St Peter's R.C. Primary School

Mathematics Policy

Policy	Mathematics Policy
Date	September 2019
Date of review	September 2020
Signed Chair of Governors	George Lopez
Signed Headteacher	Clare Scott

We, the family of St Peter's, united in faith by God strive to learn and grow together to be the best we possibly can every day.

Mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables them to understand and appreciate relationships and pattern in both number and space in their everyday lives. All pupils should have access to the power and beauty of mathematics and hence enable them to think logically and imaginatively. To become numerate is a life skill and will equip children to lead a fulfilling and successful adult life.

Rationale

At St Peter's RC Primary School we aim to inspire all children to reach their full academic potential. In Mathematics, we ensure we have a curriculum that is fully inclusive for all children which:

- Develops children's fluency, reasoning and problem solving skills – all of which are inextricably linked.
- Develops children's knowledge and understanding of mathematical concepts whilst enabling them to practise and hone skills and methods.
- Enables them to think critically and communicate their understanding to others.
- Gives them opportunities to apply learned mathematical skills, in different contexts.
- Provides opportunities to develop problem solving skills useful for maths and in other areas of the curriculum.

Aims

- To provide consistent high quality teaching in all areas of mathematics.
- To enable all children to access the curriculum at an appropriately differentiated level.
- To enable every child to feel comfortable to explore their understanding of maths in a safe, enjoyable and challenging learning environment.
- To promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion.
- To develop logical thinking and reasoning skills through a natural curiosity and investigative approach.
- To understand the importance of mathematical skills in everyday life.
- To encourage the application of mathematical skills in other curriculum areas.
- To develop the ability to solve problems through decision-making and reasoning in a range of contexts.

By the time children leave St Peter's at the end of year 6, we aim for them to be able to:

- Relate the role of different types of mathematics within the real world.
- Investigate to test mathematical ideas in an increasingly systematic way.
- Discuss and debate real world problems and form conclusions to consolidate understanding.
- Explain their thinking clearly.
- Present the results of their work in appropriate and varied ways.
- Develop the ability to work both independently and in collaboration with others.

Implementation

The Mathematics Curriculum is delivered using the National Curriculum, supported by the Collins Primary Maths Scheme. The National Curriculum provides the core objectives for each year group, whilst Collins provides an interactive skeleton for delivery.

The school uses a variety of teaching and learning styles in mathematics lessons. Our main aim is to develop children's knowledge, skills and understanding in mathematics. During the mathematics lesson, children may experience whole class shared/modelled mathematics skills, or guided group work, mental starter activities and a plenary to check and assess understanding. They have the opportunity to experience a wide range of resources such as number lines, number squares, digit cards and other small apparatus to support their work. Children and teachers use ICT in mathematics lessons where it will enhance their learning, and to assist with modelling ideas and methods. Wherever possible, children are encouraged to use and apply their learning in everyday situations.

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. Throughout lessons, a range of strategies are used to ensure appropriate leveled learning. Children are asked to undertake independent work but other strategies are also utilised. In some lessons group work is undertaken, and in other lessons, children are organised to work in pairs on open-ended problems or games. We use classroom assistants to support some children and to ensure that work is matched to the needs of individuals.

Children are set a weekly mental maths homework task in order to strengthen their learning in mathematics. At St Peter's we use CGP Maths homework books, which is proven to raise children's attainment in maths.

Mathletics

We are subscribed to the online mathematics resource, Mathletics. Children from reception to year 6 have log in details and access it from both home and school. Teachers set work for individual pupils in school so that Mathletics will be accessed at the appropriate level.

Planning

At St Peter's, we follow the New Collins Primary Math Scheme. Teachers use the scheme to facilitate their weekly maths planning. Maths plans include key vocabulary, starter, objectives, main teaching, and assessment for learning. Differentiation and provision is to be explicitly detailed.

Marking

Teachers mark mathematics in line with the school Marking Policy. Children must be given time at the beginning of each lesson to reflect on next steps of learning and assess any errors from the previous lesson.

Assessment and Target Setting:

- Work will be assessed in line with the Assessment Policy.
- Information from assessment tasks will be used to inform planning.
- AfL and individual target sheets will be used to closely monitor progress.
- Each child has their own maths targets and take an active role in working towards these throughout the year.

We assess children's work in mathematics from three aspects (long-term, short-term and medium-term). We make short-term assessments, which we use to help us adjust our daily plans. These short-term assessments are closely matched to the teaching objectives and learning outcomes.

We make medium-term assessments to measure progress against the key objectives, and to help us plan the next unit of work. We use termly assessments as a way of recording children's progress in objectives covered across that specific term.

We make long-term assessments towards the end of the school year, and we use these to assess progress against school and national targets. We make long-term assessments with the help of end of year tests and teacher assessments. National tests for children in years 2 and 6 are used, plus the optional national tests for children at the end of years 3, 4 and 5. We also make annual assessments of children's progress.

Inclusion:

We aim to provide for all children to enable them to achieve as highly as possible in mathematics, according to their individual abilities. We will identify those who are under-achieving and take steps to improve their attainment. Gifted children will be identified and challenged where appropriate. At St Peter's School we enjoy teaching mathematics to all children, whatever their ability. We provide a broad and balanced education to all children and offer learning opportunities that are matched to the needs of individual children. Work in mathematics takes into account the targets set for individual children in their Individual Education Plans (IEPs).

Intervention Programmes

Booster and extension classes are offered to students in both years 2 and 6. These are aimed at students who are struggling with maths and also those who are doing well to extend them even further. 1stClass@Number 2 is also offered to a selection of Year 3 students. We also offer a variety of in-class interventions throughout the school such as Plus1 and Power of 2.

Monitoring and Review

Monitoring of the standards of children's work and of the effectiveness of teaching in mathematics is the responsibility of the mathematics co-ordinator. The work of the mathematics co-ordinator also involves supporting colleagues in the teaching of mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject within the school. A named member of the school's governing body is briefed to oversee

the teaching of numeracy. This governor meets regularly with the subject leader to review progress.