SAINT MARY'S CATHOLIC PRIMARY ACADEMY

Mr J O'Connor – Head Teacher



CURRICULUM POLICY FOR MATHEMATICS

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Next review due
To be monitored and updated as required

by:

CURRICULUM POLICY FOR MATHEMATICS

Mission Statement

"We Value All in the Name of Jesus the Christ"

Learning is a sacred endeavour.

Here are some highlights from a document shared in full on our 'Building the Kingdom' course – to whet your appetite!

How is Maths a sacred subject?

The ultimate purpose of Maths is the pursuit of truth. Exploring the beauty of mathematics enables all learners to engage with the transcendent dimensions of life, freeing them to be pioneers, trailblazers and the inventors needed today and in the future.

Introduction

Mathematics is a core subject and this policy has been written in accordance with its statutory requirements. All pupils can achieve in mathematics! At Saint Mary's Catholic Primary Academy, it is our belief that pupils are not learning to be mathematicians but that they are mathematicians.

'Mathematics is a creative and highly inter-connected discipline...a high-quality mathematics education should provide a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity.' (National Curriculum for Mathematics, 2014)

Intent

At St Mary's, we believe that all children, no matter what their starting points, can become confident, competent and curious mathematicians. Through the use of the White Rose Maths scheme, we want to ensure children experience a range of concrete, pictorial and abstract learning to maximise their understanding of mathematics. It is essential that, through EYFS and KS1, children have a secure knowledge of number at the earliest opportunity and use all available time to make as much progress as possible in this area. Our Maths curriculum, through consistent high expectations and challenge, ensures the majority of children leave KS2 with sustained Mastery. This means children are fluent in basic concepts, can reason mathematically and are able to make links with their knowledge to solve problems in relation to national standards. It is our intent that children build on some of the school's intents in Maths specifically, working independently and collaboratively, building on prior knowledge, showing resilience and reflecting on their own and others' work.

Implementation

The use of White Rose Maths and other resources allows our children to learn through a range of manipulatives on a daily basis, if needed. Children will leave KS1 with a secure understanding of number so they are able to make links between areas in KS2. Maths is taught on a daily basis; during lessons, staff provide a fluency starter, question children

relating to the national standards, stretch children through challenging, reasoning problems and offer effective, immediate, intervention to children who are struggling to understand the concept. The White Rose Maths worksheet questions also give the children multiple opportunities to develop their fluency and reasoning skills. This allows children the opportunity to progress as much as possible and have every opportunity to achieve fluency

and reason mathematically by the end of KS2. Children who are below age-related expectation receive interventions (especially in KS1) to help close gaps in knowledge.

Impact

Our Maths curriculum will ensure the majority of children leave KS2 with fluency and are able to apply knowledge and skills to problem solve. Children will be able to recognise relationships and make links in mathematics. It is essential every child leaves KS2 with vital life skills that are mastered and embedded. We aim for children to leave St Mary's with a joy for learning Mathematics.

What a good Maths lesson looks like:

- 5 minute Flashback 4 task recapping prior learning
- 5 minute fluency task
- (In KS2) 1 minute times table challenge
- A clear learning objective
- Teacher modelling
- Use of manipulatives (if appropriate)
- Teacher talking time is limited
- AFL to take place within the lesson
- High expectations
- A clear understanding of the task
- Children are supported where needed
- Children are challenged through extension and reasoning problems
- Reflect

It is expected that Greater Depth children correctly answer reasoning questions on most days. Expected children correctly answer extension questions and some reasoning questions. It is expected that Working Towards children have evident of being supported and mainly completing the main Maths task. See our EYFS policy for information on how our early years curriculum is delivered.

Planning and Organisation

Maths at St Mary's is planned through the White Rose Maths scheme which takes into account the National Curriculum 2014. Maths is carefully sequenced to provide a comprehensive curriculum that has been strategically sequenced to ensure a broad and effective learning experience for all pupils. Teachers use long term planning, set out in the White Rose scheme, which informs medium term planning. Class teachers are responsible for the teaching of Maths in their class in consultation with and with guidance from the Maths coordinator, Middle Leadership and Senior Leadership.

