ST CUTHBERT WITH ST MATTHIAS CE SCHOOL
MATHS POLICY
SEPTEMBER 2022

We take inspiration from our vision,

'As a school community we are inspired by the parable of the Good Samaritan from the Bible (Luke 10:25-37), where we are encouraged to love one another courageously and with compassion. Through friendship, kindness and thoughtfulness, we will nurture each other to learn and flourish as individuals.'

Loving one another. Learning for our future.

OUR INTENT:

At St Cuthbert with St Matthias CE School, we are committed to offering pupils a broad and balanced experience of mathematics with opportunities to develop mathematical questioning through activities that arise in all curriculum areas, undertaken individually or in groups, being appropriate to all pupils including those from different cultures and home backgrounds.

Pupils are taught to use mathematics as 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 through investigative and problem-solving projects.

To provide opportunities for the children to:

- 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
- solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions
- apply their mathematical knowledge to science and other subjects

To develop skills through teaching which:

- enable children to observe closely, use simple equipment and perform simple problem-solving tasks
- enable children to identify, classify, and use their observations and ideas to suggest answers to questions
- enable children to gather and record data to help in answering questions
- develop children's confidence in using primary and secondary resources
- enable children to take responsibility for their own learning
- provide continuity and progression

To develop children's knowledge of mathematics so that they:

- build a sequenced knowledge of concepts over time
- recognise the power and limitations of mathematical and data evidence and consider associated personal, social, economic and environmental implications

- can make decisions based on mathematical evidence
- are confident in developing appropriate questioning

IMPLEMENTATION:

PLANNING including CROSS-CURRICULAR LINKS

We believe that quality planning is essential in all areas of learning. Planning should be clear, succinct and ensure that all pupils are catered for regardless of their needs. Planning should also clearly show continuity and progression through learning stages.

Long term plans (curriculum maps, subject overviews for year groups) provide details of skills and both disciplinary and substantive knowledge covered across the year. Medium Term and Short Term plans (termly planning and weekly planning documents) identify aspects to be taught each term and each week and form the basis for title pages and lesson learning objectives.

The planning structure for each year group is organised so that progression through the subject is identified. Vocabulary for each topic taught within each year group is identified on title pages.

We also use a cross curricular approach through the foundation subjects, linking topics where this provides valuable learning.

LEARNING AND TEACHING STRATEGIES

We follow the 2014 National Curriculum for Mathematics. To deliver the Mathematics curriculum the children mainly work in classes. Teachers will expose children to a range of experiential learning opportunities using objects and varied resources and digital resources to develop understanding of mathematical concepts (pictorial, spatial, concrete), including appropriate topic-based trips and visitors will be arranged as needed. The aim is to have either one trip or visitor per topic. Pupils may receive a half term project on a specific topic and this will enable them to undertake independent research and individually and creatively present their research to an audience – their class. Teachers assess via a star and a wish feedback format.

Whole school co-ordination and support is essential to the development of mathematical ability. However it remains the responsibility of each class teacher to:

- Develop pupils' understanding of mathematical research and how this has helped to establish mathematical concepts over time
- Develop specific mathematical skills and knowledge
- Ensure children have access to a range of equipment and resources; and they are used safely and appropriately
- Ensure that pupils engage in practical experiences and that this is done safely and appropriately
- Ensure that cross curricular links are made wherever possible and valuable
- Differentiate activities appropriately
- Review and monitor progress regularly

In the Early Years Foundation Stage, the activities are organised to promote social skills and the development of scientific language and understanding. Teaching will be based on the objectives in the Framework for Reception, working towards the Early Learning Goals. This will prepare children for starting the National Curriculum in Year 1.

ASSESSMENT

We recognise various methods of assessing a child's learning, and use formative and summative assessment to make assessment judgements.

Pupils are then identified as working at a low (WT)/secure (EXP)/high level (GDS).

MARKING

AFL has impacted significantly on the School's Marking Policy to ensure immediate feedback is offered to the pupils. In Mathematics, where applicable, teachers must mark according to the Learning Objective (LO). We also make effective use of peer marking. Once they have completed a task, pupils self-reflect on how they have done against the LO of the lesson in green pen. Finally, teacher's comments include a star and a wish (next step) which is addressed the following lesson.

MONITORING AND REVIEW

Lesson Observations:

The Mathematics Coordinator, as well as the HT, will complete drop in sessions as part of the monitoring. There will also be an opportunity for formal observations to be completed as part of the Appraisal cycle. The coordinators support colleagues in developing their practice according to the results of the observations and common principles will be addressed in INSET and staff meeting sessions. Learning Walks with the governors, Diocese and RBKC advisers take place on a cyclical basis.

