Over St. John's C.E. Primary School

'Let your light shine before others.' Matthew 5:16

Mathematics Policy

Curriculum Intent

The Mathematics curriculum is designed to equip our children with fundamental skills so that they have a developed understanding of Maths in our world and are prepared for their future. We aim to inspire children so that they develop a sense of mathematical enquiry, enabling them to become confident to reason, problem solve and explore things such as number patterns or relationships between numbers. Our curriculum enables children to become resilient learners who are curious about Maths and confident mathematicians at an appropriate level, through sustained challenge at all levels. It enables all children to flourish, in an environment of high expectations, tailored support and varied, high quality activities. Mathematics is a core subject and we use the National Curriculum as the basis for implementing the statutory requirements of the programme of study for mathematics.

Our Intentions

- to promote enjoyment of learning through practical activity, exploration and discussion;
- to promote confidence and competence 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 the 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.

Curriculum Implementation

We carry out the curriculum planning in mathematics in two phases (medium-term and short-term). Content is driven by the National Curriculum to ensure coverage of knowledge, skills and understanding, particularly at a reasoning level. Medium Term planning ensures an appropriate balance and distribution of work across each term.

Within our school, Reception and Key Stage One are taught in single-age classes whereas Key Stage Two children are taught across three mixed year group classes and the curriculum is designed to reflect this.

Our medium-term mathematics plans give details of the main teaching objectives for each block and define what we teach. They ensure an appropriate balance and distribution of work across each term.

It is the class teacher who completes the unit plans for the teaching of mathematics in line with the White Rose Scheme of Work. These plans list the specific learning objectives and intended learning outcomes and give details of how the lessons are to be taught. The class teacher keeps these individual plans and the class teacher and subject leader can discuss them on an informal basis.

In all classes, children have a wide range of mathematical abilities. 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. We achieve this through a range of strategies – in some lessons through adapted group work and in

other lessons by organising the children to work in pairs on open-ended problems or games. We use teaching assistants to work with some children and to ensure that work is matched to the needs of individuals.

The Foundation Stage
We teach mathematics in our reception class. As the class is part of the Foundation Stage of the National Curriculum, we relate the mathematical aspects of the children's work to the objectives set out in the Early Learning Goals, which underpin the curriculum planning for children aged three to five. We give all the children ample opportunity to develop their understanding of number, shape, space and measure through varied activities that allow them to enjoy, explore, practise and talk confidently about mathematics.

Contribution of Mathematics to teaching in other curriculum areas
English
The teaching of Mathematics contributes significantly to children's understanding of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, in Mathematics lessons we expect children to read and interpret problems, in order to identify the Mathematics involved and explain their reasoning. They are also improving their command of English when they explain and present their work to others. In English lessons, too, maths can contribute: younger children enjoy stories and rhyme that rely on counting and sequencing, while older children encounter mathematical vocabulary, graphs and charts when reading non-fiction texts.

Personal, Social and Health Education (PSHE) and Citizenship
Mathematics contributes to the teaching of PSHE and citizenship. The work that children do outside their normal lessons encourages independent study and helps them to become increasingly responsible for their own learning. The planned activities that children do within the classroom encourage them to work together and respect each other's views. We present older children with real-life situations in their Mathematics work on the spending of money.

Spiritual, Moral, Social and Cultural Development
The teaching of Mathematics supports the social development of our children through the way we expect them to work with each other in lessons. We group children so that they work together and we give them the chance to discuss their ideas and results. The study of famous mathematicians around the world contributes to the cultural development of our children.

Mathematics and Computing
Computing enhances the teaching of mathematics significantly, because Computing is particularly useful for mathematical tasks. It also offers ways of impacting on learning which are not possible with conventional methods. Teachers can use software to present information visually, dynamically and interactively, so that children understand concepts more quickly. Younger children use Computing to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results, or when creating repeating patterns, such as tessellations. When working on control, children can use both standard and non-standard measures for distance and angle. They can also use simulations to identify patterns and relationships.

Mathematics and Inclusion
At our school we teach mathematics to all children, whatever their ability and individual needs. Mathematics forms part of the school curriculum policy to provide a broad, balanced and rich education to all children. Through our mathematics teaching we provide learning opportunities that enable all pupils to make good progress. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see separate policies: Special Educational Needs; Equal Opportunities Guidelines and Policy.

When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, and adaption– so that we can take some additional or different action to enable the child to learn more effectively. Assessment against the National Curriculum allows us to consider each child's attainment and progress against our assessment without levels system. This ensures that our teaching is matched to the child's needs.

We enable all pupils to have access to the full range of activities involved in learning mathematics. Where children are to participate in activities outside the classroom (a 'maths trail', for example) we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Curriculum Impact

To allow children and teachers to see progress across a unit of work, children complete a pre and post learn at the beginning and end of a unit of work to show impact and next steps. We use national documentation to create the pre and post learn to ensure the pitch and expectation is accurate and meets national standards. We also measure the children's progress and attainment on a termly basis. This is completed using a range of both formative and summative assessments and then inputted into the school tracking system. We aim for all our children to make at least good progress from their prior attainment at key points: baseline assessment for Foundation Stage, Early Learning Goals in KS1 and end of KS1 statutory assessment in KS2. Alongside this, we monitor and track progress and attainment throughout each year group to ensure that children remain on track to make at least expected progress.

Children will leave Over St. John's with well-rounded mathematical learning experiences enabling them to use these skills confidently so that they are prepared for their future beyond life in primary school both socially and academically.

Monitoring of the standards of children's work and of the quality of teaching in Mathematics is the responsibility of the subject leader. The work of the subject leader also involves supporting colleagues in their teaching, being informed about current developments in the subject, and providing a strategic lead and direction for Mathematics in the school, based upon a triangulation of monitoring activities.

This policy will be reviewed at least every two years.

Signed: *E Snowdon* **Head Teacher**

Date: **October 2024**
Review Date: October 2026