

Powick Church of England Primary School



Mathematics Policy

Reviewed: September 2024

Review Date: September 2025

Mathematics Policy Intent

Through Mathematics children learn how to make sense of the world around them, by developing their ability to use number, calculate, reason and solve problems. Mathematics helps children to understand relationships and patterns in both number and space in their everyday lives. The Mathematics curriculum should provide breadth, be relevant and accessible to all children. It should encourage a deeper understanding in all children through a process of enquiry and investigation.

Aims

General

To ensure all staff, children, parents/carers and Governors are aware of the aims for learning and teaching Mathematics at Powick C of E Primary School and that these are consistently applied.

School Staff

- To promote a positive attitude towards the learning and use of Mathematics by making it an enjoyable, active and collaborative experience.
- To increase confidence of all pupils when working with numbers and the number system.
- To foster a belief in every child, that with an open growth mindset, great progress in Mathematics can be achieved.
- To promote the ability to solve problems through connecting ideas/making links, decision-making and applying their mathematical skills in a range of contexts, including other subjects such as Science and Geography.
- To promote mathematical reasoning by following a line of enquiry, developing an argument and making justifications using mathematical language.

Children

- To develop an enjoyment of learning through practical activity, investigation, exploration and discussion.
- To develop confidence and competence with numbers and the number system.
- To develop the ability to solve problems through connecting ideas/making links, decision-making and applying their mathematical skills in a range of contexts, including other subjects such as Science and Geography.
- To develop the ability to reason mathematically by following a line of enquiry, developing an argument and making justifications using mathematical language.

Parents and Carers

- To be understanding and supportive of our aims in teaching Mathematics.
- To attend and contribute to Parent Consultation Meetings.
- To support their children with Mathematics homework, including the importance of learning their times tables off by heart.
- To praise their children for the good things that they do in Mathematics.
- To communicate and work with school whenever further support is needed to develop their children's mathematical skills and understanding.
- To make mathematics part of children's everyday lives.

Governors

- To monitor Mathematics through the teaching and learning committee.

Implementation of the Mathematics Policy

ELG: Number

By the end of the Foundation Stage, children at the expected level of development will:

- ✓ Have a deep understanding of number to 10, including the composition of each number;
- ✓ Subitise (recognise quantities without counting) up to 5;
- ✓ Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns

By the end of the Foundation Stage, children at the expected level of development will:

- ✓ Verbally count beyond 20, recognising the pattern of the counting system;
- ✓ Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- ✓ Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Key Stage 1 and Key Stage 2

- Teachers use the White Rose Maths scheme alongside a wide range of other appropriate resources to support and consolidate concepts. Mathematics is taught to a mastery level (aligned with the National Curriculum 2014) ensuring that all children are challenged at an appropriate level with support when required.
- The White Rose Hub Mathematics scheme has full coverage of the National Curriculum 2014 objectives for each year group and is taught in blocks.
- Assessment of Mathematics, will be supported by the termly NTS Maths and end of unit White Rose assessments.
- Teaching and learning match the needs of the class and the individuals within it, using Concrete, Pictorial and Abstract representations which should be displayed on the Maths working wall.
- All year groups to have a daily 10-15 minutes Maths On Track (**M.O.T.**) session when prior learning is revised and consolidated.
- All year groups to have a daily Maths lesson of new learning with an appropriate learning objective and clearly defined success criteria.
- Daily Maths lesson to include opportunities for all children '**To Do**' (varied fluency), '**To Prove**' (reasoning) and '**To Solve**' (problem solving).

Mastering Number

Children in Reception and Key Stage 1 receive daily Mastering Number sessions to secure firm foundations in the development of good number sense for all children in these year groups. The aim over time is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number. Attention will be given to key knowledge and understanding needed in Reception classes, and progression through KS1 to support success in the future. Mastering Number sessions will form the whole class input sessions for Reception and M.O.T. sessions for Year 1 and 2.

Resources

- The use of Mathematics resources is integral to the concrete – pictorial – abstract approach.
- A variety of good quality equipment and resources is readily available, both tangible and ICT based (including new Promethean boards), to support teaching and learning.
- Standard resources are located in individual classes including number lines, multi-link cubes, dienes, hundred squares, shapes and Numicon. Other shared resources are centrally stored.
- Teachers to use the school grounds as an outdoor classroom when possible, for example, when teaching length, area or perimeter.

Calculation Policy

- Please refer to our Calculation Policy in staff share and on the school website.

Homework

- MyMaths and Times Tables Rock Stars homework is set for children in Years 1-6 by the class teacher on a regular basis.
- A Maths activity is always included in the termly project homework.
- Other Maths work can be set when appropriate.

Parents/Carers

- The School aims to involve parents/carers in their children's learning as much as possible and to inform them regularly of their child's progress in Mathematics.
- Parents/carers have the opportunity to meet with their child's class teacher at least twice a year at Parent Consultation Meetings and receive a written report at the end of the year.
- Parents/carers are encouraged to speak to their child's teacher at any point during the year, either informally or by making a specific appointment to discuss anything to further support them at home.
- Information about their child's standards, achievements and future targets in Mathematics is shared with parents/carers at these times and also ways that parents/carers may be able to assist with their child's learning.
- Parents/carers are encouraged to support their children with homework.
- School also provides an opportunity for parents/carers to learn about what their child is learning and the way their child is being taught through a regular Maths FLIP.

Subject Coordinator

- The role of the Subject Coordinator is to provide professional leadership and management in Mathematics in order to secure high quality teaching, effective use of resources and high standards of learning and achievement for all pupils.
- The Subject Coordinator will attend meetings with The DOWMAT Maths Hub and

GLOW Maths Hub to share ideas and resources, feeding back key information to the staff.

- The Subject Coordinator will train and coach staff on Mathematical pedagogy within the school and keep up-to-date with developments from a county and national level.
- The Subject Coordinator has regular discussions with the senior leaders about learning and teaching in Mathematics and provides data and a subject overview of the strengths and weaknesses of Mathematics within Powick C of E Primary School on a termly basis.