

Saint Thomas' C of E Primary Academy

In Association with:

Manor Multi-Academy Trust



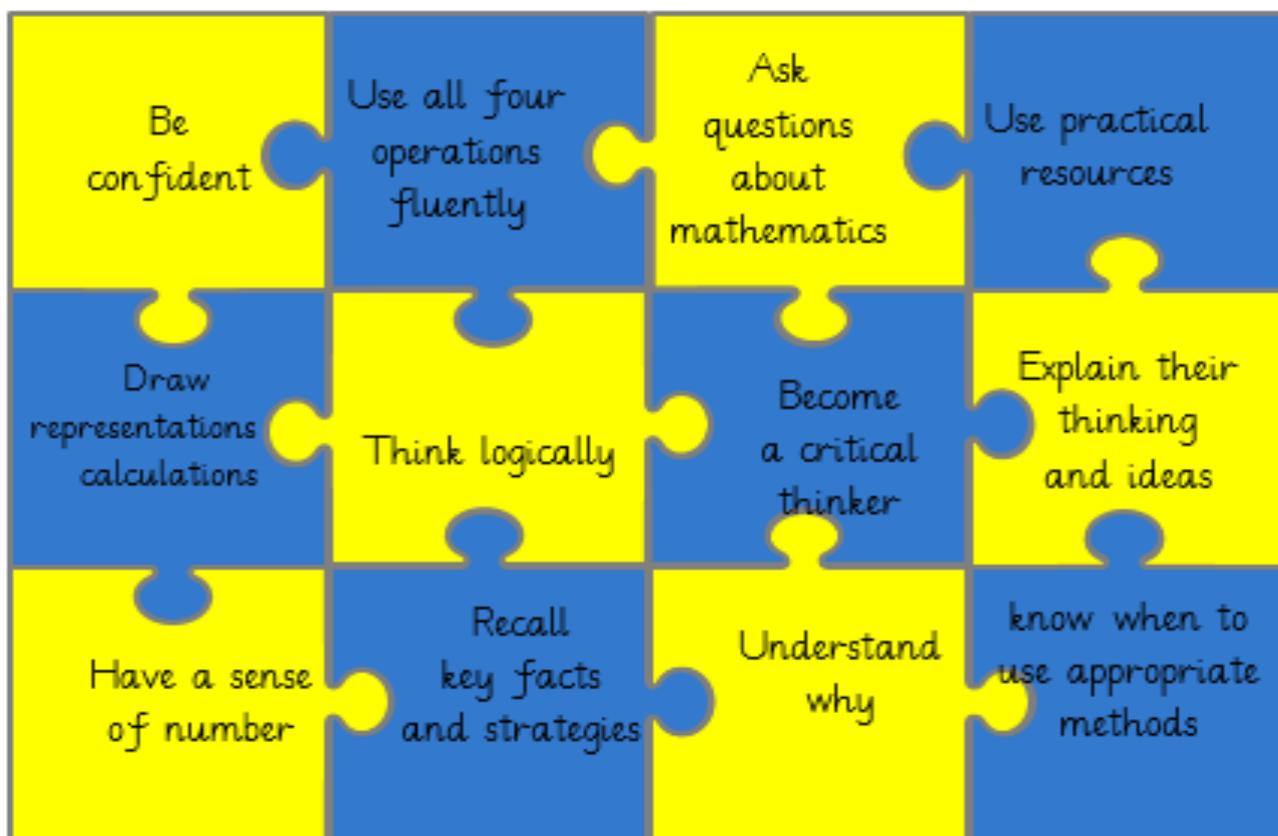
Mathematics Policy

Saint Thomas' C of E Academy.
MATHEMATICS Curriculum design

INTENT

Our Maths curriculum is designed with the intent that each child will become fluent confident and competent in the basics of mathematics, developing their ability to calculate, to reason and to solve problems through the learning of mental and formal written strategies and applying these skills to increasingly complex problems. Pupils will develop their understanding, the ability to recall and apply knowledge rapidly and accurately. This will be embedded through their time at school through rehearsal and perfect practise. Through this, children will be able to reason mathematically and solve problems by applying their mathematics to a variety of real life problems with increasing sophistication. The outcomes should be numerate pupil, who are confident enough to tackle mathematical problems without immediately going to teachers or friends for help.

