ST Barnabas CE Primary School MATHS CURRICULUM STATEMENT



Intent

At St Barnabas CE Primary School, we take a mastery approach to the teaching of mathematics. Our ethos is that all children can be successful in the study of mathematics. We do not accept that "some children cannot do maths" or that children should be limited by prior attainment. All children are challenged and encouraged to excel in maths and to develop an ability to solve problems, to reason, to think logically and to work systematically and accurately. Maths is for everyone.

We teach the skills to ensure our children are resilient learners who become life-long mathematicians. We aim to deliver an inspiring and engaging mathematics curriculum through high quality teaching using the Maths - No Problem! scheme with its spiral curriculum and mastery approach. New mathematical concepts are introduced using a `Concrete, Pictorial and Abstract' approach enabling the children to experience hands-on learning when discovering new mathematical ideas and allowing them to have clear models and images to aid their understanding. Arithmetic fluency and basic maths skills are practised daily to ensure key mathematical concepts are embedded and that children can recall this information. In all lessons, children are encouraged to reason, to communicate their ideas and to notice the links between mathematical topics

Implementation

At St Barnabas:

- Arithmetic fluency is taught daily, focusing on key mathematical skills including place value and times tables, the four operations and fractions
- The NCETM Mastering Number programme is used from Reception to Year 2 to strengthen the understanding of number and fluency with number facts.
- We use the Maths No Problem! scheme which is a maths mastery approach based on Singapore maths



- Same-day interventions are used where possible following assessment throughout lessons to support children and to ensure they are ready for their next maths lesson
- <u>The Concrete, Pictorial and Abstract (CPA) approach</u> is used to guide children through their understanding of mathematical processes. All children when

introduced to a new concept for the first time are taught to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.

- Children are taught in mixed ability whole class lessons with targeted differentiated small groups where appropriate
- Links are made explicit across different areas of maths and across the wider curriculum wherever possible
- There is a strong emphasis on questioning and maths talk: this enables the children to explore topics together as a class as well as verbally developing reasoning skills. Key questions and stem sentences are used during maths lessons to enhance these skills.
- Written questions are chosen carefully to consider both conceptual and procedural variation.
- Our Calculations Policy sets out the progression through each of the four operations with worked examples.

Impact

Formative assessment takes place on a daily basis and teachers adjust their short-term planning accordingly to meet the needs of their class. At the end of each topic, Maths-No Problem! chapter consolidation activities provide an assessment opportunity for the unit.

Leaders monitor the effectiveness of teaching through learning walks, book scrutinies and pupil interviews. Summative assessment takes place at the end of each term using National Foundation for Education Research (NFER) tests and children's progress and attainment are discussed by teachers at termly Pupil Progress Meetings as well as during phase meetings.

As a result of our maths teaching at St Barnabas you will see:

- Confident children who can all talk about maths and their learning and the links between mathematical topics.
- Lessons that use the Maths No Problem! resources and approach to secure good understanding.
- Different representations of mathematical concepts.
- Learning that is tracked and monitored to ensure all children make good progress.
- Children who enjoy and are engaged in their maths lessons.
- Confident mathematicians who can make links between different areas of maths and apply their skills in different contexts.
- Children who are ready for the next stage of their learning.

