

Mathematics Policy

Introduction

Royal Cross Primary School is a small Community Special School in Preston. The school is primarily a school for deaf children but also provides an appropriate learning environment for some children with additional communication difficulties. We believe 'Communication is the key' to success and everything we do is geared towards developing language and communication skills.

We are keen to make our children aware of the importance of mathematics in their everyday lives and numeracy skills are a vital part of our curriculum. It is important for us to provide the numeracy skills that will be invaluable in later life.

The Nature of Mathematics

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore. 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.

The Programmes of Study from the National Curriculum for Teaching Mathematics aim to ensure all children

- 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

We will do this by teaching:

- a positive attitude towards mathematics and an awareness of the fascination of mathematics

- competence and confidence in mathematical knowledge, concepts and skills
- an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- initiative and an ability to work both independently and in cooperation with others
- an ability to communicate mathematics
- an ability to use and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment

School Policy and the National Curriculum

Work undertaken within the Foundation Stage is guided by the requirements and recommendations set out in the Early Years 'Development Matters' EYFS document.

At KS1 and KS2 teachers ensure that all parts of the National Curriculum Programme of Study are taught as appropriate.

Breadth of Study

Through careful personalised planning and preparation we aim to ensure that throughout the school children are given opportunities for:

- A personalised teaching approach to ensure all the children are taught at their appropriate level.
- A creative curriculum to ensure that Mathematics is not taught only as a discrete lesson but is embedded through our topic based work so children have the opportunity to use their mathematic skills in a range of different sessions throughout the day.
- practical activities and mathematical games
- problem solving
- individual, group and whole class discussions and activities
- open and closed tasks
- a range of methods of calculating
- working with computers as a mathematical tool

Scheme of Work

Our school scheme of work is based on that developed by the Lancashire Special School Mathematics Network.

Cross-Curricular Issues

Where possible we aim to teach Mathematics not only in explicit Maths lessons, but also in a cross-curricular method, incorporating it into our topic-based teaching. This enables children to see how the skills they are learning in Maths are used in a range of contexts; reinforcing their importance as fundamental life-skills.

Teachers' Planning and Organisation

Each class teacher is responsible for the teaching of mathematics in their class in consultation and guidance from the mathematics coordinator.

Teachers are required to teach the children mathematics based on National Curriculum programmes of study. However, the class teacher will differentiate planning and activities to ensure that the appropriate mathematical skills and content is taught according to the children's individual mathematical needs.

Teachers follow the school's Calculation Policy to enable pupils to develop and progress in their use of written and mental calculation strategies.

Teachers may choose to teach 4 -5 discrete mathematics lessons a week or an equivalent amount of time allocated at the teacher's discretion. It is useful for the teachers to be able to apportion the maths times flexibly so that staff can personalise learning to the child's individual needs.

Assessment and Record Keeping

Achievement in Mathematics is formally assessed by class teachers using PIVATS 5 at the end of each term.

Teachers use formative assessment as part of their maths teaching to inform future planning and learning. Samples of work are regularly levelled and externally moderated with staff from other special schools. This has provided a bank of examples of levelled work for teachers to use when assessing individual pupil's work.

IEP related maths targets are reviewed 3 times a year and progress is recorded through PIVATs scores.

Reporting to Parents

Reports are completed before the end of the summer term and parents are given opportunity to discuss their child's progress in the year through their child's annual review and on home visits from class teachers.

Pupil achievement in mathematics is recorded at the end of Year 2 and Year 6 in accordance with the Statutory National Teacher Assessment Frameworks. This is reported to parents and as part of schools statutory assessment data submission.

Parental Involvement

The policy is available for parents to view at any time. Parental workshops have been set up to help give parents advice and strategies for working with their children at home to support the work in school. This also takes place on home visits as and when required.

Monitoring and Evaluation

Teachers use detailed Medium Term Plans based on the Lancashire Track Back System to create detailed weekly plans, ensuring coverage of the curriculum.

PIVATs data is collected three times yearly to monitor children's individual progress. Class teacher's discuss this data with the Assessment lead through pupil progress meetings and inform the co-ordinator of exceptional progress or particular difficulties that children may be experiencing.

Opportunities for teachers to review the scheme, policy and published materials are given on a regular basis during staff meetings.