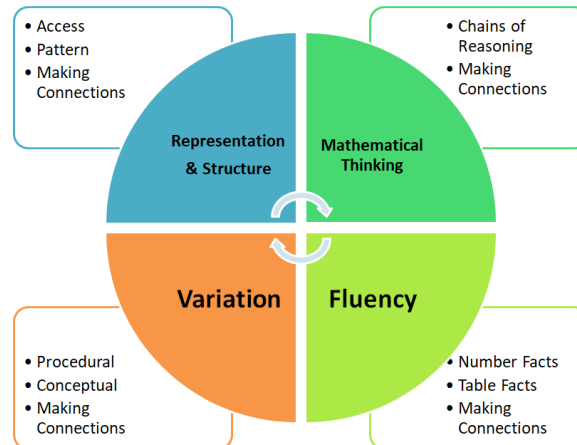


Maths at St Columba's Catholic Primary



Intent

At St Columba's we have a 'Mastery' approach to the teaching and learning of mathematics. We provide children with the necessary skills to develop their knowledge and understanding of mathematics whilst relating their learning to the world around them. Maths is a core skill that is required throughout life and, as such, it is a cornerstone of our school curriculum. Our aim is for all pupils to enjoy their learning, be fluent in the fundamentals of mathematics and confidently apply their skills to reasoning opportunities.



We encourage children to see mathematics as an interconnected subject. In doing so, they can move fluently between representations of mathematical ideas and make rich connections across a variety of mathematical concepts.

Our aim, within our Maths curriculum, is for all children at St Columba's to:

- Become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

Implementation

At St Columba's, we teach mathematics daily and our lessons follow our whole school teaching and learning strategy. Year groups typically follow the small steps given within the White Rose Planning Overviews. However, teachers use their professional judgement to make changes and tweak the sequence of lessons/units to meet the needs of the children in a particular cohort.

Each mathematical lesson includes the following elements:

1. Initial 'Trio Time' – recap of prior learning in order to develop fluency and long term memory of core mathematical knowledge

2. Fluency – pupils are provided with the opportunity to practise new skills, embed mathematical facts and make connections
3. Reasoning and challenge – develop mathematical thinking through a variation of representation and structure to deepen pupils' knowledge of core concepts and provide further challenge

We use a wide range of resources and practical manipulatives to support and scaffold the teaching of core mathematical knowledge/concepts. At St Columba's, we use visual models alongside formal calculation strategies; more information can be found in our calculation policies.

In EYFS, our pupils' learning is guided by the requirements and recommendations set out in the Early Years Statutory Framework. All children are given a wide range of opportunities to develop their understanding of mathematics. Lessons in the early years follow a mastery approach and use concrete and pictorial representations to develop an understanding of mathematics. Our pupils are encouraged to use, enjoy, explore, practice and talk confidently about mathematics using reasoning.

Discussion is essential to learning in mathematics and time is given for this in all lessons. Tasks and problem solving opportunities are planned to allow pupils to follow lines of enquiry and develop their own ideas, in order to justify and prove their responses. Children work both collaboratively and independently solving problems which requires them to persevere and develop resilience when working mathematically. They are given the opportunity to present their findings in a variety of ways through pictorial representations, visual models, formal strategies and abstract methods.

Staff are given the opportunity to attend CPD events run by the local authority and external providers, such as the Great North Maths Hub. Feedback and good practise is shared in staff meetings to ensure up to date knowledge is being shared regularly.

Impact

Through our curriculum, our pupils understand the relevance of what they are learning in relation to real world concepts. We aim to establish an environment where mathematics is accessible to all; we want our pupils to recognise that making mistakes is a core part of mathematical thinking and an integral part of the learning journey. We aim for all individuals to make at least good progress from their starting points, both across an academic year and throughout their journey at St Columba's. We support our pupils to aim high in mathematics, overcome potential barriers and encourage them to strive to be the best mathematicians they can be. Our pupils are continuing to develop skills in being articulate mathematicians who can reason verbally, pictorially and in written form.

At St Columba's our evidence is collected through:

- Our Maths exercise books which are kept individually by class teachers in KS1 and KS2
- SeeSaw – our online learning platform
- Pupil voice – discussions and feedback from our pupils
- Pictures and video clips – kept on our school shared drive/class iPads
- Assessed hot and cold tasks within exercise books showing children's attainment
- Termly formal assessments with question level analysis
- Insight tracker to monitor pupil's attainment and progress over time
- Discussion with staff and governors to challenge and review our curriculum