



Intent

St. John's recognises that maths is both a key skill within school, and a life skill to be utilised through everyday experiences. A high-quality maths education provides a firm foundation for understanding how maths is used in everyday life and activities, developing pupils' ability to reason mathematically. Maths at St John's equips children with the tools to apply knowledge learnt over time to a variety of contexts which they will come across later in life.

Through the teaching of maths, we aim to develop:

- A positive attitude towards maths and an awareness of the relevance of maths in the real world.
- A process of enquiry and experiment.
- An ability to solve problems and think logically in order to work systematically and accurately.
- An ability to work both independently and in cooperation with others.
- Competence and confidence in pupils' maths knowledge, concepts and skills.
- An appreciation of the creative aspects of maths and an awareness of its aesthetic appeal.
- A mastery approach* ensuring children can apply their skill to a variety of topics.

All pupils should become fluent in the fundamentals of mathematics, including through varied and frequent practice, so that pupils develop conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. When to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage.

Pupils who grasp concepts rapidly should be challenged through rich and sophisticated problems before any acceleration through new content. Those pupils who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

Implementation

At St John's, we teach Mathematics so that all pupils develop their understanding and skills across the mathematics curriculum. Mathematics is taught in a structured way following the 2014 National Curriculum. Throughout their time at St John's, children will have the opportunity to explore the mathematics curriculum using a range of resources and methods.

All learning is put into a real-life context where possible to help them understand the role of mathematics in the world around them.

Mathematical language is introduced and encouraged from the beginning of their learning to support their understanding and to help them discuss their own learning. Children are encouraged to talk about their learning in full sentences to consolidate their understanding and that of the children around them.

Times tables and mental arithmetic skills are a vital part to the mathematics curriculum and are a focus throughout the school. We subscribe to Times Tables Rockstars. This forms children's Maths homework weekly.

Children at St John's experience new concepts in Maths in a variety of ways often using concrete objects, drawings and pictures as well as symbols to explore and reinforce learning. We have a good range of resources in each classroom to support the children's learning. Children have access to these resources at any point and are encouraged to use them. For example, Numicon, Diennes, arrow cards, cubes, counters, dice, hundred squares, bead strings, place value grids and even playdough to help children explore number in a visual and tactile way.

EYFS

Activities and experiences for pupils will be based on the seven areas of learning and development, as outlined in the DfE's 'Early years statutory foundation stage framework'.

Provision for early years pupils focusses on four specific areas:

Literacy

Maths

Understanding the world

Expressive arts and design

Activities will provide pupils with the opportunity to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems, and describing shapes, spaces and measurements. All activities will adhere to the objectives set out in the framework.

During the early years foundation stage, pupils will be taught to:

Number

- 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.

Numerical Patterns

- 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.

KS1 & KS2

The national curriculum is followed and delivered through the use of White Rose Maths and the Power Maths schemes of learning.

Pupils will be taught to describe key characteristics and associated processes in common language, as well as understand and use technical terminology and specialist vocabulary.

Pupils will undertake independent work, and have the opportunity to work in groups and discuss work with fellow classmates.

Lessons will involve the use of a variety of sources, including data, statistics, graphs and charts.

The classroom teacher, in collaboration with the subject leader, will ensure that the needs of all pupils are met by:

Setting tasks which can have a variety of responses.

Providing resources of differing complexity, according to the ability of the pupils.

Setting tasks of varying difficulty, depending on the ability group.

Utilising teaching assistants to ensure that pupils are effectively supported.

Throughout St. John's, maths is taught as a discrete lesson and as part of cross-curricular themes when appropriate.

Teachers will use the key learning content in the DfE's statutory guidance 'National curriculum in England: mathematics programmes of study', published in 2014. The delivery of this content is through the use of Power Maths (EYFS, Y1 and Y2) and White Rose Maths Schemes of Learning (Y3, Y4, Y5 & Y6). The White Rose Maths Calculation policy will continue to be used for continuity for Y3, Y4, Y5 and Y6 pupils whereas all other year groups will follow the Power Maths calculation policies.

Teachers will ensure that all maths lessons include a focus on mental calculation. Long-term planning will be used to outline the units to be taught within each year group. These follow the Power Maths (EYFS, Y1 & Y2) or White Rose Maths Schemes of Learning (Y3 & Y4, Y5 & Y6). Medium-term planning will be used to outline the vocabulary and skills that will be taught in each unit of work, as well as highlight the opportunities for assessment. These follow the Power Maths (EYFS, Y1 & Y2) or White Rose Maths Schemes of Learning (Y3, Y4, Y5 & Y6). All lessons will have clear learning objectives, which are shared and reviewed with pupils (WALTs).

Assessment

Pupils will be assessed and their progression recorded in line with the school's Assessment Policy.

An EYFS Profile will be completed for each pupil in the final term of the year in which they reach age five. The progress and development of pupils within the EYFS is assessed against

the early learning goals outlined in the 'Statutory framework for the early years foundation stage'.

Throughout the year, teachers will use White Rose end-of-unit assessments (for the pupils' current year and the previous year) at the start of a unit to assess prior knowledge and to adapt the work for that unit then again at the end of the unit in order to gauge whether pupils have achieved the key learning objectives. Where pupils have not fully met the objectives of the unit, intervention support will be planned for and put in place by class teachers.

Formative assessment, which is carried out informally throughout the year, enables teachers to identify pupils' understanding of subjects and inform their immediate lesson planning. In terms of summative assessments, the results of end-of-year assessments will be passed to relevant members of staff, such as the pupil's future teacher, in order to demonstrate where pupils are at a given point in time.

Standardised tests will be used three times a year to measure each pupil's attainment in all areas of maths. These results will be compared with an 'average' for all pupils of that age. Parents will be provided with a written report about their child's progress during the Spring term every year. These will include information on the pupil's attitude towards Maths, understanding of mathematical terminology, investigatory skills and the knowledge levels they have achieved. Verbal reports will be provided at parent-teacher interviews during the Autumn and Spring and Summer terms. A short written interim report during the Autumn Term will also be given detailing the pupil's current attainment and a Maths target.

Impact

As the children progress through the school, children will demonstrate that a mathematical concept or skill has been *mastered* when a they can show it in multiple ways, using mathematical language to explain their ideas and independently apply the concept to new problems in unfamiliar situations. Children will demonstrate quick recall of facts and procedures, including the recollection of multiplication tables. They will exhibit the flexibility and fluidity to move between different contexts and representations of mathematics, ability to recognise relationships and make connections in mathematics. Children show mathematical confidence and believing that they will achieve. Children will show a high level of pride in the presentation and understanding of the work.

Through our delivery of Mathematics, we ensure that the children will meet the National Curriculum objectives and will be equipped, not only for their for their future education, but also for adult-life.