

St Anne's RC Primary and Nursery School

Policy for Mathematics

Mission Statement

To help every person here to achieve his or her best in work and in play. To celebrate whatever is good and to follow in the footsteps of Jesus by supporting and forgiving each other, for the honour and glory of God.

Rationale

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides 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. (*Primary Mathematics Curriculum – Purpose of study*)

Aims

In accordance with the Primary National Curriculum we aim to ensure that all pupils:

- 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.
- can **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.

In accordance with the Primary National Curriculum we aim to encourage all pupils:

- to move fluently between representations of mathematical ideas;
- to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems;
- to apply their mathematical knowledge to science and other subjects.

Guidelines

- We follow the EYFS and Primary Mathematics Curriculum.
It is expected that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress will be based on the security of pupils' understanding and their readiness to progress to the next stage.
- We use Numicon Firm Foundations (Foundation Stage), Teaching Steps in Mathematics by Focus, White Rose Maths Hub Schemes of Learning (www.whiterosemathshub/free-learning-schemes) and Kangaroo Maths Schemes of work (www.kangaroomaths.com) to support our planning and teaching of mathematics.
- Children are taught in year groups working individually, in pairs or as part of a group, either independently or with the support of an adult. There is targeted intervention for Years 5 and 6 pupils; support for pupils in class by Teaching Assistants as directed by the class teacher; support for pupils through the 1stclass@number and 1stclass@number2 intervention programmes; and designated time to address misconceptions.
- Mathematical language will be modelled and used by teachers and staff in order that pupils are able to develop their mathematical vocabulary and use it when presenting a mathematical justification, argument or proof.
- Resources for mathematics are kept in class areas with heavier/larger resources kept centrally in a cupboard in the hall. Resources include practical equipment and the text book Target your Maths (Key Stage 2).
- We subscribe to www.mymaths.co.uk which is used to support teaching and learning and to provide home learning tasks for Key Stage 2 pupils. (A mymaths club is held on Tuesday lunchtimes for key Stage 2 pupils who may not be able to access the website at home.)

Teaching and Learning

Teachers' planning is differentiated to meet the range of needs of pupils in their classes. A wide range of teaching and learning styles are employed to ensure all children are sufficiently challenged and supported. (See Teaching and Learning Policy)

Equality of Opportunity

In line with our Equality Policy, each child will receive equal access and status to the curriculum.

Assessment

- NFER baseline assessment is used on entry to the Reception Class.
- Children will be assessed each term using the Rising Stars Puma Assessment, initial assessment to be used for gap analysis and to inform teaching and learning.
- Headstart assessment is also to be used for domain testing to assess learning in particular topics.
- Attainment and progress is tracked through OTrack and Class Track.
- Formative assessment is made through observation and discussion throughout lessons, and marking of pupils work (in line with the Feedback and Marking Policy).
- There will be targeted booster groups to support Year 6 pupils in advance of the end of Key Stage Sats.

Monitoring

Mathematics is monitored in our school through work scrutiny carried out by the SLT and through learning walks carried out by the Mathematics Subject Leaders.

Reporting

Expectations in mathematics can be found on our website. Parents are informed of the progress and achievement of their children through:

- Parent and teacher meetings
- End of year written reports.

Governors are informed through the Head Teacher's report. The identified governor for mathematics is Mr Pownell who regularly visits school to monitor mathematics. He then feeds back at full governing board meetings.

Policy reviewed September 2017