

St. James CE Primary School



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Maths Policy

Flourish
Respect Courage
Friendship Develop
Strong Growth
Community StJames' Strive
God Trust Kindness
Freedom Unique Perseverance
DeepRoots Positivity
WholeChild
Responsibility

Statement of Vision and Values

In consultation with pupils, parents, governors, community members and staff our vision and values were generated based on our inspiration from the Parable of the Sower and how this links to our children and their journey with us.

Our School Vision:

Within our community we strive to develop deep **roots**, strong **growth** and freedom to **flourish** as a unique and whole child of God.

Matthew 13 - The Parable of the Sower – ‘... but the seed falling on good soil refers to someone who hears the word and understands it.produces a crop, yielding a hundred, sixty or thirty times what was sown.’



Values

We decided at St James CE Primary School that **Kindness and Respect** are values which we feel underpin our vision and are incorporated in all we do and say – so therefore these two values will be taught alongside all the other six values we have chosen.

½ termly focus	Value
Autumn 1	Responsibility
Autumn 2	Friendship
Spring 1	Perseverance
Spring 2	Trust
Summer 1	Courage
Summer 2	Positivity

Intent – what are we trying to achieve?

At St James' CE Primary School, we recognise that Mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. We want our children to become self-confident mathematicians. We aim to provide a high-quality mathematics education with a mastery approach so that all children:

- become fluent in the fundamentals of mathematics;
- reason mathematically;
- can solve problems by applying their mathematics.

(National Curriculum 2014)

Our maths curriculum provides broad and balanced opportunities which aim to drive a life-long love of learning as well as encouraging a positive learning attitude.

At our school, our intent for Mathematics is to teach a rich, balanced and progressive curriculum using maths to reason, problem solve and develop fluent conceptual understanding in each area. Teachers are supported and aided in their roles - ensuring confidence in the skills and facts they are required to teach. Lessons are child focused and allow the children to better make sense of the world around them relating the pattern between Mathematics and everyday life. We want all children to enjoy Mathematics with the ability to reason mathematically. We are committed to developing children's curiosity about the subject, as well as an appreciation of the magnificence and power that Mathematics has to offer as a subject.

This particular policy outlines the teaching organisation and management of Mathematics taught and learnt at St. James CE Primary School. The policy is based on the 2014 National Curriculum expectations and aims for Mathematics and the Early Years 'Development Matters' EYFS document.

Intent in accordance with the 2014 National Curriculum:

The 2014 National Curriculum for Maths aims to ensure that all children:

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- Become fluent in the fundamentals of Mathematics
- Are able to reason mathematically
- Can solve problems by applying their Mathematics

As a school, these skills are embedded within Maths lessons and developed consistently over time. As stated in our maths vision, we are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts.

Implementation – how do we translate our vision into practice?

We implement our approach through high quality teaching - delivering appropriately challenging work for all individuals. To support us we have a range of mathematical resources (manipulatives) in classrooms including Numicon, Base10 and counters. We use the White Rose Scheme of learning as it provides a platform for staff to build from in order to deliver high-quality teaching to pupils. We continuously strive to better ourselves and frequently share ideas and things that have been particularly effective. Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from Early Years through to the end of Year 6.

Implementation

Maths is delivered through high quality teaching and learning and also through a concrete, pictorial and abstract approach to mathematics, where manipulatives play an important role.

At St. James' CE Primary School, we use White Rose to ensure full coverage of the National Curriculum. Teachers are expected to use White Rose to its fullest and provide children with challenges to ensure a mastery approach.

Teachers should:

- Ensure that all planning has the correct level of challenge for all children. This should include no more than 6-8 calculations of the same type; any more is a waste of the children's learning

opportunity as they have already proven their skill/knowledge. To ensure the children's continued progress within a lesson their newly acquired skill should be then shown in a different context, for example a worded problem.

- Ensure that weekly plans to be written on school format to meet the needs of the pupils in the class.
- Daily plans must have a clear learning objective and success criteria, which is measurable and achievable for all children.
- Maths must be taught so that there is a deep understanding not just so that the children know the procedure of how to carry out a calculation.
- Planning must contain practical opportunities for the children to demonstrate their understanding
- Within each strand of maths there must be opportunities for mastery and literacy, which will be recorded in the maths books.
- Each maths lesson must start with oral counting.
- Mastery is planned using the White Rose.
- In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS statutory framework. Mathematics development involves providing children with opportunities to practise and improve their skills in counting numbers, calculating simple addition and subtraction problems, and to describe shapes, spaces, and measures. The profile for Mathematics areas of learning are Number and Numerical pattern. We continually observe and assess children against these areas using their age-related objectives, and plan the next steps in their mathematical development through a topic-based curriculum
- There are opportunities for children to encounter Maths throughout the EYFS (both inside and outside) through both planned activities and the self-selection of easily accessible quality maths resources. When possible children's interests are used to support delivering the mathematics curriculum.
- Regular assessment provides teachers with the tools to identify gaps in children's learning and plan interventions that will target these.

CPD is available for staff during INSET at the beginning of the year and on an individual basis throughout the year.

