



St Paul's Catholic Primary School

Maths Policy



St Paul's Catholic Primary School's Mission Statement

From the youngest to the oldest, we are enabled to flourish in God's love, grow in faith and, with the guidance of the Holy Spirit, work to fulfil our God-given potential. Our school family works together to support and challenge one another; each individual is valued and encouraged to appreciate their own unique worth and supported to achieve academic success.

St Paul's reminds us: 'Let all that you do be done in love'

CONTEXT

The school's policy for Maths is based on the 2014 National Curriculum for Mathematics for Key Stage 1 and Key Stage 2.

INTRODUCTION:

Mathematics equips pupils with a uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways. Mathematics is integral to many aspects of daily life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them for life. This policy outlines the teaching, organisation and management of the mathematics taught and learnt at St Paul's Catholic Primary School and should be viewed in conjunction with the school's calculation policy. The implementation of this policy is the responsibility of all the teaching staff. Our aim at St Paul's is to make maths learning fun, engaging and accessible for all learners. In September 2020, we implemented Power Maths across the school. At the heart of Power Maths is the belief that all children can achieve. It's built on an exciting growth mindset and problem-solving approach. By following a mastery approach, our children will move along their learning journey in small, well thought out steps, so that each day their learning builds upon their prior knowledge. All ages of learners will use physical resources to gain a thorough understanding of new concepts before moving onto pictorial and finally abstract representations.

INTENT

At St Paul's we aim to teach our children a rich, progressive, and sequential Maths curriculum which develops their ability to calculate, reason and solve problems, enabling them to make sense of the world around them. We aim to provide high quality mathematical learning experiences to develop children's mathematical skills and understanding. Children are encouraged to explore Maths through practical experiences and investigative work, building a sense of enjoyment and curiosity about the subject. We aim to give all our pupils, particularly the most disadvantaged, the knowledge, experiences and 'cultural capital' necessary to become educated citizens and to succeed in life

The National Curriculum for Maths aims to ensure that all pupils:

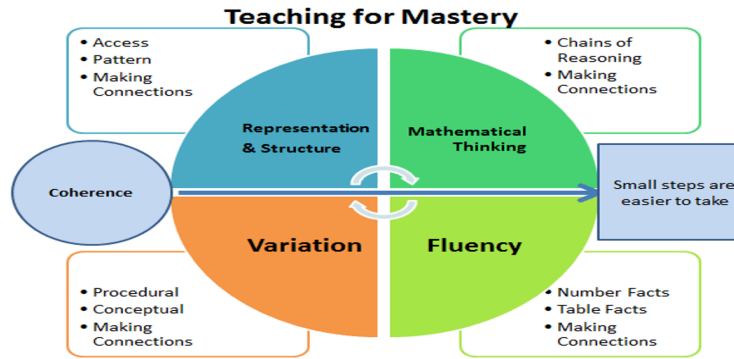
- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument,

justification or proof using mathematical language

- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

IMPLEMENTATION

At St Paul's we believe that all children can be successful in the study of mathematics. We use mixed ability groupings and do not group children by prior attainment, except for where significant gaps in learning exist. This is central to our Mastery approach to teaching and learning.



To achieve mastery, our expectation is that through quality first teaching, all our children will successfully access the learning. We expect most pupils to move through the programmes of study at broadly the same pace. However, for children who lack fluency, we provide opportunities to consolidate their understanding through additional scaffolding (this could be through adult support, concrete resources, or adapted work).

Across the school daily Maths lessons are taught where children:

- practice fluency and the ability to recall and apply knowledge accurately and quickly
- develop reasoning skills by following a line of enquiry, generalising or justifying proof using mathematical language
- develop competence in solving increasingly complex problems.

