



St Edmund's and St Thomas' Catholic Primary School

Mathematics Subject Statement:

At St Edmund's and St Thomas' Primary School, we believe mathematics equips pupils with a unique set of tools to understand the world and how it operates.

We recognise the importance of mathematics in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a healthy and enthusiastic attitude towards mathematics that will stay with them for life.

We want all children at St Edmund's & St Thomas' to see themselves as mathematicians and to:

- Have a positive attitude towards the learning of mathematics and an enthusiasm for the subject
- Be able to identify mathematical relationships (spatial, numerical and logical) and see their relevance to everyday life.
- Be able to carry out practical activities involving measurement, estimation and calculation.
- Be able to use money in everyday situations.
- Be able to read and record mathematical statements using correct terminology and symbols.
- Be able to interpret diagrams, charts, graphs and tables.
- Have an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- Have developed an ability to use and apply mathematics across the curriculum and in real life.
- Have developed an understanding of mathematics through a process of enquiry and experiment.

During the Early Years Foundation Stage Curriculum, mathematics forms part of many interactive learning experiences. Pupils develop their knowledge and understanding of mathematics through play, exploration and discussion. Children work with shapes and begin to learn their properties, use language to give positional clues and compare quantities, identify and recreate patterns. They learn to count, read, write and order numbers to 20 using songs and rhymes, which is extended to 100 and beyond during The National Curriculum in Key Stage 1.

During Key Stage 1 children are taught in a variety of either mixed or ability class groups as appropriate for their main mathematics lesson. They are taught mental calculation strategies. Additionally, they learn about shape and space, through practical activities which build on their understanding of their immediate environment. They develop their use of mathematical language, using it to talk about their methods and explain their reasoning when solving problems. Progress is monitored in target setting and Pupil Progress Meetings.

During Key Stage 2, children are taught in mixed or ability groups for their daily mathematics lesson. They move from counting reliably to calculating fluently with all four number operations. Children will use a wider range of mathematical language, diagrams and statistical charts.

They learn to tackle a problem with mental methods in addition to using any other approach, always supported with help and encouragement. They extend and secure their use of mathematical language, using it to talk about their methods, explain their reasoning when solving problems and applying it during investigations. Progress is monitored in target setting and Pupil Progress Meetings.

Planning

"Good mathematics teaching is lively, engaging and involves a carefully planned blend of approaches that direct children's learning....the pitch and pace of the work is sensitive to the rate at which children learn while ensuring expectations are kept high and progress is made by all children"

Long Term Planning

Long term planning for teaching and learning implements the requirements of the New Curriculum 2013. Teaching is organised into the following domains:

Number: number & place value; addition & subtraction; multiplication & division; fractions

Measurement: compare, describe, measure and solve practical problems for length, height, weight, time

Geometry: measurement and properties of lines, angles, solid and plane shapes

Statistics: collect, read and interpret data on graphs and charts

These domains are allocated to five half terms as indicated below.

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Nursery/ Reception	EYFS outcomes (statutory framework)	EYFS outcomes (statutory framework)	EYFS outcomes (statutory framework)	EYFS outcomes (statutory framework)	EYFS outcomes (statutory framework)
Year 1	Number -Number and Place Value	Number Addition and Subtraction	Number - Multiplication and Division -Fractions	Measurement	Geometry -Properties of Shape -Position and direction
Year 2	Number -Number and Place Value -Addition and Subtraction	Number -Multiplication and Division -Fractions	Measurement	Geometry -Properties of Shape -Position and direction	Statistics
Year 3	Number -Number and Place Value -Addition and Subtraction	Number -Multiplication and Division -Fractions	Measurement	Geometry -Properties of Shape -Position and direction	Statistics
Year 4	Number -Number and Place Value -Addition and Subtraction	Number -Multiplication and Division -Fractions	Measurement	Geometry -Properties of Shape -Position and direction	Statistics

Year 5	Number -Number and Place Value -Addition and Subtraction	Number -Multiplication and Division -Fractions (including decimals and percentages)	Measurement	Geometry -Properties of Shape -Position and direction	Statistics
Year 6	Number -Number and Place Value -Addition and Subtraction Multiplication and Division	Number -Fractions (including decimals and percentages) - ratio and proportion - algebra	Measurement	Geometry -Properties of Shape -Position and direction	Statistics

Medium Term Planning

Liverpool SIL Maths Plans are the basis of our medium term planning. This ensures the effective implementation of the new National Curriculum. Each learning objective is broken down into key components to be addressed in teaching alongside: sample questions; models and images; mathematical language and symbolic representations. There is a key focus on the teaching sequence which ensures pupils have opportunities to practise key skills and to apply these skills in more complex activities.

Short Term Planning

Short term planning outlines a teaching sequence, taking account of where pupils are in their learning, where they need to go and how they are going to get there.

Teaching staff work in phase groups to: identify learning objectives; ascertain prior learning and skills essential to new learning; organise lesson resources which enable consolidation of learning objectives and mastery of learning through application to more complex activities.

Resources used for short term planning include:

- Commercial resources to support the teaching of mathematics e.g. Maths Makes Sense
- Online resources e.g. STEM; NCETM; White Rose Hub.
- ICT software

Assessment Procedures

Foundation Stage

- Transfer records from pre-school settings indicate progress using the Foundation Stage Curriculum Guidance. This is used in partnership with Reception Class practitioner's ongoing observational assessments.
- Attainment is noted using photographs and observational notes. Progress is recorded in each child's and the next steps to be taken are identified.
- Statutory assessments are made on entry, mid-term and on exit of year 2 of the FS

KS1 and KS2

• In the daily mathematics lesson, formative assessments are made on a day-to-day basis, activity records are used to document individual progress and the short-term plans annotated. Practitioners observe, question and evaluate lesson outcomes to further determine progress made and the next steps in learning.

- Statutory assessments are made at the end of each key stage.
- Teacher assessment / optional tests are completed at the end of Years 3, 4 and 5.
- Teacher assessments are completed at the end of Y1.

Monitoring procedures

The Head teacher and maths subject leader play a central role in the monitoring and evaluation of the quality of teaching and learning in mathematics.

The monitoring strategy:

1. A scrutiny of children's work and medium term planning is conducted termly
2. Annotated short term planning is submitted weekly.
3. Progress meetings are held every two terms with SMT

Home /school partnership

We value the importance of the home/school partnership and provide opportunities to inform and engage parents re mathematics. This includes regular curriculum meetings and 'Family Learning' sessions. Regular maths homework is provided which includes games to encourage parental involvement.