areas, taking small steps that allow the children to develop a deep understanding. We use Number Sense to provide a structured regular approach to teaching key number facts in Early Years and Key Stage 1. We deepen children's understanding of Maths through regular opportunities to problem solve and reason, building their resilience to approach such challenges independently.

Implementation

At Cameley maths is delivered daily during the hourly maths lesson. Our curriculum overview shows the order in which topics are taught across the year groups. These lessons cover the National Curriculum objectives, broken down into smaller steps. Additionally, number fact fluency is practiced regularly through activities such as: Number Sense, Fluent in 5, Flashback 4, Maths Talk and times table's challenges at the beginning of maths lessons.

	Early Years	Year 1/2	Year 2/3	Year 4/5	Year 6
Number Sense	3 x per week	Y1 - Daily Y2 – 3x a week	Y2 – 3x a week		
Fluent in 5		Y2 – 2x a week	Y2 – 2x a week Y3 – 3x a week		2 x a week
Times Tables			Y3 – 2x a week	2 x a week	1 x a week
Maths Talk				Introduce in summer term	1 x a week
Flashback 4 (White Rose)				3 x a week	1 x a week

To supplement White Rose at Cameley, we use a range of additional resources: I see reasoning, Classroom Secrets, NRICH, The National Centre for Excellence in the Teaching of Mathematics (NCETM), Number Blocks in EYFS and Thinking Tom (Can you convince me cards).

Cameley Maths Curriculum Overview

Reception Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn	Getting to Know You			Just Like Me! Match and Sort Compare Explore Patterns			It's Me 1 2 3! Representing, comparing, composing of 1, 2 & 3. Circles & Triangles Positional Language			Light and Dark Representing numbers to 5. One more or less Shapes with 4 sides Time			Consolidation	
Spring	Alive in 5 Introducing zero Comparing numbers to 5 Composition of 4 & 5 Compare mass & capacity.			Growing 6, 7, 8 6, 7 & 8 Combining two amounts Marking Pairs Length & Height Time			Building 9 and 10 Counting to 9 and 10 Comparing numbers to 10 Bonds to 10 3-D shapes Spatial awareness Patterns			Consolidation				
Summer	To 20 and Beyond Build numbers beyond 10 Count patterns beyond 10 Spatial reasoning 1 Match, rotate, manipulate			First ,Then, Now Adding more Taking away Spatial reasoning 2 Compose and decompose			Find My Pattern Doubling Sharing & Grouping Even & odd Spatial reasoning 3 Visualise and build			On The Move Deepening understanding Patterns and relationships Spatial mapping (4) Mapping				

Y1 / 2 Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value Y1 – Numbers to 20 Y2 – Numbers to 100				Number: Addition and Subtraction Y1 – Numbers within 20 (including recognising money) Y2 – Numbers within 100 (including money)					Number: Y1 – Place Value to 50 and Multiplication Y2 – Multiplication		
Spring	Number : Y1 – Division	Number : Y1 – Place Value to 100	Measurement: Y1 – Length, Height, Mass and Volume Y2 - Length, Height, Mass, Capacity and Temperature			Geometry: Y1 – Shape, Position and Direction Y2 – Shape, Position and Direction			Number: Y1: Fractions and consolidation Y2 - Fractions			
	Number: Y2 – Division											
Summer	Measurement - Time			Number: Y1 – Place Value recap	Y1 – Four operations recap Y2 – Shape	Y1 – Four operations recap Y2 - Shape	Y1 – Four operations recap Y2 -SATs	Consolidation				
Y2 - Statistics												

Y2 / 3 Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value Y2 – Numbers to 100 Y3 – Numbers to 1000				Number: Addition and Subtraction Y2 – Numbers within 100 (including money) Y3 – Numbers within 1000 (including money)					Number: Y2 – Multiplication Y3 – Multiplication & Division		
Spring	Number: Y2 – Division Y3 - Multiplication & Division		Measurement: Length, Height, Mass, Capacity and Temperature			Geometry: Y2 – Shape, Position and Direction Y3 – Shape and Perimeter			Number: Fractions			
Summer	Measurement: Time			Statistics		Y2 – Shape Y3 – recap as required	Y2 – Shape Y3 – recap as required	Y2 -SATS Y3 – recap as required	Consolidation and investigations			

Y4 / 5 Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value				Number: Addition and Subtraction		Y4 – Addition and Subtraction Y5 – Negative Numbers	Number: Multiplication and Division			Measurement: Length, Perimeter and Area	
Spring	Number: Multiplication and Division			Number: Fractions					Number: Decimals (Including Y5 Fractions and Percentages)			
Summer	Number: Decimals (including Y4 Money)		Measurement: Time	Statistics		Geometry: Properties of Shape		Geometry: Position and Direction	Y4: Consolidation		Consolidation	
								Y5: Converting Units & Volume				

Y6 Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value		Number: Addition, Subtraction, Multiplication and Division.				Number: Fractions					Measurement: Converting Units
Spring	Number: Ratio		Number: Algebra		Number: Decimals		Number: Fractions, Decimals and Percentages		Number: Area, Perimeter & Volume		Statistics	
Summer	Geometry: Shape, Position and Direction			Consolidation or SATs Preparation		Consolidation, investigations and preparations for KS3.						