

All Saints CE (VC) First School, Busy Bees Pre-School & Kingfisher Club

Policy on Mathematics

Date adopted: December 2022 To be reviewed: December 2024

Maths Policy

Introduction

This policy statement outlines the intent, implementation and impact of mathematics taught and learnt in All Saints CE(VC) First School. The implementation of this policy is the responsibility of all teaching staff and should be overseen and monitored by the maths leader and Headteacher.

"Schools should ensure the maths curriculum is designed to help pupils to gain increasing mathematical proficiency and build confidence in their ability." (Ofsted, May 2021).

At All Saints we believe that mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real-life problems.

Intent (Aims and Objectives)

Our aim at All Saints CE (VC) First School is for all of our children to reach their full mathematical potential during their time with us. This will be achieved through the following aims:

- To encourage a love of learning in mathematics.
- To promote high standards of achievement in mathematics.
- To develop resilience through promoting a growth mindset during Maths lessons.
- To provide opportunities for children to acquire and build mathematical language, skills, knowledge and understanding at their own rate.
- To develop clear, logical thinkers who become secure in Numeracy, through an understanding of concepts such as number, space, relationships and patterns.
- To equip children with problem solving strategies which enable them to apply mathematics to real and unfamiliar scenarios both in and out of the classroom.
- To understand the importance of mathematics within the real world and in their later life.

By meeting the aims set out above, the children will be able to achieve the following outcomes:

- Develop a positive and confident attitude to mathematics.
- Develop the transferable skills of independence and resilience.
- Become confident and competent in their mathematical ability.
- Become thinkers and problem solvers.
- Develop a clear understanding of the language of mathematics.
- Develop logical thinking skills enabling them to work effectively in a variety of ways.
- Develop a love of Mathe.

Implementation

Teaching and Learning

Following the *Maths No Problem* scheme, lessons are delivered in year groups and follow a set lesson structure:



Explore - The lesson begins with an open-ended problem for the children to discuss in partners and groups. Teachers are encouraged to make this question practical and with the use of resources to give children a concrete experience in their learning. They are then encouraged to share their answers *and* how they achieved their answer.

<u>Master</u> - The children are then shown pictorial examples to the problem from *Explore* and provided with a written method/way to work it out whilst using correct language and vocabulary modelled by the teacher.

<u>Guided Practice</u> - The children are presented with further problems linked to the lesson objective and given the opportunity to have a go at answering them having now been taught the appropriate way to solve them. This section of the lesson can be completed on whiteboards, in groups, or as a class on the interactive whiteboard. It also gives the teacher an opportunity to assess the children's understanding at this mid-point in the lesson as to who may or may not further support/guidance.

<u>Workbook</u> - The children each have a workbook with worksheets linking directly to the lesson being taught. The children should be able to have a go independently at answering the problems, but support from an adult is also available if needed.

It is the teacher's discretion to dictate how much of the work should be completed or at what starting points the children may need depending on their ability and understanding e.g. a more able child may not need to complete every question as the teacher is confident in their understanding.

<u>Mathe Journal</u> - When children have completed their work from the workbook, or the teacher is happy with their understanding, the child will move onto their Mathe Journal.

The Math's journals are used to demonstrate the skills and knowledge learned from the *Maths No Problem* scheme by applying them to different problem-solving areas. It also encourages children to practise their mastery level thinking as the work provided requires a deeper thinking to solve it.

Inclusion

Children are provided with work pitched to their ability. In most cases children should be able to access lesson material from the workbook, however if a child is not able to access this they will be provided with tasks based on the same learning objective (where possible) but that they can be successful in, for example adapting the task to make it more practical or if needed, being given completely separate tasks to meet their needs/target areas.

Children are also provided with appropriate resources depending on their stage of development? e.g. counters, cubes, 100 squares, number lines, mirrors, set squares and protractors etc.

Children with SEN are taught within the daily mathematics lesson whenever possible. Teachers and any additional support staff support groups or individual children if needed. Within the daily mathematics lesson teachers not only provide activities to support children who find mathematics difficult, but also activities that provide appropriate challenges for children who are high achievers in mathematics.

In addition to the daily lessons, children receive other opportunities to develop their Maths skills through use of

- Active Maths; delivered by a TA whilst the class teacher delivers the Maths No Problem lesson to a separate year group. This involves practically building on existing arithmetic knowledge such as number bonds and times tables, through the use of games.
- Mastering Number; these sessions are delivered twice weekly as a whole class, usually in the afternoon again to build fluency within the Maths curriculum.

Assessment

Children are assessed throughout each lesson within the *Explore* and *Guided Practice* areas so that they can use their time most appropriately within the lesson to support children who need it. In addition to this, children who are deemed to require further support will be taken by support staff to receive 1:1 or small group interventions to assist with learning.

The Maths No Problem scheme is split into Chapters, each one focussing on a different area of the Maths curriculum e.g. Place Value or Shapes. At the end of each of these chapters, children are given the opportunity to demonstrate their new knowledge in a "Chapter Review", which is a series of worksheets based on all the learning that has taken place in that chapter. Teacher's can then use this as an assessment tool to support children who may require further intervention on the theme of that chapter.

Parental Involvement

Parents are actively encouraged to support their child(ren)'s mathematical development at home, this is done in the following ways:

- Children being set weekly Maths homework linked to the learning that has taken place that week.
- Children having access to useful websites/apps at home such as TT Rockstars, Purple Mash and Mathletics.
- During parents evenings each term, class teachers provide targets for the children and communicate how parents may be able to support at home.

Impact

Monitoring

The subject of Maths is regularly monitored throughout the school year by the Headteacher and Maths Subject Leader in the following ways:

- Assessment of Termly data on Target Tracker:
- Lesson Observations.
- 🛚 🛛 Book Looks.

Evaluation

The teaching and learning of Maths is evaluated against the results from on-going monitoring (listed above) to assess the impact of the *Maths No Problem* scheme and other provision such as *TT Rockstars*, *Purple Mash* and *Mathletics*.

Role of Maths Subject Leader

Alongside the Headteacher, the Maths Subject Leader is responsible for:

- Ensuring good quality teaching and learning across the school in mathematics.
- Providing up to date training/support for Teachers and support staff to promote and develop the teaching and learning within the school.
- Stay up to date with research, advancements and changes within the curriculum and to ensure these are embedded within the school.
- Ensure both staff and children develop a love for Maths.