



SUTTON CE VC PRIMARY SCHOOL

MATHS POLICY

January 2024



Mathematics Vision Statement

At Sutton, all pupils STRIVE to be confident, fluent and curious mathematicians who appreciate the beauty, power and creativity of the subject. Together we are on a journey to develop our mathematics mastery curriculum, which allows every child to achieve a deep knowledge and understanding of each mathematical concepts taught.

Key Features of our Mastery Curriculum:

- We learn together through mathematical thinking and language.
- Children value and gently challenge each other's ideas
- Children are fluent in the fundamentals of mathematics: we start with a foundation of number sense and place value
- We have high expectations of every child and STRIVE for excellence in their work.
- Reasoning and Problem solving is central
- We use resources to support children's mathematical understanding.
- We can calculate with confidence.

Aims

In Mathematics education at Sutton C of E (VC) Primary School we aim to sustain and develop in all children:

- a positive attitude towards the subject, in which they show confidence, understanding and enjoyment when using and applying mathematics;
- awareness of the relevance of mathematics in the real world concepts and skills;
- an ability to solve problems, to reason, to think logically and to work systematically and accurately in a wide variety of situations;
- an appreciation of mathematics as a means of communication through which they can ask questions, analyse information and ideas;
- the ability to work systematically where the task requires a careful accurate approach, as well as the ability to show imagination, initiative and flexibility when appropriate;
- independence of thought and action as well as the ability to cooperate within a group;
- to solve problems, to effectively use reasoning language and explanation, to think logically and to work systematically and accurately;
- To develop a foundation of conceptual understanding leading to accurate choices in mental and written methods, calculators and other mathematical aids;
- To learn from mistakes;
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and investigation

Organisation of Teaching and Learning:

At Sutton C of E (VC) Primary School, we are committed to providing a motivating, challenging and comprehensive maths curriculum that is accessible to all and links the use of mathematics across a range of subjects, adding meaning to the learning of maths.

Our maths planning is largely based on Schemes of Learning from White Rose Maths and enhanced by a wide range of resources. This ensures a progressive and thorough curriculum in every year group. Teachers know which objectives must be taught and assessed in each year group and can follow progressive small steps to ensure pupils have a comprehensive understanding of maths. White Rose Maths promotes kinaesthetic learning to ensure children acquire fluency of skills by introducing concepts in a practical/concrete way to progress to pictorial then abstract (C-P-A).

The school's medium term plans and breakdowns of objectives across each year group can be found in the Curriculum Guidance Documents on the Google Drive on the school system.

Structure of a lesson

1. Warm up/starter activity
2. New Learning
3. Talk Task
4. Develop Learning
5. Independent Task
6. Plenary

The independent tasks include a mixture of fluency, reasoning and problem solving activities. Scaffolding is planned to support SEND children and challenge for children at all levels.

Teachers should use their professional judgement to determine the activities, timing and organisation in each lesson in order to suit the teaching objectives and ensure children understand each small step.

Throughout KS1 and KS2, pupils have daily maths lessons. In Early Years, outdoor maths is advocated at every opportunity in order to give children a context to their learning and further deepen their understanding.

The teaching of mathematics at Sutton C of E (VC) Primary School promotes the use of mathematical vocabulary through encouraging children to explain their thinking, strategies and mistakes during lessons to embed understanding and to support peer on peer learning as children learn well from peers. Opportunities for both written and verbal reasoning are taken at any point in order to encourage and deepen children's conceptual understanding further.

For pupils who may struggle or possibly 'fall behind' with parts of the curriculum, in class support is provided on a daily basis. Additionally, intervention and consolidation is provided in the afternoon or early morning work to ensure they are ready for the next lesson. For SEN pupils, a separate curriculum may be more appropriate.