We ensure that there are opportunities for children of all abilities to develop and apply their skills and knowledge in each topic. Opportunities for progression are planned for to ensure that children are increasingly challenged as they progress through the school. All classes

have an allocated slot of 1 hour minutes daily to teach Maths.

Long Term Planning

This is based on the White Rose scheme, supported by the National Curriculum for Maths, which details what is to be taught over the Key Stages and provides the topic basis for planning Maths activities for each year group. Opportunities for recap and recall through the school will be clearly identifiable. The Maths subject folder will contain an up-to-date copy of the long term plan from the White Rose Maths scheme.

Medium Term Planning

This takes the long term plan and organises the teaching of Maths into weekly sections set out for each half term. The planning is more detailed and the objectives are more specific in nature. This planning is developed by class teachers, who respond to the needs of their pupils. It also ensures a balanced distribution of work is undertaken across each term. The medium term planning includes the learning intents for each lesson and the key knowledge the children will be learning. The medium term planning will also give opportunities for recap and recall through the school.

Short Term Planning

The short term planning is rooted into the medium term planning; this is to allow teachers to focus on preparation for the lessons. Teachers can use the medium term planning to identify the key knowledge they will be teaching, which will make the preparation of resources more efficient.

The coordinator will be responsible for:

- The implementation, review and update of the policy.
- Providing schemes of work for all aspects of the Maths Curriculum.
- Consultation and advice on resources and activities for other teachers.
- Attending CPD courses and cascading relevant information.
- The ordering, storage and inventory of resources.
- Monitoring and evaluating how the curriculum is delivered.
- Auditing the needs of staff and arranging CPD.

SEND and Equal Opportunities

At St Mary's, we adapt and differentiate learning opportunities for children with SEND in Maths lessons.

Teaching is adapted to suit the needs of these pupils in a variety of ways:

setting suitable learning challenges

responding to children's diverse learning needs

Interventions to enable inclusion may involve:

- grouping for teaching and learning purposes
- additional support
- adapted use of resources

In Maths lessons, we ensure that EAL children are supported in a variety of ways. eg. emphasising key vocabulary and ensuring that the key vocabulary is explained in a way that can be understood, providing teacher or teaching assistant support, speaking clearly, using resources such as visual images, examples of work and making links to previous experiences.

Recording of Children's Work

Children are encouraged to record work in their exercise books when appropriate and photos and videos taken when completing spoken and other activities. Any photos and videos are uploaded to the school server or website, or displayed pictorially in exercise books. Children may use a combination of written responses, mind-mapping, jottings and spoken activities as a record of their work. Examples of children's work will also be displayed on the school website including photographic/video evidence of displays, presentations and spoken activities to provide a source of engagement with parents, carers and the wider community.

Marking and Feedback

Marking and feedback is provided in line with the whole school marking and feedback policy. Feedback relates to their attainment against the learning objectives for Maths.

Monitoring & Evaluation

Maths is monitored throughout school by the Maths coordinator.

Evidence is provided through:

- work scrutiny
- data analysis
- review of planning
- learning walks
- pupil interviews

Feedback is shared and discussed with senior management, staff and governors regularly.

Assessment

Teachers will use live marking (as outlined in the marking policy) to identify where children have understood and are able to apply a new mathematical skill. They will use this knowledge to inform their planning throughout the week. At the end of each term, children complete the NFER Maths tests as a summary of their understanding throughout the year and this will be used to identify gaps in learning and inform future medium term planning.

Summative Assessment

By using regular formative assessments, teachers are able to determine which objectives have been achieved and which will need revisiting. This information is then reported to parents annually through termly Feedback Reports and through Parents Evenings.

Assessing GDS

A child who is working at Greater Depth is encouraged to reason more precisely, deal with more complex problems and presentation, suggest multiple strategies and approaches to solving calculations, and compare different approaches, taking efficiency into account.

Arrangements for Review

Policies are regularly updated/reviewed by staff and governors to ensure that all aspects of the Maths policy aims are being met and the standards of Maths are continuing to improve. This policy will be reviewed again by the Leadership team and Maths coordinator by May 2024.