Our curriculum is designed to allow each pupil to:



IMPLEMENTATION

- The schools Medium term planning and Calculations policy will be used by teachers to plan, this will drive the journey of Maths for every year group, from Concrete to Pictorial, then onto Abstract more formal strategies
- Promoting enjoyment and enthusiasm for learning through concrete/practical lessons, exploration and questioning
- Promoting confidence and competence with numbers and the number system – encouraging a Growth Mindset and YET! Attitude where children relish challenges and understand the importance of the struggle
- Developing the range of mental calculations skills the children have and encouraging their use in a range of settings, through the use of Medium term planning and the schools calculations policy that is specific for each year group.
- Developing the ability to solve challenging problems through decision-making and reasoning in a range of contexts, including real life problems
- Allowing children to discuss and present their work using mathematical language, diagrams, jottings and charts
- Exploring the features of shape and space and developing measuring in a range of contexts, rehearsing and building on skills each year, following the medium term planning and mathematical vocabulary builder
- Developing an understanding of the importance of mathematics in everyday life.

Each class in both Key Stage 1 and Key Stage 2 will be provided children with a daily lesson for mathematics, which will be an hour in duration.

The structure of the lessons will have problem solving at the heart of every lesson and use a variety of teaching and learning styles, in order to develop children's knowledge, skills and understanding in mathematics. We will do this through a daily lesson that have a high proportion of whole-class and group-direct teaching. During these lessons, we will encourage children to ask as well as answer mathematical questions. They will have the opportunity to use a wide range of resources and apparatus to make the learning opportunities concrete.

Learning opportunities for all children will be matched to ability, this will be achieved through a range of strategies –through differentiated group learning opportunities throughout all lesson, matched to the children's relative starting points, working interdependently to support each other through peer learning and challenging children with

open-ended problems or games. We use classroom assistants to support children across all ability groups and to ensure that learning is matched to the needs of individuals.

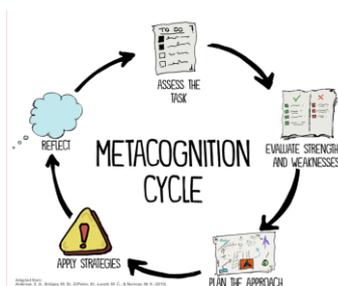
In addition, mathematics will play a part in other subjects, where children will be able to develop and apply their mathematical skills. For example, collecting and presenting data in Computing, Science and Geography.

The Leader of Mathematics will ensure that the curriculum is reviewed and kept up to date, with the latest research and methods. All staff will be informed, trained and have regular CPD to guarantee there is a common understanding of how to achieve high quality mathematics teaching and learning.

All classrooms will be equipped with resources that will enable children to learn in a concrete manner, which will lead to clear understanding of numbers, the number system and strategies.



- Enjoy learning and experience 'the magic of maths'.
- Have a voice and be able to choose how they wish to learn – the resources and strategies they feel are most appropriate.
- Understand that Mathematics is relevant to everyday living and a lifelong skill, by solving problems that are set in a real life context.
- To develop critical thinking and the confidence to question ideas in order to deepen their understanding.
- To become interdependent as well as independent learners.
- To become metacognitive learners, understanding their own abilities, what they need to do that will enable them to develop their abilities and the skill to review their learning accurately.



IMPACT

The impact of the curriculum design will lead to outstanding progress over time at all key stages, from the children's starting points on entry. Children will leave school at least achieving Age Related Expectations. The curriculum, including the calculations policy and building blocks, will enable teacher's to consistently plan and deliver lessons of the highest standard, matched to children's individual needs. By following the medium- term planning and calculations policy children will have a clear sense of number and will confidently be able to apply this to different situations in order to solve problems that have a real life relevance. Children's outcomes will therefore be of the highest quality. Children will be confident, resilient, believe that mistakes matter and we only learn by reviewing this mistakes, self-motivated, independent learners, with a thirst for challenge and the mind-set that enables them to believe that they can succeed with EFFORT.

Review

This policy will be reviewed annually by staff and governors.