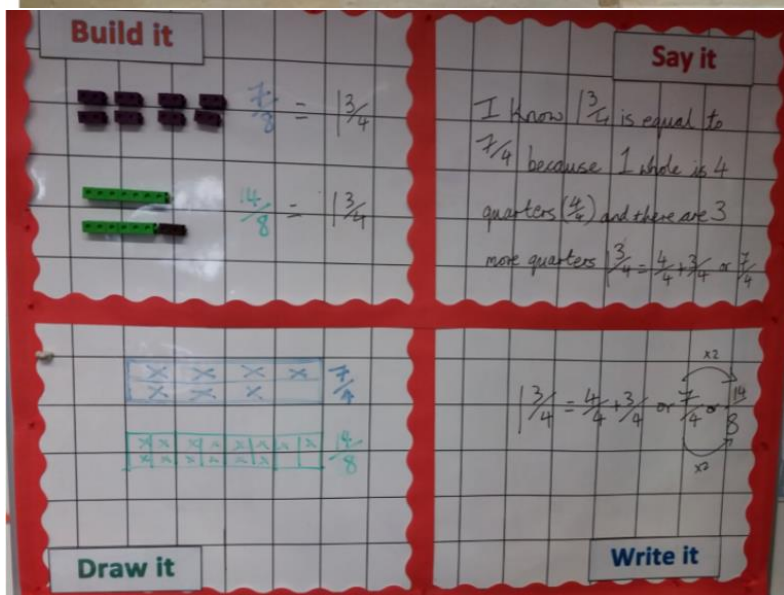
A love of mathematics is promoted through different initiatives and the sharing of ideas. Maths Eyes is used regularly during lessons and throughout the school day to encourage the idea of mathematical concepts being embedded in our daily lives and surroundings. In addition, Sutton C of E (VC) Primary School also makes use of interactive resources such as Times Table Rockstars and Numbots to encourage fluency practice at home and in school.

What does the maths learning environment look like at Sutton?

Each classroom in Sutton C of E (VC) Primary School has a working wall display showing four clear sections that consist of Build It, Draw It, Write It and Say It. These are updated and used for

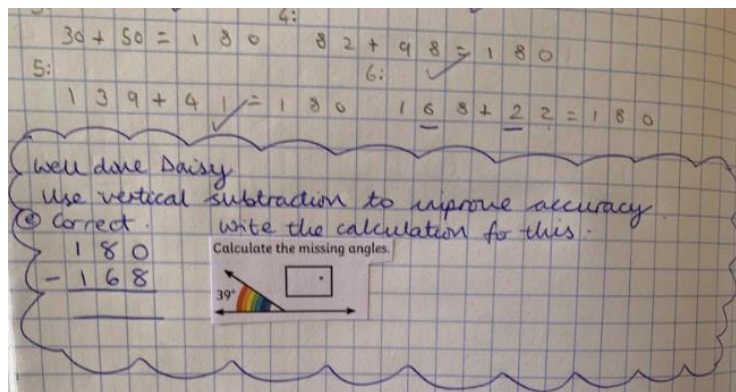
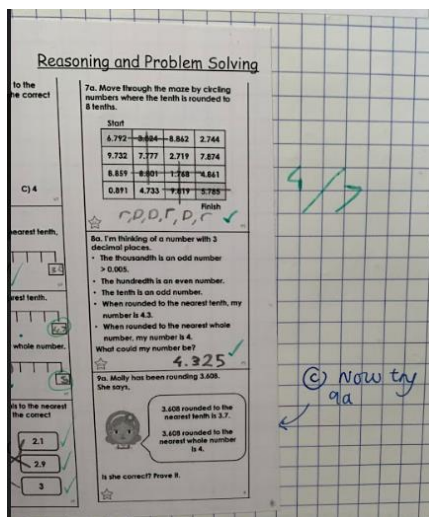
each new concept covered in the children's learning and used as a tool to help build children's conceptual understanding. In addition to this, it also follows on from the concept developed by White Rose and also our calculation policy of CPA (Concrete, Pictorial and Abstract).

Each classroom has age appropriate resources readily available and Owls classroom is equipped with a wide range of specific maths resources, these can be used and returned.



Marking and Feedback

Live marking is encouraged where possible in order to allow children to act on feedback immediately. Marking in maths follows the school's marking policy and next steps or challenges should be given where appropriate. After activities, the whole class discuss answers, strategies and mistakes. This provides children with immediate feedback and time to reflect on their learning. Mistakes are discussed and correction time given as part of a lesson either at the beginning or at the end.



Assessment

Between one and two weeks prior to a change in concept, children complete an initial assessment (diagnostic task) without any input in order to gauge their understanding before the learning begins. This then informs planning and any necessary intervention that may be needed.

Alongside these initial assessments, teachers assess against the different objectives at each stage of their learning, plan and respond to any gaps in knowledge or any objectives that may need to be revisited. Where appropriate, teachers can use the White Rose end of unit assessments to assist with their assessment of children's attainment in maths.

In Mathematics Mastery assessment is continuous. From the beginning of every lesson, teachers and teaching assistants will be assessing what their pupils are, or are not understanding and adapt their lessons accordingly.

Interventions will be both planned for and 'live', meaning that misconceptions are dealt with immediately and high attaining pupils are challenged appropriately. For pupils who may struggle or possibly 'fall behind' with parts of the curriculum, in class support is provided on a daily basis. Additionally, intervention and consolidation is provided in the afternoon or early morning work to ensure they are ready for the next lesson. For SEN pupils, a separate curriculum may be more appropriate.

