

St Peter's CE Primary School



Mathematics Policy

‘For the children to realise their God-given gifts and talents, and grow following the example of Jesus.’
Matthew 19:26- But Jesus looked at them and said, “With man this is impossible but with God all things are possible”

November 2021

Mathematics teaches children to make sense of the world around them through developing their ability to use number, calculate, reason and solve problems, and understand relationships and patterns in number and space in their everyday lives. The mathematics curriculum should be engaging, inclusive and progressive, following the Mastery approach and following a 'concrete – visual – abstract' teaching sequence. It should also be flexible, motivating all pupils, thus encouraging every child to be successful.

Aims

- To promote a confident, positive attitude towards the learning and use of mathematics, making it an enjoyable experience
- To provide pupils with sufficient mathematics to meet their needs in other areas of the curriculum
- To enable pupils to appreciate the importance of mathematical knowledge in the context of science, technology and the modern world
- To enable pupils to develop greater communication skills, using mathematics as an aid
- To encourage pupils' mathematical curiosity through problem-solving
- To provide pupils with the opportunities and skills to reason about their mathematical knowledge
- To promote a practical understanding of the ways in which information is gathered, presented and used
- To enable pupils to develop the mathematical skills and understanding required for adult life
- To understand the importance of mathematics in everyday use, especially in relation to essential life skills, such as telling the time and understanding money
- To provide all pupils with the opportunities to 'master' the mathematical skills, with a depth of understanding, and achieve good standards of mathematics.

Teaching and Learning

Maths lessons follow our six non-negotiable elements: progress, pace, differentiation, pupils know what they are learning, engagement, and quality questioning. Staff follow the Mastery approach to Mathematics, teaching the skills using a 'concrete – pictorial – abstract' sequence. Children move from using mathematical equipment and a practical approach, to representing the same ideas using pictures and diagrams, and then applying these skills in an abstract manner. Opportunities are made for variation, and for children to tackle activities in a wide variety of situations, allowing them to see problems in a number of different ways. This encourages fluency and a depth of understanding, whereby pupils can secure each skill.

In addition to this, pupils undertake ten minutes mathematics daily, which develops their skills with multiplication facts and their fluency and speed of recall. The activities are varied and promote a secure understanding of the times tables facts.

Members of staff also aim to develop pupils' ability to reason about their learning, ask questions and explain themselves, using a thorough and deep understanding of mathematical concepts. The blocking of units and resequencing means that the objectives covered are covered in depth and enable children to embed their learning into their long-term memory.

In order to secure consistency and progression across year groups, the skills are taught, where appropriate, using four key models –

*Dienes

*Number lines

*Arrays

*Bar models (See Calculation Policy)

Teachers are supported in all key stages by Learning Support Assistants (LSAs), whose contribution is determined by the teacher. Weekly interventions are organised to support those children who need further reinforcement of skills and are run by LSAs or teachers. These are reviewed half-termly, in terms of progress and impact. In addition, immediate interventions (daily) by teachers and LSAs target those children who need support to secure a skill, in order for them to build on this learning successfully the next day.

The pupils are taught in sets so that the work can be even better tailored to the pupils' needs.

Provision for those pupils deemed gifted and talented, in mathematics follows the school's Gifted & Talented Policy.

Homework

Homework will be set weekly across all year groups and connect with and reinforce the teaching which has taken place during that particular week. This may be set on paper or on the MyMaths program. Multiplication tables learning is also set, as appropriate, either on paper or with Times Tables Rock Star program.

Marking, Assessment and Recording

Assessment for Learning is fundamental to raising standards and enabling children to reach their potential. Assessment takes place daily, using a range of strategies, such as marking and feedback of work and verbal discussions with children. This information will inform subsequent planning and next steps in teaching and learning. Pupils' work will be marked in line with the Feedback Policy.

Pupils are formally assessed three times a year on their reasoning and arithmetic skills, using a wide variety of assessment materials, provided by the Mathematics Subject Leader. The assessments are linked to the precise topics that we teach, then in the summer term the pupils are assessed on the whole year's learning. Assessments are always carried out in the penultimate week so that misconceptions can be dealt with.

The results of these are recorded on our tracking program, SPTO, and tracking ladders and analysed by the Senior Leadership Team, the Mathematics Subject Leader and individual teachers, in order to inform next steps, planning and intervention groups.

Last Review: November 2021

Next Review: November 2025