

Subject Policy: Mathematics

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We believe all children can shine at St Matthew's and we strive for every member of our school family to succeed and flourish with us.

As a church school, we embody our values of respect, kindness, aspiration and perseverance in all we do. Therefore, every family from across our community is welcomed at St. Matthew's and we are proud of our diversity. Our curriculum reflects this and we pride ourselves in providing equal opportunities for all members of its family regardless of disability, religion, sexual orientation, culture, gender, ethnic origin, colour or age. All pupils have access to the Mathematics curriculum, and the right to a learning environment which dispels ignorance, prejudice or stereotyping.

As a school, we have high aspirations for our children, and our vision for children to 'let their light shine' reflects this. Our **'Shine Curriculum'** encapsulates everything we desire for our children as they leave us and move on to their next stage of education. We aim to provide our children with a primary education they will always remember and treasure.

OUR SHINE CURRICULUM



Let Your Light Shine

This policy should be read in conjunction with the Learning Policy.

Intent

- Develops children's mathematics skills through a systematic approach of fluency, variation, reasoning and problem solving following a mastery curriculum approach.
- Encourages the children to develop confidence in manipulating numbers, including addition, subtraction, multiplication and division.
- Ensures the children are given opportunities to explore each new mathematical concept through a variety of strategies and representations and develops skills in making connections.
- Encourages a love of mathematics through an exciting, engaging and relevant mathematics curriculum.
- Encourages the children to engage with mathematics in a variety of different ways e.g. active maths, use of multiple resources, use of technology, open-ended challenges.
- Develops the ability to confidently and clearly explain mathematical thinking orally and in writing using accurate mathematical vocabulary.
- Develops a positive attitude towards mathematics, including celebrating and learning from mistakes as opportunities to learn and grow.
- Gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and *perseverance* when faced with tricky mathematical challenges.
- Recognises that mathematics underpins much of our daily lives and is therefore of paramount importance in order that children *aspire* to become successful in this and the next stages of their learning.
- Encourages the asking of questions.
- Develops an increased competence across the broad mathematics curriculum e.g. number, geometry, measurement and statistics.
- Provides opportunities to develop team working skills as children wrestle with challenging concepts together, showing *kindness*, *respect* and humility as they learn and grow.

Implementation

Planning, Teaching and Learning

Strategies are in place within school to develop each of the key areas of mathematics, ensuring coverage of the Nation Curriculum 2014, and systematic coverage of key skills.

- In Reception, objectives are taken from the Development Matters Framework and Early Learning Goals alongside the White Rose Maths Scheme of Learning. Much of the learning is planned for through activities children access in continuous provision. Highly-skilled adults facilitate child-led learning in continuous provision and wherever possible, move children on in their learning and understanding through quality questioning.
- From Year 1 to Year 6, each class follows the White Rose Maths Scheme of Learning, ensuring coverage, progression, small steps, fluency, variation, problem solving and reasoning.
- The calculation policy is used within school to ensure a consistent approach to teaching the four operations over time.
- Children are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts. Alongside modelling, teachers engage children in guided practice to develop their understanding of a particular concept or skill, allowing them to master this through independent practice. Guided practice is recorded on left-hand pages and independent practice is recorded on right-hand pages. This allows children to refer back to guided practice within the lesson and future lessons.

- The mastery approach incorporates using manipulatives, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.
- A sequence of lessons will progress from developing fluency within an area and then ensuring this knowledge is embedded with a variety of representations. Following this, the children will apply their knowledge to problem solving, reasoning and explanation within that area.
- Within a lesson, children will be given opportunities to investigate areas using concrete, pictorial and abstract concepts.
- In Reception, Year 1 and Year 2, separate sessions take place daily for children to take part in the 'Mastering Number' programme.
- In Year 3 and above, separate sessions take place daily for children to learn times tables and practice fluency and problem solving linked to previous learning.
- A range of sources are used to resource lessons, including:
 - Wite Rose Premium Resources
 - NCETM Primary Mastery Professional Development Materials
 - NCETM Ready to Progress Exemplification
 - Gareth Metcalfe I see Reasoning and I see Problem Solving
 - Times Table Rock Stars
 - NCETM Mastering Number

Leadership, Assessment and Feedback

- Feedback given in line with the St Matthew's Learning Policy.
- Children will be given feedback in the lesson, linked to the learning objective for the lesson as well as any ongoing individual targets the teacher is aware of for each child.
- In Year 2 and Key Stage 2, children should sometimes be given the opportunity to self-mark their work.
- Exemplar pieces of work from individual pupils can be shared with parents using Weduc.
- Formative assessment within *every* lesson helps teachers to identify the children who need more support to achieve the intended outcome as well as those who are ready for greater stretch and challenge through planned questioning or additional activities.
- Ongoing assessments are made by the teachers against the year group objective trackers. This helps them to identify gaps and support children to develop their learning.
- Assessment informs the teaching and learning sequence, with children also working on individual target objectives if necessary to underpin future learning and ensure rapid progress within a 'keep up' culture rather than 'catch up'.
- At the end of each week, children will be given a maths quiz that covers the learning objectives planned for the following week. This will be based on expectations from the previous year. This will then inform planning for the following week, as lessons will be adapted to fill any gaps from previous years.
- In order to support teacher judgments, children may be assessed using current and reliable tests in line with the national curriculum for maths. Gap analysis of any tests that the children complete is undertaken and fed into future planning.
- Targets are discussed and agreed upon in Autumn term, with summative assessments completed in Spring and Summer term. These are reported to parents in the end of year report.
- A monitoring cycle ensures that work is moderated and quality assured at regular intervals through the year.

- The maths leader has a clear role and overall responsibility for the progress of all children in maths throughout school. Working with the Senior Leadership and Management Team, key data is analysed and regular feedback is provided, to inform on progress and future actions.

Impact

- Children show confidence in their abilities as a mathematician and are able to approach new problems with embedded strategies.
- Each child achieves the expected objectives for their year group.
- Children demonstrate flexibility and fluidity to move between different contexts and representations of maths.
- All children develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- Children show a high level of pride in the presentation and understanding of their work.
- Children will be excited and proud to share their work in maths around school, at home, and in the community.
- Children are resilient and see mistakes as learning opportunities.

This policy will be reviewed biennially or more frequently if required.