Early Years Foundation Stage

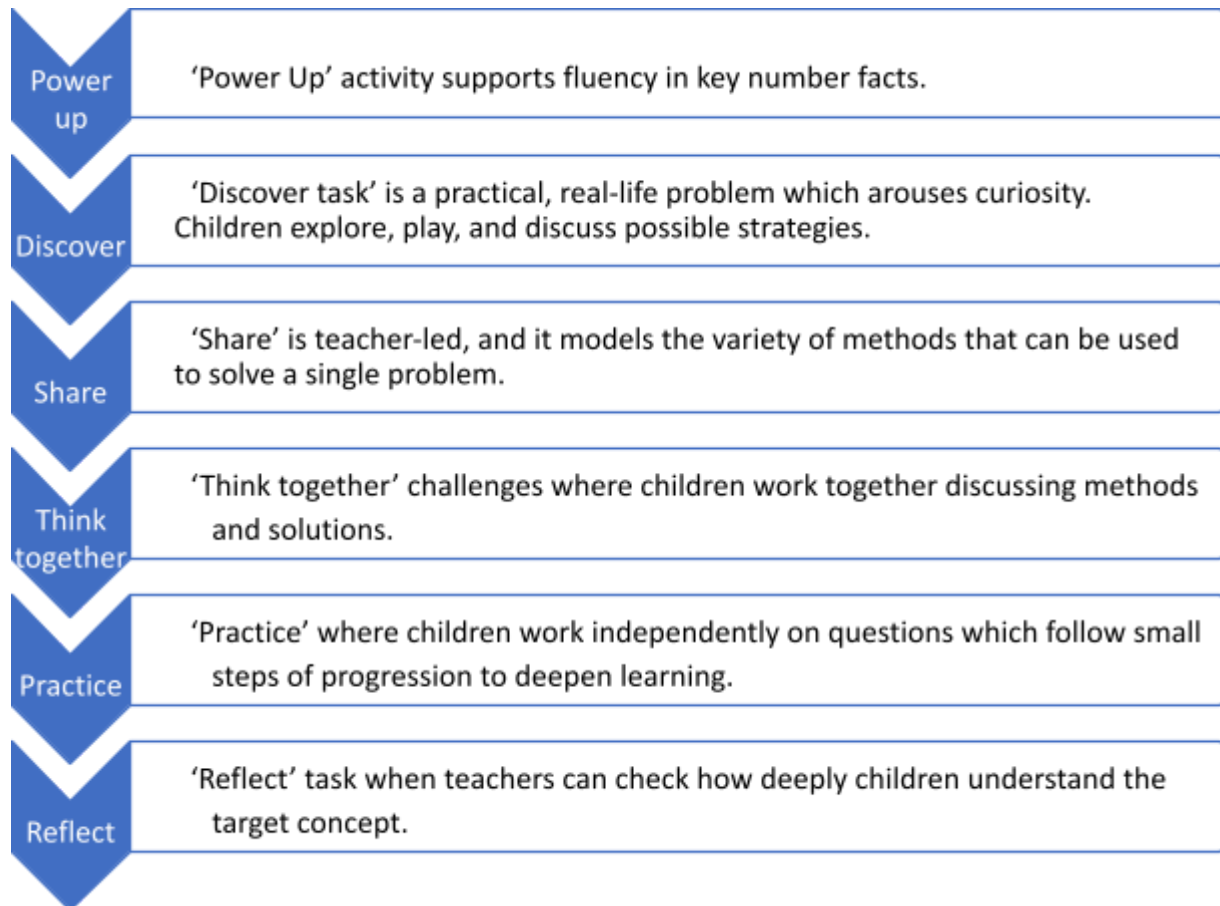
In EYFS, teachers use the Power Maths schemes of learning. These are matched to the National Curriculum Early Learning goals. In the Early Years, Maths is a specific area of learning in the Early Years Curriculum. Play based opportunities are carefully planned and provided by staff. The learning environment both inside and outside, is set up to create a stimulating space where children feel confident, secure, and challenged in their mathematical thinking. Learning experiences provide children with the opportunity to explore, use their senses and become independent in their mathematical learning. Enhanced provision to meet the children's next steps can be seen in the provision.

Years 1-6

In Years 1-6, we follow the National Curriculum, using the Power Maths schemes of learning for curriculum planning to ensure progression across the year groups. It is a scheme of work recommended by the DfE and NCETM (National Centre of Excellence for the teaching of maths), which promotes a mastery approach to mathematics. It builds every concept in small, progressive steps and is built with interactive, whole class teaching in mind. It provides the tools needed to develop growth mindsets, check understanding throughout lessons and ensure that every child is keeping up. The Power Maths curriculum covers units of learning in Number, Measurement and Geometry, Statistics, Algebra and Ratio and Proportion.

Power Maths

At the heart of Power Maths is a progressive lesson sequence designed to empower children to understand core concepts and grow in confidence.



Throughout each stage of the lesson, teachers check on children's understanding through high quality questioning enabling misconceptions to be quickly addressed.

In addition, we use White Rose, NCETM mastery resources and other resources such as IXL to challenge our more able children and deepen their understanding.

Numbots

Numbots are used both at home and in school by children in EYFS and KS1 to practice their basic number bonds and improve their addition and subtraction skills.

Times Tables Rock Stars (TTRS)

TTRS is used by children in Years 2-6 to practice their quick recall of times tables. It is an online resource which children can also access at home.

From years 1 – 6, there is a big focus on the development of multiplication facts and fluency. This forms part of the homework and also the independent Maths provision in all classes, supporting children to know more and remember more.