Planning Look:

The HT and Mathematics Coordinator will monitor the planning at the beginning of each week, identifying key strengths and areas for development. These results are shared with the staff member and where necessary all staff. ECT's and new teachers to the school receive additional planning support from the subject lead, leadership team or mentors. Staff meetings can allow time for addressing planning next steps and teachers are encouraged to seek any support, guidance or clarification from their phase leaders.

Book Look:

The Mathematics Coordinator, as well as the HT, monitor books on a regular basis (half termly and weekly). Key strengths and areas for development will be identified and results will be shared with respective staff members. ECT's and new teachers to the school have additional support from the leadership team and their mentors. Governors undertake subject lead meetings or learning walks with the subject leads focussing on intent, implementation and impact. At these meetings book samples and learning evidence are viewed.

Data Analysis:

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The Maths Coordinator reviews whole school data for their subject and together with book or learning evidence and pupil voice, creates an overview analysis commenting on the standards of achievement in Maths for each cohort and an overview for the whole school. Training and INSET will be scheduled according to these findings. This data also informs the School Development Plan.

Early Years Foundation Stage: The EYFS follow a thematic curriculum. There are specific topics for each term. Where reference has not been made specifically to Nursery and Reception in this policy, it is important to remember that they work from Foundation Stage Framework as this is the main tool for assessment.

EQUAL OPPORTUNITIES

Our school is an inclusive school. We actively seek to remove the barriers to learning and participation that can hinder or exclude individual pupils, or groups of pupils. Where appropriate, alternative assessments (E.g. P Levels) are used to assess progress. EAL pupils are also assessed across Stages of English Language Development. Personal Learning Plans are reviewed termly and SMART targets are set to ensure progress is attainable. These form the basis for rapid progress targets which identify small steps of daily progress in a child-friendly manner. Pupils take ownership for their goals on clipboards in this way.

ROLES AND RESPONSIBILITIES

The Mathematics Coordinator and Head teacher will ensure this Policy is implemented consistently throughout the School.

The Governing body in co-operation with the Head Teacher should determine the school's general policy and approach to Mathematics in the school.

In addition:

The Co-ordinator

The co-ordinator is responsible for co-ordinating Mathematics through the school. This includes:

- To be a role model and demonstrate good practice
- To keep the written policy document up to date and keep under review the Scheme of Work for Mathematics in line with the requirements of the National Curriculum.
- Encourage and support colleagues in the implementation of the agreed procedures and monitor the progression of activities and consistency of approach across both Key Stages
- Manage the financial allocation to Mathematics effectively and purchase and organise all resources, ensuring they are readily available and well maintained
- Monitor standards in Mathematics across the school through classroom observation, work scrutiny, teachers' planning, discussion with pupils and data analysis
- Contribute to whole-school curriculum improvement by advising SLT and Governor Teaching and Learning Committee on areas of strength and areas for development and identify clear targets to improve and sustain pupil achievement
- Lead the teaching of Mathematics by example and afford colleagues the opportunity to share in good practice

- Lead professional development in Mathematics in accordance with staff development needs and support and guide by encouraging sharing of ideas and skills
- Be aware of National development in Mathematics through reading relevant materials and attending courses when appropriate
- Link with subject leads in alternative settings to work collaboratively and benchmark standards
- Further parental involvement and knowledge by facilitating support and advice through parents meetings and in disseminating relevant information
- Submit regular feedback on standards in Mathematics to SLT and in turn the Governors.
- Work to achieve equality of opportunity throughout the school

Class Teachers

The class teacher remains responsible for the teaching of Mathematics, but liaises closely with the Mathematics Co-ordinator. The class teacher needs:

- To ensure progression in the acquisition of Mathematics skills with due regard to the 2014 curriculum
- To develop and update skills, knowledge and understanding of Mathematics and to take advantage of training opportunities where necessary
- To plan effectively for Mathematics (with phase group partners where appropriate), ensuring cross-curricular opportunities particularly in Design Technology, History, Geography and Science allow for use of mathematical skills and knowledge
- To plan effectively for all learners, including the planning for visits to offsite settings
- To keep appropriate on-going records
- To inform parents of pupils' progress, achievements and attainment
- To keep up to date with new or revised information from the Mathematics lead or SLT
- To employ a variety of teaching styles using various methods and different techniques to enable all children to maximise their learning

Parents

We encourage parents to be involved by:

- Providing them with a curriculum map so that they can support the learning of the topic at home
- Inviting them into school regularly to share in the children's learning of the topic
- Sending home an annual report outlining their child's progress and targets for the start of the following academic year
- Giving informal feedback of their child's progress in the playground at the end of the day
- Providing parents with weekly updates about Mathematics learning via our weekly newsletter and via our website

IMPACT: Please visit our website galleries and weekly newsletters.

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SEPTEMBER 2022

Signed: G Puttenill

September 2021

Name of School: St Cuthbert with St Matthias CE Primary School

Policy review Date: September 2022

Date of next Review: September 2023

Who reviewed this policy? Ratified by the T&L committee