

# St Francis Xavier Catholic Primary School



## Maths Policy

Approved By: Bernadette Nesbit

Last Reviewed: September 2023

Next Review Due by: As required

## **Legislation and guidance**

This policy reflects the requirements for academies to provide a broad and balanced curriculum as per the Academies Act 2010, and the National Curriculum programmes of study which the school has chosen to follow. It also reflects requirements for inclusion and equality as set out in the Special Educational Needs and Disability Code of Practice 2014 and Equality Act 2010, and refers to curriculum-related expectations of governing boards set out in the Department for Education's Governance Handbook.

## **Roles and responsibilities**

### The Governing Board

The governing board will monitor the effectiveness of this policy and hold the Executive Headteacher to account for its implementation. The governing board will also ensure that:

- A robust framework is in place for setting curriculum priorities and aspirational targets
- The school is complying with its funding agreement and teaching a "broad and balanced curriculum" which includes English, maths, and science, and enough teaching time is provided for pupils to cover the requirements of the funding agreement
- Proper provision is made for pupils with different abilities and needs, including children with special educational needs (SEN)

### Executive Headteacher

The Executive Headteacher is responsible for ensuring that this policy is adhered to, and that:

- All required elements of the curriculum, and those subjects which the school chooses to offer, have aims and objectives which reflect the aims of the school and indicate how the needs of individual pupils will be met
- The amount of time provided for teaching the required elements of the curriculum is adequate and is reviewed by the governing board

### Other staff

Other staff will ensure that the school curriculum is implemented in accordance with this policy. The Maths Leader will ensure this policy is being adhered to and monitor the effectiveness of Maths lessons.

## Intent

At St Francis, we aspire for each and every one of our pupils to grow into a highly competent, confident mathematicians who has a love of maths. We aim to enable all of our pupils to master the objectives in the National Curriculum.

We enable pupils to experience mathematics through the concrete, pictorial and abstract in order to build secure understanding in long term memory. We strive to enable pupils to become fluent in the fundamental knowledge and skills which are the foundation of becoming a competent mathematician and to provide our pupils with plenty of opportunities to reason and to problem solve. Our pupils are taught to make links between the different domains of the maths curriculum and to apply their mathematical understanding in a range of different contexts.

High expectations of all coupled with high levels of challenge are fundamental to our approach to enable all pupils to attain highly in maths.

## Implementation

### Curriculum

Our maths curriculum is underpinned by the Ark My Mastery scheme of work. The school maths long term plan is founded upon the Ark My Mastery

Our maths curriculum is organised progressively from Nursery through to Year 6 with new knowledge and skills building upon what pupils have learned before. Content is taught and revisited in increasingly greater depth multiple times throughout the curriculum in order to support pupils with assimilating knowledge into long term memory.

### Teaching

In every class 4-5 one hour maths lessons are taught each week. These are supplemented by 3 x 15 minute maths meetings for the purpose of revision and retrieval practice of previously taught content. Typically, maths meetings will focus on fluency: foundational knowledge and skills. Every maths lesson follows a six part lesson structure:

1. Do Now
2. New Learning
  - a. Share Learning Objective
  - b. Teach/retrieve key vocabulary
  - c. Teacher Modelling
3. Talk Task
4. Develop Learning
5. Independent Task
6. Plenary

## Task Design

The learning objective for the lesson along with the date will be stuck in each child's book in every lesson.

Pupil's tasks will be designed to increase incrementally in challenge and follow the following structure:

- 1) Fluency task
- 2) Orange Reasoning
- 3) Green Reasoning
- 4) Blue Reasoning
- 5) Purple Reasoning (KS2 only)

All pupils should have the opportunity to reason and problem solve in every lesson.

## Assessment & Feedback

In every lesson teachers will apply a range of formative assessment strategies to systematically check pupil understanding. They will use this formative assessment as the basis for providing feedback to pupils and in order to address misconceptions. All pupil work will be live marked in line with school marking policy – see policy.

Staff feedback during the lesson following the school's Feedback policy. It is expected that a green highlight against the learning objective means the child has achieved the learning objective for the lesson. A green highlight including an S with a circle round means the child achieved the learning objective with support. A pink highlight means the child did not meet the learning objective. Staff to tick answers using a purple pen. Support offered to the child will be evident by a pink highlighter. Children being challenged with extensions and reasoning will be evident with a pink. Children respond to any intervention by an adult in green pen. Ticks in green mean the children have self-marked either using a marking station or when the teacher has gone through the answers.

Each new unit of maths begins with a pre-unit assessment using the digital formative assessment tool 'plickers'. This assessment then informs adaptations and scaffolds in the teacher's planning. All units end with a post-unit assessment using the digital formative assessment tool 'Plickers'. This post unit assessment is used to inform the teacher's future intervention sessions and foci for revision and retrieval.

Pupils sit a summative assessment in maths termly. These assessments are used to identify target groups or individual pupils who may require additional support; to identify target domains of the curriculum

## Impact

Our pupils leave school with a strong grounding in the fundamentals of mathematics and the ability to transfer this knowledge to different contexts in order to reason and problem solve. Pupils remember mathematical knowledge and skills in the long term and form strong connections between the different domains of the maths curriculum. The pupils at St Francis demonstrate a real love for and enjoyment of learning mathematics.

## Inclusion

Teachers hold high expectations for all pupils' attainment and progress. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- Higher attaining pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEND
- Pupils who speak English as an additional language (EAL)

Teachers will adapt lessons so that pupils with SEND and/or disabilities can study the mainstream maths curriculum and will put scaffolds in place where necessary for learners. Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects. Further information can be found in our statement of equality information and objectives, and in our SEND policy.

## Monitoring Arrangements

Governors monitor whether the school is complying with its funding agreement and teaching a "broad and balanced curriculum" which includes the required subjects, through:

- School visits
- Learning walks
- Meetings with staff
- Data Analysis

The Maths Leader and Senior Leadership Team monitor the way their subject is taught throughout the school by:

- Book Looks
- Learning walks
- Lesson observations
- Lesson drop-ins

- Pupil Voice
- Staff Voice
- Data analysis
- Maths moderation meetings.

The Maths Leader also has the responsibility for monitoring the way in which resources are stored and managed.