

# ST FRANCIS OF ASSISI CATHOLIC PRIMARY SCHOOL



## MATHS MASTERY POLICY

### **Mission Statement**

At St Francis of Assisi Catholic Primary, God is at the heart of our school  
**We** try, everyday, to follow Jesus' commandment 'Love one another as I  
have loved you'

**We** do this through love for our families, our friends, and our school

**We** respect our environment and recognise our responsibility for it

**We** encourage in each other a love of learning

**We** rejoice in each others' uniqueness

**We** place prayer and worship at the centre of everything we do

**We** are a community of love dedicated to God

Our school is somewhere **We** can grow together

## **Whole School Curriculum Intent**

**At St Francis of Assisi Catholic Primary School, we are deeply committed to developing the gifts and talents each pupil has been given by God. The school's direction stems from its Mission Statement, 'Our School Is Somewhere We Can Grow Together'.**

**We deliver an engaging and challenging curriculum for every child that attends our school. The National Curriculum forms the foundation for all learning, which has been carefully sequenced to ensure that all children, in particular the disadvantaged and those with Special Educational Needs, are exposed to the richest and most varied opportunities that we can provide.**

**We have ambitious expectations and will support the spiritual wellbeing of each child by instilling the knowledge, skills and understanding that they need to be aspirational, successful young people, who are confident and well-rounded in an ever-changing world.**

### **Maths Intent Statement**

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

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

At St. Francis of Assisi, these skills are embedded within Maths lessons and developed consistently over time. 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. We aspire that all children, including those that are disadvantaged or have Special Educational Needs, are: engaged in Maths lessons; challenged but also can experience success within the subject; and have the ability to reason mathematically. We are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

## Subject Curriculum Design – Implementation

The content and principles underpinning the 2014 Mathematics curriculum and the Maths curriculum at St. Francis reflect those found in high-performing education systems internationally, particularly those of east and south-east Asian countries such as Singapore, Japan, South Korea and China. These principles and features characterise this approach and convey how our curriculum is implemented.

- All teachers plan from the White Rose medium term plans, which allow time to focus on topics by teaching in blocked units. These also address the aims of the 2014 National Curriculum of fluency, reasoning and problem solving. The class work together on the same key point, whilst at the same time challenging and supporting pupils to gain depth of understanding and proficiency.
- Teachers plan on a weekly planning proforma and produce smartnotes, or equivalent for each lesson.
- Lessons will contain a combination of fluency work, reasoning tasks and problem solving activities. Lessons will not always contain all three.
- Pupils should work in mixed or ability groups according to teacher discretion.
- Precise questioning during lessons ensures that pupils develop fluent technical proficiency and think deeply about the underpinning mathematical concepts.
- Pupils are encouraged to make rich connections across mathematical ideas to develop deep interconnected understanding.
- Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems rather than accelerated onto new content.
- Additional support may be given in the following ways: further use of representations; careful directed questioning; additional time or activities to consolidate understanding and use of flexible grouping.
- New concepts are introduced by using a concrete, pictorial, abstract approach. See calculation policy.
- Every Maths lesson should show progress and/or help children to deepen their understanding and should build on prior knowledge, therefore all children should be challenged.
- Maths vocabulary should form part of every lesson and it should be used in the correct way in order to develop children's knowledge. Stem sentences should be used where appropriate.
- Every classroom should have helpful, appropriate, display materials, including Maths vocabulary. There should be a clearly defined maths area/ working wall, with resources that can be easily accessed by the children.
- All calculations should follow the calculations policy, according to individual needs.

- The learning intention for each lesson should be clear, should be taken from the objectives for the year group and written as a 'Can I...?' It should be shared with the children and they should be aware of the success criteria.
- All adults working with the children should be used effectively in order to develop the children's knowledge and they should be aware of the focus children for the class where appropriate.
- Pre-teaching (Sneaky Pete) of an area of maths may take be required for some children to provide them with more knowledge and confidence when approaching a new topic. This is to help to increase engagement and reduce frustration.
- Post-teaching (Have-A-Go-Hare) is also embedded across the year groups. This is an opportunity for children to address any misconceptions from the morning Maths lesson and will take place on the same day.
- Opportunities for self and peer assessment should be incorporated into every lesson. Children should consider what they did well and how to improve. Children are expected to perform to the best of their ability. All work should be self assessed using traffic light colours and there should be indication of support from an adult (see marking code).
- Children should record at least 3x weekly in their Maths books.
- Children should have regular opportunities to practise their targets; times tables challenges and awards; number sentence missions.
- Children in KS1 and KS2 have their own Maths Shed account, which is used to support learning at school and at home. In addition to this children in KS2 have a Mathletics and Timestables Rockstar account.

