‘My sheep hear my voice, and I know them, and they follow me.’ John 10:27

Parsons Heath Primary School Curriculum Design – Maths

‘At Parsons Heath Church of England Primary School, we are inspired by the example of Jesus, the Good Shepherd, who cares for his sheep. Our vision is embedded in the imagery of God/Jesus as the Good Shepherd. We view school as the shepherd, guiding all members through daily life. We follow the example that Jesus gave us using our Christian Values of Belonging, Kindness and Resilience. As the Good Shepherd tends his sheep, so we nurture our school community in a safe, secure environment to ensure that they thrive and fulfil their potential as good shepherds of the future.’

Our Curriculum Drivers

Active Learners We want our children to participate in a curriculum that promotes physical activity to develop collaboration, confidence and resilience. Our children will recognise the importance of physical activity on their emotional well-being.	**Independence** We want our children to be able to work both individually and as part of a team and have the resilience to take on new and difficult challenges. With this independence we want all our children to strive to reach their highest personal achievement in all aspects of schooling, community action and life-long learning.
Belonging We want our children to be proud to belong to Parsons Heath C of E Primary School. We are a church school and belong to a wider community of Christians and other faiths. We fit together as individuals, classes, a school, within the community, in the United Kingdom and the World.	**Communication** We want our children to become articulate communicators, attentive listeners and speak confidently in a variety of situations and ultimately express oneself fluently.
Happiness We want our children to thrive in a positive, safe and calm environment. Our community promotes health in body, mind and spirit. We encourage children to build resilience to be happy, successful and confident people.	

Our Christian Values

Belonging	**Kindness**	**Resilience**

Subject Statement of Intent (with links to Curriculum Drivers and Christian Values)

At Parsons Heath, it is our intent to provide our children with a strong foundational knowledge of number and mathematical concepts, within a curriculum that is based on fluency and mastery. Children are given the opportunity to build secure knowledge of the four operations, and we use manipulatives and models to develop conceptual understanding. Pupils also explore concepts such as measure, algebra and shape, as outlined in the National Curriculum. Our children are encouraged to reason, problem solve and think logically and use appropriate mathematical vocabulary. Through Assessment for Learning, we enable our children to make good or better progress within lessons, adapting content to ensure inclusion and challenge for all. We aim for our children to leave Parsons Heath Primary School with an appreciation and enthusiasm for Maths, resulting in a lifelong positive relationship with number.

Subject Implementation

As a school we have invested in the White Rose Maths Scheme. The scheme has been carefully designed to ensure it addresses the three key aims of fluency, reasoning and problem solving and follows the principles of teaching for mastery. In following the scheme, we also ensure full coverage of the National Curriculum. It is designed to support pupils to be able to perform simpler tasks so they can then move on to perform more complex tasks. For example, we cannot expect pupils to add two numbers together before they understand what each individual number represents. This provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. This ensures pupils fully understand what they are learning.

The White Rose Maths scheme is also designed to ensure progression, building upon children's prior learning and revisiting key concepts. We use 'Retrieval' sections in our lessons to help children commit mathematical concepts to memory and to further consolidate learning. As a school, we use 'Times Tables Rock Stars' to ensure that children become fluent in their recall of multiplication and division facts and children in Year 3 and Year 4 have sessions that are dedicated to mastering the recall of times tables.

In Reception and Key Stage 1, the children follow the Mastering Number programme to increase number fluency. At the end of Year 2 and throughout Key Stage 2, the children complete daily arithmetic sessions.

We follow a clear structure for lessons which is based around a 'I do, we do, you do' model. Please see our document – 'Maths the Parsons Heath Way' for our outline of lesson structure and expectations.

Subject Impact

By the time the children leave Parsons Heath Primary School they will:

- Be fluent in the fundamentals of mathematics
- Reason mathematically
- Solve problems by applying their mathematical understanding to a variety of situations

Our children will be able to:

- Use mathematical vocabulary to communicate and explain their ideas
- Independently apply mathematical concepts to new problems and situations
- Demonstrate quick recall of facts and procedures
- Show resilience when facing challenges in maths

Long Term plan

Maths	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Getting to know you! Match, Sort and Compare Talk about Measure and Patterns	It's Me! Circles and Triangles 1, 2, 3, 4, 5 Shapes with 4 sides	Alive in 5! Mass and Capacity Growing 6, 7, 8	Length and Time Building 9 and 10 Explore 3D shapes	To 20 and Beyond How many now? Manipulate, Compose and Decompose	Sharing and Grouping Visualise, Build and Map Making Connections
Year 1	Number: Place Value (within 10)	Number: Addition and Subtraction (within 10) Geometry: Shape	Number: Place value (within 20) Number: Addition and Subtraction (within 20) Place Value (within 50)	Number: Place Value (within 50) Geometry: Length and Height Measurement: Mass and Volume	Number: Multiplication and Division Number: Fractions Geometry: Position and direction	Number: Place Value (within 100) Measurement: Money Measurement: Time
Year 2	Number: Place Value Number: Addition and Subtraction	Number: Addition and Subtraction Geometry: Shape	Measurement: Money Number: Multiplication and Division	Measurement: Length and height Measurement: Mass, Capacity and Temperature	Number: Fractions Measurement: Time	Statistics Geometry: Position and Direction
Year 3	Number: Place Value Number: Addition and Subtraction	Number: Addition and Subtraction Number: Multiplication and Division A	Number: Multiplication and Division B Measurement: Length and perimeter	Number: Fractions A Measurement: Mass and capacity	Measurement: Money Measurement: Time	Geometry: Shape Statistics

Year 4	Number: Place Value Number: Addition and Subtraction	Measurement: Area Number: Multiplication and Division	Number: Multiplication and Division Measurement: Length and Perimeter	Number: Fractions Number: Decimals	Number: Decimals Measurement: Money Measurement: Time	Geometry: Shape Statistics Geometry: Position and Direction
Year 5	Number: Place Value Number: Addition and Subtraction	Number: Multiplication and Division A Number: Fractions A	Number: Multiplication and Division B Number: Fractions B	Number: Decimals and Percentages Measurement: Perimeter and Area Statistics	Geometry: Shape Geometry: Position and Direction	Number: Decimals Number: Negative numbers Measurement: Converting units Measurement: Volume
Year 6	Number: Place Value Number: Addition, Subtraction, Multiplication and Division	Number: Fractions A Number: Fractions B Measurement: Converting units	Number: Ratio Number: Algebra Number: Decimals	Number: Fractions, decimals and percentages Measurement: Area, perimeter and volume Statistics	Geometry: Shape Geometry: Position and Direction	Themed projects and problem solving