



Statement of Practice for Mathematics

INTENT

Place of Mathematics in the Curriculum.

At St Matthew's Mathematics is taught in line with the National Curriculum. This core subject plays an important part in embedding our school values; especially those of love and learn. Throughout their time at St. Matthews we want children to develop a secure knowledge and understanding of the key mathematical concepts and skills needed for them to successfully progress onto their next stage of learning and beyond. This includes fluency in number and the ability to apply key skills to reasoning and problem solving, approaching this with confidence and resilience. Wherever possible, links to real life contexts are made so children can see the importance of mathematics in the world around them. We believe that it is vitally important for children to be able to apply their Mathematical knowledge in a wide variety of contexts so that they can use these skills throughout their lives, both professionally and in their personal lives. We want our children to be able to use Mathematics as an everyday tool.

Planning

Mathematics is a Specific Area of Learning in EYFS. As the children enter the school in Reception, their first experiences and learning of Mathematics are through play-based activities as a part of our carefully planned child initiated and adult initiated continuous provision. The NCETM Mastering Number programme is followed to ensure coverage of number and support the development of good number sense. White Rose schemes of learning are also used to cover additional number objectives as well as shape, measure and spatial thinking.

In Key Stage 1 and 2, our Mathematics teaching and learning follows the National Curriculum. White Rose is used as the route through the content to be covered at a pace suitable for specific cohorts of children. Year 1 and Year 2 continue to follow the Mastering Number programme to develop fluency and confidence in number. Other resources such as Target Your Maths and Learning by Questions (LbQ) are also used. Within our teaching, we ensure that the Ready to Progress criteria are achieved by the majority of children by the end of each year. The Ready to Progress criteria are covered within the White Rose units, staff refer to the document *Ready to Progress coverage in White Rose* to identify small steps that will provide evidence for each criteria. Ready to Progress criteria are listed on Insight (our online tracking system).

We follow a concrete, pictorial, abstract approach through steps in learning. We promote concrete learning using a range of manipulatives and this is reflected in teachers' planning. Where appropriate, new learning begins with concrete experiences leading to pictorial and abstract representations. Children of whatever age and ability have access to manipulatives to support their learning and are also encouraged to 'draw' solutions as well as completing abstract or formal methods. Concrete and pictorial methods support secure learning at every level.

At St. Matthew's we recognise that children of all abilities should be working towards Mastery. As such, planning contains regular problem solving and reasoning activities for all abilities as well as opportunities to explain learning supported by the use of STEM sentences.

IMPLEMENTATION

Timetabling/unit planning

Teachers' follow the White Rose route through learning. The overview of units is on the server: [W:\CURRICULUM\CURRICULUM INFO and OVERVIEWS\2. Subject Overviews by subject\Maths Overview]. Each year group starts with number and place value skills so that further learning across the year is based on a sound understanding of the number system.

Maths is taught every day, where practical. Lessons build on previous learning and assessments. Most lessons will be between 30 and 60 minutes. As part of lessons, children complete an activity to support previous learning or develop basic fluency (e.g. Flashback 4, counting activities). Additionally, children in Key Stage 1 have a Mastering Number session four times a week. In Key Stage 2, opportunities to use LbQ (Learning by Questions) are identified and planned in. Children also an opportunity each week to practice their number and times tables' skills using NumBots and Times Tables Rock Stars.

When planning a unit of work, teachers refer to the medium term planning objectives saved on the system: W:\CURRICULUM\CURRICULUM INFO and OVERVIEWS\3. Medium term planning objectives\Maths. They also refer to Insight, especially previous Ready to Progress criteria, and ensure that children are ready to learn new content. The White Rose overview for each unit is also referenced to provide additional guidance on key learning and models and representations. For relevant units, staff will also refer to our calculation policy.

White Rose resources to support each small step, alongside White Rose workbooks, are used to support planning and lesson delivery. These are supplemented by resources from other sources (e.g. Target your Maths, LbQ, NCETM).

Teaching and Learning

Teaching is based on need as informed by assessments on Insight. Learning opportunities for the vast majority of children are based within the year group expectations, but some children receive work from previous year group expectations to enable them to make the best, secure progress. Where possible, these children will work on a similar topic as the rest of the class (e.g. fractions) but with work from the appropriate year group.

Wherever possible, new learning is introduced through concrete experiences using a range of manipulatives. Concrete experiences lead to children using pictorial and abstract methods and representations. Even at this stage, manipulatives remain available to support learning.

All children are working to achieve mastery at their level and this is achieved through the application of skills and concepts to reason and solve problems in most lessons. STEM sentences are used to support children's understanding and ability to explain concepts. Accurate and full use of vocabulary is used and promoted through our learning walls.

In Key Stage 2, children use Learning by Questions to support their learning. This is very much viewed as a teaching tool and is used as such, enabling teaching to address misconceptions at source and for staff to teach concepts with quality shared resources.

Recording of children's work

Children's work is completed in their individual exercise books or in White Rose workbooks. In Key Stage 2, there are digital records of work completed on Learning by Questions. Children's achievements in NumBots and Times Tables Rock Stars are available online. Photographs and planning may also be used as evidence of work completed where an individual workbook is not suitable.

Checking for understanding to support teaching and learning

We use summative and formative assessment to enable targeted teaching and learning experiences so children make good, secure progress. Prior to teaching a unit of work, teachers use assessments on Insight to inform their planning, paying particular attention to Ready to Progress Criteria.

Ongoing assessment opportunities within lessons enable teachers to adapt their teaching and identify children who need support. Children's understanding is continually checked through questioning and opportunities for children to practice new skills. Learning is introduced in small steps so new learning can be practiced and secured at each stage. Where children are not making expected progress, targeted teaching is used within lessons, alongside interventions. When a unit is completed, White Rose end of block assessments are used to assess progress and inform any targeted teaching that is needed.

Summative assessments are made to support judgements made by teachers. Alongside end of KS statutory assessments, we use NFER standardised tests in January and June in years 3, 4 and 5.

Inclusion

Maths learning opportunities are adjusted for cognitive, physical, social and other diversities so that all our children can achieve the best they are able to. Lessons are planned so that all children can participate, with adult support and practical resources used effectively to enable all children to access learning. Children working at greater depth are provided with additional reasoning and problem solving opportunities. Vulnerable groups and individuals are tracked and supported where appropriate.

Supporting Teaching Knowledge

CPD is provided for staff to ensure everyone has the correct subject knowledge to deliver a quality curriculum to the children. This includes both teachers and support staff attending training through the Maths Hub, as well as internal CPD on specific areas of maths teaching.

Resources and Budgets

Resources are reviewed annually and replaced and purchased as are needed so that children have appropriate and good quality equipment and other resources to support their learning.

Budget. The school Improvement Budget enables subject leaders to ensure that children have access to high quality materials and resources.

IMPACT

Assessment

Children's attainment against the Ready to Progress criteria and additional White Rose units is recorded on Insight (a web based tracking system). At the end of the year, children will be judged to be working at the expected level if the vast majority of Ready to Progress Criteria are met. Children

who meet this, and have shown consistent ability to reason and solve problems, can be judged to be working at greater depth.

Expectations for assessment within and at end of a unit of work

Teachers use assessments on Insight, paying particular attention to the Ready to Progress criteria, to inform their planning at the beginning of a unit. White Rose end of block assessments are used at the end of a unit. Teaching is adjusted so that learning opportunities are targeted and interventions can be provided for children who have not made expected progress.

End of Key Stage assessments

We use statutory assessments at the end of Early Year Foundation Stage and Key Stage 2 and this partly informs our strategic targets for moving forward.