Rapid Recall

At St Paul's we recognise how important it is for children to have a quick recall of their Key Instant Recall Facts (KIRFs). They include facts such as number bonds and times tables. They are particularly useful when calculating, adding, subtracting, multiplying and dividing but also underpin many other areas of Mathematics. . For example, in order to find equivalent fractions in Year 6, children need to be able to rapidly recall their knowledge of common multiples (numbers in particular times tables). When children have quick access to a bank of facts, which incur little cost to working memory, they have more capacity to think about more complex problems that draw on these facts. All children are baseline in September.

Club 99

99 Club is a mental-oral starter at St Paul's School which aims to raise standards in maths through encouraging pupils to improve their mental calculations when attempting quick-fire multiplication and division problems. The idea is that with repeated practice, the scheme should result in increased speed and confidence when tackling mental maths problems, without relying on written workings and methods. All pupils will begin at the 11 Club and work their way up, having one opportunity per week during the start of one of their maths lessons to answer all calculations at their current level unaided and within the allotted time of five minutes. If all of the calculations are answered correctly twice in a row, the child moves up to the next level! All children are baseline in September.

IMPACT:

The impact of our maths curriculum is that children become confident and successful learners' who can achieve regardless of their starting points. Assessments show that maths knowledge and skills are developing, and children can apply their skills and knowledge to more challenging problems. Children across the school have positive attitudes towards their learning in maths and enjoy maths lessons. Children make progress in maths from their starting points on entry and are closing the gap towards attaining national expectations. They are given opportunities to enable them to achieve the greater depth standard. It is our aim that all cohorts will achieve in line with or above national expectations and that they make good progress. The impact of our mathematics curriculum is that we establish an environment where it is OK to be 'wrong' because the learning journey towards finding solutions and confidently applying new knowledge and understanding is most important.

Assessment

Assessment for learning is a continuous process throughout the planning, teaching and learning process. At St Paul's we assess maths in the following ways:

- Daily formative assessment which is used to inform next steps planning.
- In EYFS, observations are recorded in children's learning journals and next steps are identified.
- Times tables fluency progress checks/Rapid Recall checks/99 club.
- Power Maths end of unit checks
- NFER termly data

Equal Opportunities

At St Paul's we are committed to providing a teaching environment which ensures all children are provided with the same learning opportunities regardless of social class, gender, culture, race, special educational need or disability. Teachers use a range of strategies to ensure inclusion and also to maintain a positive ethos where children demonstrate positive attitudes towards others. Support for specific individuals is well considered and planned for, with consideration given to how greater depth and further challenge can be provided for and demonstrated by children who require further challenge.

We recognise that there are children with different historical abilities in all classes and we provide suitable learning opportunities for all children. We achieve this by:

- providing low threshold, high ceiling opportunities that can be open-ended with a variety of possible responses;

- setting tasks with increasing depth of learning and challenges;
- providing resources of different complexity according to the conceptual understanding of the child;
- using additional adults to support the work of individual children and groups of children.

Mathematics Subject Leader

RESPONSIBLE TO:

The Headteacher and governing body.

MAIN DUTIES

To liaise closely with colleagues in order to:

1. To be a role model and demonstrate good practice.
2. Keep the written policy document up to date and keep under review the scheme of work for Maths in line with the requirements of the National Curriculum.
3. Encourage and support staff in the implementation of the agreed procedures and closely monitor the progression of activities and consistency of approach across both year groups and Key Stages.
4. Manage the financial allocation to Maths effectively and purchase and organise all resources, ensuring they are readily available and well maintained.
5. Monitor standards in Maths across the school through classroom observation, learning scrutiny, teachers' planning, and discussion with pupils and data analysis.
6. Contribute to whole-school curriculum improvement by advising the SLT and Governors' Curriculum Committee on areas of strength and weakness and identifying clear targets to improve and sustain pupil achievement.
7. Lead the teaching of Maths by example and afford colleagues the opportunity to share in good practice. Lead professional development in Maths in accordance with staff development needs and support and guide staff by encouraging the sharing of ideas.
8. Be aware of national development in Maths through reading relevant materials and attending courses when appropriate
9. Continue to attend and support maths hub groups in order to facilitate continuity of approach across all local schools.
10. Further parental involvement and knowledge by facilitating support and advice through parent meetings and disseminating relevant information.

11. Submit regular feedback on standards in Maths to the SLT.
12. Work to achieve equality of opportunity throughout the school.

This policy should be read in conjunction with the following:

Early Years Policy

Curriculum, Teaching and Assessment Policy

Fluency expectations

Display expectations

Power Maths - White Rose Calculation Policy

New Policy Written: August 2024

Policy Written by J Caves (Subject Leader)

Policy approved by HT: J Hensman (Head Teacher)