ST. PETER'S CATHOLIC FIRST SCOOL (ACADEMY), BROMSGROVE
MATHEMATICS POLICY
LOVE GOD AND LOVE ONE ANOTHER

Catholic Schools Pupil Profile Virtues- Wise, Curious, Attentive

Our Mission
St. Peter's is a Catholic School where there is evidence of the risen Lord through the quality of relations, at all levels, which are Christ centred. We are committed to the development of the whole child to his/her fullest potential. We strive to work with parents to meet the individual needs of every child spiritually, intellectually and socially, in their growth towards becoming independent and responsible members of our school community and society. Our school is a place where children learn to live as Christ taught us. Our school motto is at the centre of our teaching and our daily life- Love God and Love One Another.

Aims
Mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables children to understand relationships and patterns in both number and space, in their daily lives.

The aims of teaching mathematics are:

- to promote enjoyment of learning through practical activity, exploration and discussion
- to promote confidence with numbers and the number system
- to develop the ability to solve problems through decision making and reasoning in a range of contexts
- to develop a practical understanding of ways in which information is gathered and presented
- to explore features of shape and space, and develop measuring skills in a range of contexts
- to understand the importance of mathematics in everyday life

Early Years
The Development Matters document is the Early Years Curriculum. Mathematics is a specific area of learning and has two Early Learning Goals (ELG), these being Number and Shape, Space and Measure. The document provides the developmental stages in Mathematics for children aged three to five with the expectation that children at the end of the Reception Year achieve the ELG. Through the curriculum we provide opportunities for every child to develop their understanding of number, calculation, measurement, pattern, shape and space, allowing them to enjoy, explore, practice and talk confidently about mathematics.

Equal Opportunities
All children are provided with equal access to the Mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background. See our Equal Opportunity Policy for more details.

Special Educational Needs
We strive to meet the needs of pupils with special educational needs, those with disabilities, those with special gifts or talents, and those learning English as an additional language. Please refer to SEN Policy for details.

Teaching and Learning Styles

Through careful planning and preparation, we aim to ensure that throughout the school children are given opportunities for:

- applying their learning to everyday situations
- practical activities and mathematical games
- problem solving
- asking as well as answering mathematical questions
- mathematical reasoning, including making, testing and proving generalisations
- individual, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculating e.g. mental, formal and informal written methods
- working with technology (computers, iPads, programmable devices)

Children are taught mathematics within mixed ability class groups. Teachers have high expectations of all children, irrespective of ability, and encourage them to be successful and achieve their full potential. We achieve this through using a range of strategies and differentiated activities. Children are grouped in a variety of ways depending on the activities involved. Children have opportunities to work independently and with a variety of others. Teaching Assistants are used to support individuals or groups, either within the class or by withdrawing them for intervention strategies.

Mathematics Curriculum Planning in Key Stage 1 and Lower Key Stage 2
Mathematics is a core subject in the National Curriculum 2014, and we use these objectives as the basis for implementing the statutory requirements of the programme of study for mathematics. Additional guidance for specific mental and written strategies taught in each year group are detailed in the school's Calculation Policy.

Weekly plans identify specific learning objectives and success criteria.

Cross Curricular Links
Mathematics takes place both within dedicated Maths lessons, and through cross-curricular links as part of other topics. Key skills, such as speaking, listening, reading, thinking and computing skills, are also reinforced throughout Maths lessons.

Differentiation
Teaching sequences and activities are designed so that they meet the needs of all children at their current ability or stage in their learning. Our approach to differentiation allows children to be challenged at a level that is suitable for them. This is incorporated into all Maths lessons and is achieved in a variety of ways, such as the use of differing resources, activities with various layers, and open-ended activities. Flexible ability groupings are used to teach specific skills to groups of children with similar mathematical needs. Pupil Progress meetings are used to identify children who would benefit from small group intervention, either to support or extend. Catch-up programs such as Numicon and 1st Class @ Number, are used for groups of children when appropriate.

