

St Anne's Catholic Primary School

Maths Policy 2017 (February)





St Anne's Catholic Primary School



Loving & learning together in harmony with Christ

'Love one another, just as I have loved you.'

(John 13:34-35)

The above mission statement is built upon our core values that are embodied by all at St. Anne's. We refer to them as the 5Rs and our principles by which we live out our values in all aspects of our school life are shared below:

Responsible: We take care with everything and we take control of our behaviour; accepting the consequences of our good or bad choices. We show initiative and we develop our understanding of how we can contribute positively to those living and working close to our school and to those who live in other parts of the world.

Reflective (KS1)/Respect (KS2): We learn how to treat others positively and think about our own actions; being mindful of justice and peace. We distinguish right from wrong and we learn to respect rules, locally and worldwide. We learn about different cultural traditions and we appreciate and celebrate the uniqueness of us all, everywhere.

Resilient: We learn to persevere even if our work is difficult; we do not give up. We adapt to different situations, make positive responses and always bounce back for more. We accept that aspects of life are not easy, but we learn to continue to participate fully in and contribute positively to our lives today. We want to challenge our thinking and change outcomes for the better.

Ready: We are prepared mentally and physically for learning. We are eager to learn new things and are ready to help others. We develop our self-knowledge, self-esteem and self-confidence over time. We want to be the very best that we can be, whilst maintaining mutual respect for all.

Resourceful: We can use lots of different things to help us learn. We also have the ability to find quick and clever ways to overcome difficulties. We learn how to find a better way to solve problems and address issues. We use the gifts that God gave us to challenge and improve ourselves day by day.



The Nature of Mathematics

Mathematics at St Anne's Catholic Primary School is promoted as a tool for everyday life.

We aim for pupils to have a positive attitude towards Mathematics, enjoying the challenges that Mathematical problem solving can create. Pupils at St Anne's will be able to solve problems, reason, think logically and work in a systematic way when faced with challenges, always endeavouring to work with accuracy by initially estimating and then checking results, questioning outcomes as necessary.

Within the Early Years Foundation Stage (EYFS), we aim to ensure that pupils seek patterns and make connections through finding out about and working with numbers, counting, shapes, space and measures. Children will use their developing understanding to solve problems, generate new questions and make connections across other areas of Learning and Development.

We encourage pupils to work collaboratively with others as well as independently across Key Stage 1 and 2 building on the work already started in Foundation Stage.

We aim to ensure that our pupils have a secure mathematical understanding and knowledge of concepts and skills, and are able to use and apply these in a range of everyday contexts and across the curriculum.

The school uses the programmes of study from the National Curriculum 2014 underpinned by the 3 pillars; fluency, problems solving and reasoning mathematically. This ensures that children are accessing and mastering an age-related curriculum.

Breadth of Study

Our mathematics curriculum aims to ensure that pupils are given opportunities to:

- Engage in Mathematical games and practical activities that will support learning.
- Problem solve regularly so that they are confident and competent with approaching unusual mathematical tasks and questions.
- Develop independence through open tasks as well as closed tasks that will allow pupils to practise skills.
- Work with a range of mathematical representations to explore key concepts.
- Talk and discuss their mathematics through appropriate group, paired and whole class discussions.

Develop a range of arithmetical skills and knowledge of mathematical facts in order to work fluently and with pace.



Scheme of Work

EYFS follow the 'Development Matters' Document to guide the teaching and learning of our youngest children at the start of their maths journeys. The key skills and maths facts are taught through play and exploring using lots of different equipment through continuous provision and objective led guided sessions with our Foundation Stage staff.

Across Key Stage One and Two Maths- No Problem textbooks are used as a key tool to ensure that all pupils are accessing the correct level of learning and challenge that is outlined in the 2014 National Curriculum document. The textbook focusses on using varied questions on the same topic to push for deeper understanding and that a Mastery curriculum is on offer to all pupils.

The White Rose Maths Hub provides detailed long term and medium term planning documents for each term for every individual year group ensuring appropriate coverage of all topics. Assessment documents specially created for each year group from Year 1 to Year 6 will be used at the end of each term in line with the 2014 National Curriculum.

Please see our school Calculation Policy which outlines the formal methods taught for each of the four operations.

Cross-curricular

At St. Anne's, we endeavour to ensure that our children view maths as a transferable skill rather than an isolated lesson. Teachers identify regular opportunities to integrate mathematics across the curriculum when medium term planning for the foundation subjects and through thematic planning.

Appropriate links are made to mathematics predominantly through science, geography and P.E.