## Sequencing the Curriculum

The Progression of Skills to illustrate the curriculum sequence is mapped out on the link below:

[NEW NC RTP 2022.3 FINAL March 2023 version.pdf \(whiteroseeducation.com\)](#)

A typical lesson lasts approximately 1 hour. Maths is taught daily during the morning. Children begin with a short 'starter' activity which supports fluency in and recall of number facts. This reinforces previous learning. Following this, the teacher introduces the learning objective for the lesson and the context of the skills (teacher input). Through effective questioning, modelling and paired talk, children will be prepared to start their independent work. Teachers use careful questions to draw out children's discussions and their reasoning and the children learn from misconceptions through whole class reasoning. Their independent work begins with fluency activities where the children record their working out in their Maths books or on a mini whiteboard. This fluency task uses conceptual and procedural variation to build fluency and develop greater understanding of underlying mathematical concepts. The teacher uses this part of the lesson to address any initial errors and confirm the different methods and strategies that can be used. In both KS1 and KS2 children will support their working out using concrete or pictorial resources. Following on from the Fluency task, children will move onto reasoning or problem solving activities to promote a greater level of thinking.

An extension activity is planned for and may link to other areas of Maths which encourages children to take their understanding to a greater level of depth. Children who complete this are provided with further 'dive-deeper' problems based on the White Rose Maths scheme.

Lessons finish with a plenary and provides an opportunity for Assessment for Learning.

## Early Years Foundation Stage (EYFS)

Teachers support children in developing and expressing their understanding of problem solving, reasoning and numeracy in a broad range of contexts through exploration. Teachers offer opportunities for these skills to be practised, in order to give children confidence and competence in their use.

This Area of Learning and Development includes seeking patterns, making connections, recognising relationships, working with numbers, shapes, space and measures, and counting, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other Areas of Learning and Development. Mathematical understanding will be developed through whole class sessions as well as stories, songs, games and imaginative play.

### **Assessment and Record Keeping**

- Assessment is continuous and ongoing. There should be assessment opportunities in every lesson. White Rose assessment materials can be used to plan appropriate assessment activities.
- Assessment values knowing 'why' and 'how', as well correct answers.
- Assessment does not solely focus on the need to memorise key facts and procedures and answer test questions accurately and quickly.
- Assessment values applying mathematics to new and unfamiliar situations.
- Times tables are assessed using time tables TTRS every half term.
- Children in KS1 complete number sentence missions regularly.
- Each term children are assessed using the White Rose assessment materials or NFER tests which provide summative data to measure progress.
- Data is recorded on Target Tracker.
- Data is discussed at the termly PLRs where Maths targets are agreed.

### **Home/School Link**

The link between home and School is forged in a number of ways. In EYFS through weekly overview homework from January and tapestry observations. In key stage 1 and 2 homework is on Google Classroom. This will support the Mathematics work in the classroom. To give more detailed outlines of the child's progress, annual reports and parent consultations are arranged but informal meetings are encouraged when needed. The school encourages families to engage in online learning with resources such as Mathletics, MathsShed and TTRS.

### **Inclusion and Special Needs**

We aim to meet the needs of all children by an effectively differentiated curriculum through quality first teaching.

Where we identify that, due to one or more factors a child is finding an area of learning challenging, measures are put in place to support the child in catching up. These measures are individual and personal to the needs of that child at that time and may be as small as altering an element of our classroom practice.

When or if it is clear that impact has not been seen, then it may be appropriate for a SEN Support Plan in the form of an Individual Learning Plan to be put in place. These are reviewed termly and amended as appropriate. Quality first teaching will still be taking place but the child may receive additional support in or out of the classroom.

On occasion a child may have a significant difficulty which requires support from specialist strategies or external agencies.

Ultimately, we aim to ensure that every single child is fully catered for regardless of their age, gender, race, culture or ability. Where children do find difficulties we are pro-active in our actions.

## **Monitoring and Evaluation**

In Maths, subject leaders and SLT know that children achieve their very best through regular monitoring which includes lesson visits, book and planning reviews, staff meetings and pupil voice. Pupil Learning Review meetings take place termly where each child's progress is discussed and actions taken to accelerate/support learning, as necessary. Subject Leaders regularly meet and report to link governors.

## **Role of subject leader**

The subject leader will be responsible for improving standards of teaching and learning in Mathematics through:-

- Pupil progress,
- The quality of the learning environment,
- Taking the lead in policy development,
- Auditing and supporting colleagues in their CPD,
- Purchasing and organising resources,
- Keeping up to date with mastery maths developments.

Reviewed September 2023 VF