Environment
To ensure consistency across the school, the Calculations Policy (updated Sept 2015) is displayed in each classroom. Additionally, current calculation methods are displayed on the Working Wall in each classroom for the use of staff, supply teachers and children. The Working Wall and other Maths areas are also used to celebrate children's work and have an interactive element in order to encourage children to think further about their learning.

Assessment and Recording
Teachers constantly assess children's work in mathematics in line with the school Assessment Policy. Short term, informal assessments are used to adjust current teaching and further daily plans. Independent problem solving tasks, paper-based tests and other activities are used to

assess children's progress against a range of objectives. Assessments are recorded against objectives using Classroom Monitor, and a stage-related judgement is made based on these. Teachers attend termly moderation meetings within school to discuss and compare the attainment judgments that are made.
Children are made aware of the current and future curriculum expectations for them, which are shared with their parents. These expectations are age-related, and give pupils opportunity to assess their own progress. Work is marked in accordance with the school's Marking, Feedback and Presentation Policy allowing pupils and teaching staff to assess the children against specific criteria.
All this information then forms the basis for termly Pupil Progress Meetings. During these meetings, any children who are not making the expected progress are identified and strategies (including interventions) are put in place to address this. Each term the co-ordinator looks at the data for progress and attainment.

At the end of Key Stage 1, children take national tests in Arithmetic and Reasoning.

Reporting
Progress and attainment in mathematics is discussed through formal meetings with parents twice a year, is reported twice a year through a written Progress Report, once a year through an end of year report, and informally with parents as necessary.
Academy Representatives are informed of mathematics priorities through the subject action plan. They are also informed of progress and standards within the subject throughout the course of the year. This will be in the form of a written document outlining the actions to date, impact of actions and any next steps or future actions.

Resources
The school is resourced with a wide range of practical resources, teaching aids and ICT resources. ICT resources include access to websites which allow children to practise maths skills both in school and at home. IPads are used, as appropriate, to enhance mathematics teaching through the use of educational apps and games. Resources which are not used or required regularly are stored centrally and accessed by teachers when needed. Areas within the classroom are dedicated to mathematics resources and are easily accessible to all children. This allows them to become familiar with the relevant equipment and to be independent when choosing resources which help themselves.

Home School Links
Years 1, 2, 3 and 4 send home a termly curriculum letter detailing the focus of Maths for that term. Parents are also given the opportunity to attend a curriculum information workshop where the Maths curriculum for their child's year group is discussed in more detail. Additionally, resources are provided to parents to help them work with their child. The school website also contains information and resources to support parents. The Calculation Policy is available for parents and also video clips of the calculations taught in school.
Children have topic based homework with elements that link to Maths and its practical applications. In addition, children in Years 1 to 4 have SumDog accounts. These allow the children to access mathematical games and competitions at home.

Liaison with other schools
The co-ordinator attends termly meetings with other schools within the MAC, where good practice is shared. Teachers attend termly moderation meetings with a focus on Maths, where judgements are compared and discussed across the groups of schools.

Role of the Co-ordinator
- To take the lead in policy development
- To support colleagues

- To monitor progress in Mathematics – e.g. leading staff CPD, scrutiny of work, analysis of formal assessment data
- To take responsibility for the choice, purchase and organisation of central resources for Mathematics, in consultation with colleagues
- To be familiar with current thinking concerning the teaching of Mathematics, and to disseminate information to colleagues

Monitoring and Evaluation
Monitoring of the standards of children's work and the quality of teaching and learning in mathematics is the responsibility of the subject leader and SLT. The co-ordinator is responsible for identifying needs within the school and actions that can be taken to address these through action plans and RAPs if needed. This is achieved through learning walks, pupil interviews and book scrutinies (see Monitoring schedule). The subject leader feeds back to the headteacher and evaluates strengths and weaknesses in the subject, and indicates areas for further improvement. Short term actions, long term actions and future CPD are then decided and acted upon.

This policy will be reviewed every three years.

Updated: October 2017

Teaching Staff consulted: Wednesday 18th October 2017

Approved by Academy Representatives: November 2017

Due for review: November 2020