SEN, Differentiation and Vulnerable Groups

A range of interventions are offered across the school for mathematics. Beginning with high quality whole class input during daily maths lessons to group support to individual 1:1 learning. Group support involves helping children 'catch up' with concepts that they have missed or that they are not confident to use and apply independently. Other groups consist of 'keeping up' which are instant interventions if pupil have not grasped a concept during a maths lesson or need extra consolidation. Some pupils also receive 1:1 support focussing on rapid recall of known facts e.g. number bonds, multiplication facts etc.



Pupils' Records of Work

Key Stage Two children have 'Reasoning books' which have blank pages and are used to record their mathematical thinking, personal responses to calculations and explore problem solving tasks.

Squared books are introduced at the relevant stage within a child's learning. A child is not expected to record in squared books if it is unlikely to support their mathematical understanding. These are used to support with presentation and understanding of calculation particularly when introducing partitioning, empty number lines and positioning of numbers on a number line.

Relevant photographs and observations of individual pupil Mathematical learning are recorded by teachers and additional adults in the children's Mathematics books.

We expect the highest standards of presentation in all recording of work from pupils.

All mathematics work is completed in pencil. Mistakes are crossed out using 1 single line. All lines are drawn using a ruler. All children are required to record the short date at the top of each piece of work along with the Learning Intention for the lesson. When working in squared books, children will record 1 digit per square. This does not apply when writing and pupils should write in their normal style.

Marking

All Mathematics work is marked using the guidelines outlined in the schools marking policy.

When marking practice exercises staff will use a pink highlighter to identify if a child is correct or a green highlighter so show an error or where further work is required by the child. Staff will follow up mistakes/errors/ misconceptions by recording comments with an appropriate model or scaffold that moves the learning forward. Children are encouraged to respond appropriately to teacher comments and academic guidance during target time or at an appropriate stage identified by their class teacher.

Peer and self-assessment is used for the marking of some informal practice exercises at Key Stage 2.

Assessment and Record Keeping

A range of tracking is carried out by staff in order to assess that pupils are making sufficient progress. Summative assessment is used on a day to day basis during lessons to identify areas of weakness and possible interventions that maybe required. Formative assessments are carried out at the end of term by each class and the results are analysed to identify any gaps in teaching and learning which are then addressed accordingly.



Target Tracker is used throughout the school which enables all strands of maths to be tracked and highlight gaps or areas that need further attention to be identified. It is also used to set targets and to outline where the learning journey should go next.

At the end of both Key Stage One and Two pupils take part in National SATs tests which are made up of two different papers. The first being arithmetic, which focusses on the four rules and the ability to use known maths facts fluently. The second focuses on reasoning and the ability to apply mathematical understanding to everyday life. These are both timed and pupils are given opportunities across all areas of the curriculum to apply their knowledge and rehearse test techniques in order for them to gain confidence and be able to achieve their potential.

Staff take part in Learning Enquiry Meetings each half term during which various pupils are identified and key actions are put in place to assist any areas of concern.

Monitoring, Evaluation and Reporting (MER)

The Subject Leader ensures adherence to the agreed policy and scheme of work through the regular monitoring of pupils work and planning. The Subject Leader completes reports that are used to inform the SEF and reports annually to Governors on the standards of teaching and learning in Mathematics and attainment of pupils at EYFS, Key Stage 1 and 2.

The quality of teaching and learning is monitored by the Headteacher/SLT/SL through regular learning walks, pupil voice, book looks and lesson observations. Feedback from any monitoring is given to staff individually and whole school actions are collated into a summary report by the Subject Leader which is also shared with staff.

Additional Monitoring activities are identified within the Mathematics action plan and MER Calendar. These are focussed directly on measuring the impact of actions within the action plan against the agreed success criteria.

Staffing/Resources

Children have access to a range of mathematical resources within the classroom across all Key Stages that they are encouraged to access independently.

A wide range of mathematical representations are used to support mathematical learning and children are encouraged to use these independently to support thinking, moving between the concrete, pictorial and abstract as appropriate.

A mathematics learning wall within each classroom is a reference point for children, identifying the sequence of learning that has taken place or key facts/information that they can use to support and scaffold their Mathematical thinking.



St Anne's Catholic Primary School

Loving & learning together in harmony with Christ

'Love one another, just as I have loved you.'

(John 13:34-35)



Parental Involvement

Parents receive an annual report along with regular meetings to advise them on the mathematical progress of their child.

Open Mornings provide opportunities for parents to be involved in mathematical activities within the classroom and to help them understand the changing approaches to mathematics. Within Foundation Stage, individual learning targets for PSRN are shared with parents. The Foundation Stage offer Stay and Play sessions for parents each half term.

Homework

Mathematics homework is heavily based on learning mathematical facts across both Key Stages- practising, learning, reciting, recall of- number bonds, multiplication and division facts etc. Staff will ensure that parents are made aware of their children's focus for their year group through updating of the school website and parents evenings. If parents do require any ideas/assistance they are advised to contact their child's class teacher.