Early years:

The Foundation Stage teaches maths alongside guidelines from the Early Years 'Development Matters' EYFS document. All children are given ample opportunity to develop their understanding of Mathematics. Lessons in the Early Years aim to do this through varied activities that allow children to use, enjoy, explore, practise and talk confidently about maths. Any independent activities at the Maths table link to the focus for the week. For example, if the focus for the week is addition, then activities on the Maths will often link to this. In addition to these planned independent activities, children also have the opportunity to self-select Maths resources to consolidate their learning during child initiated activities. We recognise the importance of play-based learning – which are planned to be fun, practical and in a meaningful context. Such opportunities are provided in both the inside and outside environment. Regular observations – through Tapestry (an online platform which records a child's experiences, development and learning journey) regularly takes place and are used to inform assessment and progress. The children also record their learning in their own maths books (from Spring term).

Planning, learning and teaching:

- Planning is built around a sequence of lessons which support pupils in acquiring knowledge, reasoning, investigating and problem solving skills. These are incorporated into daily sessions through modelling and quality first teaching. Pupils are also provided with independence by allowing them to self-select their level of challenge (challenges include those at greater depth).
- Lessons include knowledge, reasoning and problem solving activities, which where possible have a purpose – a real life connection.
- Mini plenaries are planned for and implemented throughout the lessons and used as assessment for learning opportunities - to develop children's understanding further. This is to allow for progression, targeted support and to ensure the appropriate pace for each individual child. They should not however disrupt learning.
- Final plenaries will be planned for and used effectively to consolidate, assess and take learning forward.

- Questioning is the key to success in Mathematics and questions will be continuously adapted by the teacher and support staff based on assessment for learning and in order to stimulate mathematical thinking at different levels.
- Mental maths should be incorporated throughout all lessons and strategies used for solving mathematical concepts. To further support this area, Arithmetic tests should be completed and tracked as required within their year group.
- The use of learning assistants are planned for in every part of the Mathematics lesson, to ensure they are used effectively in supporting, developing and assessing pupil progress throughout.
- Pre-assessments of each area taught are used to identify existing strengths/gaps in learning and this then informs planning. To measure progress, post-assessments are then carried out at the end of the unit (through pupils going back and correcting in red pen the initial assessment to identify progress). Pre-assessments should only consist of a few well selected questions.
- Children are able to learn and consolidate their times tables through the use of Times Table Rock Stars. This will allow children to further grasp existing knowledge of times tables and develop a quick recall of number facts or will allow children to focus on areas of development using the software's 'smart algorithm'.

Progression of calculation methods:

We have a policy for progression in calculation methods to ensure continuity and consistency throughout the school with the teaching of the four operations over time.

Inclusion, differentiation and support: (Including provision for SEND, More & Most Able, E.A.L, and P.P pupils)

This is incorporated into all Mathematics lessons and is done in various ways, such as:

- Setting challenging age related knowledge, reasoning and problem solving tasks based on systematic, accurate assessment of pupils' prior skills, knowledge and understanding; allowing children to develop mastery of the concept;

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- Differentiated activities for all children to choose from and move through at a pace that suits their needs;
- Timely support and intervention; systematically and effectively checking pupils' understanding throughout lessons – using a range of practical, real-life resources and manipulatives to support all stages of learning within the class;
- Ensuring that marking and constructive feedback is personal, frequent and of a consistently high quality - enabling pupils to understand how to improve and develop their work. There is time planned in for children to respond to feedback;

Impact – what is the impact of our maths curriculum on our students?

St. James CE Primary School has a nurturing ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Throughout their learning journey, our children will become fluent in the fundamentals of Mathematics – encouraging them to be life-long learner. The White Rose scheme certainly addresses these preconceptions by ensuring that all children experience challenge and success in Mathematics. Through varied and frequent practice, with increasingly complex problems over time, pupils will have the conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of every child. These factors ensure that we are able to maintain high standards, with progress and achievement at the end of KS2 is above the national average.

Assessment:

Assessment is regarded as an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class against the objectives taught and record the outcomes on our school tracking system. This is mainly achieved through observation, questioning, marking, and feedback from support

staff. In addition to these assessment opportunities, and so that both short- and long-term progress can be closely monitored - children complete a maths assessment each half term as well as pre and post unit assessments. These results are used as further evidence of attainment and progress.

Furthermore, since assessment data in maths is reviewed throughout the year, it is carefully used to inform interventions and to also ensure that provision remains well-informed to enable optimum progress and achievement. End of year data is used to measure the extent to which attainment gaps for individuals and identified groups of learners are being closed (as we seek to diminish the difference). This data is used to inform whole school and subject development priorities for the next school year. This evidence will be monitored by the Maths Curriculum Leader. Our data consistently shows that children of all abilities and backgrounds achieve well in Mathematics, reflected in clear progress that reveals an effective learning journey. The children experience a wide-ranging number of learning challenges in the subject and know appropriate responses to them. As a school, we use rigorous monitoring to ensure that this policy is lived out in everyday practice. Monitoring is on-going by members of SLT alongside the Maths Curriculum Leader.

Feedback from the children truly reflects the impact that our curriculum has on their learning. Our children are resilient and happy learners within Mathematics as they talk enthusiastically about the subject and are eager to further their learning in the next stages of their education.

This policy must be read and used in conjunction with the following:

- The Calculation policy;
- Maths Curriculum 2014 government documentation;
- White rose Scheme calculation documents

Evaluation/Review

Reviewed and updated – November 2023

Next review – November 2024