

FAITH PRIMARY SCHOOL

Liverpool

MATHS POLICY



Introduction

A 'high-quality' mathematics education provides 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 about the subject. (National Curriculum September 2013)

Vision

To develop fluency in mathematics, children need to secure a conceptual understanding and efficiency in procedural approaches. It is important to make connections between concrete materials, models and images, mathematical language, symbolic representations and prior learning.

We must ensure that children have opportunities to practise the key skills whilst building the understanding and knowledge to apply these skills into more complex activities. The basic skills must continually be practised to ensure that they secure the building blocks in mathematical learning.

Aims

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Daily Maths Lesson

All pupils have a daily maths lesson. The structure of each lesson is flexible and will vary depending on the needs of the children and the content of the lesson. Typically, a maths lesson will include; a learning objective, activities that provide challenge for each ability group, key questions and the use of additional adults. Other areas for consideration include, steps to success, teacher modelling and the structure of the lesson (chunking, show and go, staggered input). Reasoning must be part of every maths lesson, whether this be through starting/ending the lesson with a challenge or a reasoning lesson focus.

Basic Skills

The knowledge of the basic skills is fundamental in helping pupils move towards procedural efficiency. The session gives teachers the opportunity to link with previous, current or future learning so that the prerequisite skills of an objective can be regularly practised and rehearsed. There is an expectation of basic skills sessions taking place at least twice a week. A typical basic skills session could include; counting, recall of facts and practise of a skill linked to current learning. Jotters alongside whiteboards are a useful way of recording basic skills work. It is essential that teachers adapt these sessions to suit the needs of the children therefore reference to PIVATs alongside the use of other adults to support groups is vital.

Outdoor Learning

There is an agreed amount of time that the children should spend outdoors during maths. This is at least once every two weeks.

Planning and Resources

The Liverpool maths plans are used as the main structure for planning. Other resources that maybe used include; calculation policy, calculation sequence, (White Rose, NCMT and abacus texts books)

Calculation Policy

There is an agreed calculation policy that should be followed. For each operation there are four or five stages, starting with practical methods that support conceptual understating moving through to methods that allow children to demonstrate efficiency in procedural approaches.

The calculation sequence provides an opportunity for pupils to practise the skills of calculation through a range of application activities including the use of inverse, missing box, word problems and investigations.

Marking and Feedback

Consistently high-quality marking and constructive feedback from teachers ensures pupils make progress in their learning.

Presentation

Pupils should be reminded to always take pride in their work.

Date and learning objective to the left of the page

1 square 1 digit

Pencil

Use of ruler

Working Walls and Maths Displays

The learning environment is key to supporting pupils learning and a maths working wall is a key part of this.

The working wall is the public display of the learning process and includes; steps to success, models and images, challenges, vocabulary and examples of good work. A maths display is an opportunity to celebrate pupils' success and as such is often found outside of the classroom. Any display that includes a maths element should be highlighted to show those true cross-curricular links.

Interventions and use of Additional Adults

Interventions are used to support pupils who have been identified through teacher assessment as having gaps in mathematical understanding. Interventions are delivered by the teaching assistant of the class, they are reviewed regularly to assess impact. Additional adults are used to support the learning in class.

Assessment and Moderation

Assessment is an integral part of teaching and learning and is a continuous process. It is the responsibility of the class teacher to assess all pupils in their class. A summative assessment after every maths topic will take place, with data being provided to the subject leader. Formative Assessment information can be gathered in various ways including by; pupil-teacher discussions, observations, through marking, questioning etc.

Monitoring and Evaluation

Monitoring is important as it allows leaders to have an accurate understanding of pupil's performance.

Monitoring exercises will be undertaken across the year and could include; book scrutinies, observations, learning walks, pupil interviews and moderation meetings.

Cross Curricular

Throughout the whole curriculum, opportunities to extend and promote mathematics should be sought.

Role of the Subject Leader

The subject leader is responsible for leading mathematics throughout the school.

This includes:

- Monitoring and evaluation
- Leading CPD
- Write an action plan
- Interventions
- Resources
- Overview of data

Parents

Parents are important influences on pupils' attitude and attainment. We actively encourage and involve them in school life by:

- Homework
- Parent Afternoons and Information giving sessions
- Parent's evenings
- Newsletters
- Twitter
- Seesaw
- School Website

Reporting to Parents

Reporting to parents is undertaken on a termly basis through parent's evenings and annually through a written report

Inclusion and Equal Opportunities

All pupils have equal access to the curriculum regardless of their race, sex, religious belief or ability. This is monitored by analysing pupil performance throughout the school to identify and address any disparity between groups.

Review of Policy

This policy was written by SLT and was reviewed by the governors in 2022. The policy will be reviewed 2023.