In Early Years, pupils are assessed against the Early Years Foundation Profile and are awarded levels of Emerging, Expected and Exceeding, matched to their achievement of the assessed statements.

Following these assessments as well as Teacher Assessment through book scrutiny, moderation and tracking, teachers input 'Point in Time' data six times a year using Pupil Asset.

Performance Indicators

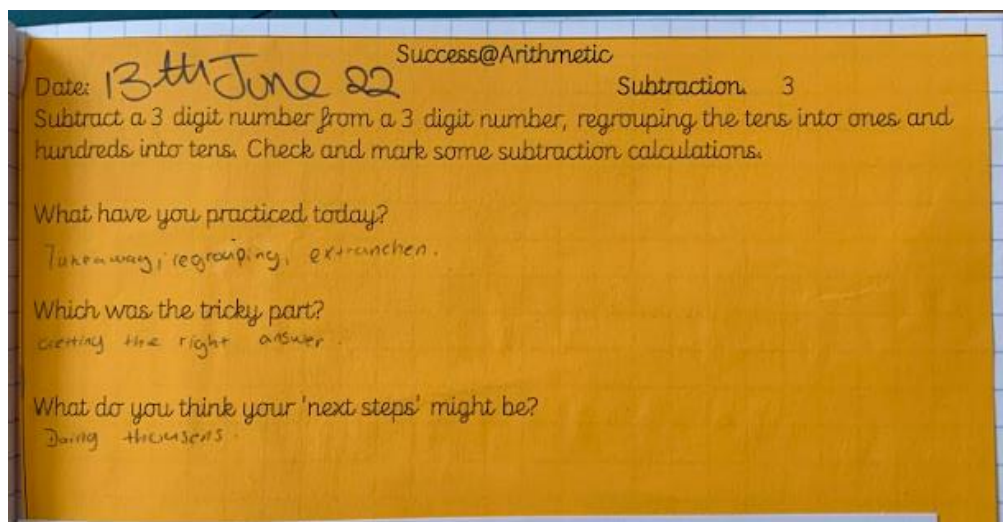
Performance Indicators, which are the criteria for success of the school's mathematics policy at Sutton C of E (VC) Primary School, are:

- Early Years Foundation Profile (Statutory Assessment)
- KS1 results (Statutory Assessment)
- KS2 results (Statutory Assessment)
- Yr4 Multiplication Table Check
- Pupil Asset data analysis (using end of term assessments)
- Pupil voice (enjoyment of maths and their ability to talk confidently about what they are doing)

Intervention

Sutton C of E (VC) Primary School offers a range of different mathematical interventions following teacher's planning, assessment and data entry. Success @ Arithmetic provides children in key stage 2 with a detailed intervention programme that revisits key calculation skills that helps to develop confidence in children's mathematical knowledge. This is achieved through a series of games and short 30 minute sessions, following the Success @ Arithmetic planning. FirstClass@Number provides a catch up programme for identified gaps in learning.

Interventions should be recorded in maths books using a different colour paper and giving children an opportunity to reflect on their learning



Enrichment

At Sutton, children learn that maths is all around them and we teach them to see maths in all we do. Cross-curricular maths opportunities are planned in and there is a close link with science planning and PE. We promote a love of learning at home as well as school, sharing opportunities such as estimation and maths eyes and even have our own maths trail in school. There are opportunities for children to take part in challenges both internally and through external competitions such as the Year 5 and Year 6 maths challenges.

Lateral thinking and problem solving skills are developed through maths weeks, NSPCC Number Day, morning activities and practical and outdoor maths foci. This is particularly evident in EYFS and in Year 1 through Rainbow Learning.

Role of Subject Leader

The Mathematics Subject Leader monitors standards of planning and teaching and carries out scrutinies of children's work and teachers' planning alongside the Senior Leadership Team. Support is given, if necessary, to ensure all staff are adhering to the agreed policy and planning format. Findings from monitoring are discussed with the Senior Leadership Team and shared with teaching staff as appropriate.

Parental Involvement.

At Sutton C of E (VC) Primary School we encourage parents to be involved by inviting them into school to participate in year group information mornings where they are informed of the up to date objectives, methods and strategies we use and to work with their child on a range of activities. Copies of the presentations and notes are sent home for parents who are unable to attend. We also invite parents to participate in learning cafes where they have the opportunity to see a lesson in action. Parents are also invited to a Parent's evening each term to discuss the progress of their child.

Homework

Children are encouraged to practice their key number facts and multiplication times tables using Numbots and Times Tables Rock Stars as their homework.

The Governing Body

A governor responsible for mathematics is identified from the governing body. Governors are invited to attend any Maths workshops or training days. The subject leader and the nominated governor meet annually for a monitoring meeting.