

# St Paul's CE Primary School



## Maths – Overview

*‘Through the love of God, we protect our school community. Together we trust, hope, persevere and flourish on life’s great adventures.’*

*“Without mathematics, there’s nothing you can do. Everything around you is mathematics. Everything around you is numbers.”*  
***Shakuntala Devi***

### **Curriculum Intent for Maths:**

At St Paul's CE Primary School, we believe that children should experience the awe and wonder of mathematics as they learn to solve problems; develop ways of looking at patterns; discover efficient strategies and make links between the different areas of maths. We believe maths is a universal language; it helps us to describe, make sense, investigate, understand and respect our ever-changing world. We believe all children can achieve in mathematics and teach for secure and deep understanding of concepts through fluency, reasoning and problem solving. Where possible, we try to make our maths 'real maths', making our learning and experiences relevant to everyday life. We use mistakes and misconceptions as an essential part of learning and provide challenges through rich and varied problems. At our school, the majority of children will be taught age-related content and will be supported in understanding this through corrective teaching when necessary. We aim to make maths an exciting and varied experience to enable children to flourish and achieve.

Our medium- and long-term plans and sequencing of lessons follow the White Rose mastery approach where the goal is to deepen understanding so that each lesson builds upon the last. A progression map has been provided to all teachers so that they understand where children are coming from and where they are headed.

Staff are aware and sensitive to the needs of all pupils. We ensure that all pupils have access to the curriculum and utilise a wide range of maths manipulatives that are demonstrated in the White Rose approach. Based on the mastery approach, pupils who are sound with their fluency deepen their understanding with reasoning and problem solving. Pupils who are struggling to grasp a concept will have a teacher working and checking in with them during the lesson. We also use short term interventions to aid catch up and extension activities are offered to extend learning.

In the long term we would like to continue developing a deeper understanding for the teaching staff's pedagogical knowledge and through working with a Maths Consultant in targeted work groups through the Local Area Network.

### **Implementation**

Teaching across the school is a gradual progression. EYFS start with singing and working with concrete manipulatives. There are significant links made to everyday life and can be seen through play. In KS1 there is still a large emphasis on concrete manipulatives, connections to everyday life, repetition and consolidation of basic number skills that can be applied to calculations. In KS2 calculations are secured, and there is an emphasis on reasoning and problem solving to deepen understanding. Fluency, reasoning and problem solving are usually seen within a lesson. Times tables are consolidated to the 12 times table by Year 4 who prepare for the MTC. Some manipulatives are still used for place value, decimals, weight, shape (2D and 3D).

Termly NFER assessments take place and QLA's are completed to analyse this data using in house analysis sheets and feedback to teachers. There is regular evaluation of progress through termly book and planning scrutiny meetings with time to revisit/address any gaps if necessary. Maths working walls may include specific vocabulary, good examples of work, and address marvelous mistakes.

### **Impact**

Progression is mapped out through the school using long term planning, which shows what topics are covered across each year group. Books show progress for each child over time and in lessons by: having work that is pitched at the right level, it gets increasingly challenging, there is verbal or written feedback recorded to address misconceptions. At the end of KS1 and KS2 students will be in line with national (expected and greater depth) with progress and attainment to be at least good across KS1 and KS2. Pupils will have a love of maths. Pupils will be able to have discussions and "think mathematically" and use skills such as reasoning, conjecturing, generalising and working systematically.

The maths curriculum is monitored and evaluated across the school by:

- o Learning walks and drop ins
- o Monitoring of planning
- o Book looks to ensure sequencing and progression is evident
- o Interviewing teachers and students
- o Pupil Progress Meetings