Policy Title:	Mathematics Policy
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Author & Role	Lisa Hughes – Maths Subject Leader - QTOD
Ratified by:	Governors
Responsible signatory:	Clive Gregory – Chair of Governors
Date of signature:	This signature has been removed for GDPR purposes
Outcome:	This Policy: Reflects the school values and philosophy in relation to the teaching and learning of Mathematics. It sets out a framework within which teaching, and support staff can operate and gives guidance on planning, teaching and assessment, and is designed to help them understand their role and responsibilities. It is intended for all teaching staff and support staff, school governors, parents, and advisers/inspectors as appropriate.
Cross Reference:	Assessment, Recording and Reporting Policy Computing Policy Online Safety Policy Teaching and Learning Policy Single Equalities Policy

#### **EQUALITY AND DIVERSITY STATEMENT**

Royal Cross school is committed to the fair treatment of all in line with the Equality Act 2010. An equality impact assessment has been completed on this policy to ensure that it can be implemented consistently regardless of any protected characteristics and all will be treated with dignity and respect.

### **LEGAL FRAMEWORK**

This policy has due regard to statutory guidance including, but not limited to, the following:

- DfE (2021) 'National curriculum in England: Mathematics programmes of study'
- DfE (2021) 'Statutory framework for the early years foundation stage'
- DfE (2021) 'Teaching mathematics in primary schools'

#### **POLICY REVIEW**

To ensure that this policy is relevant and up to date, comments and suggestions for additions or amendments are sought from users of this document. To contribute towards the process of review, please contact the author of the policy.

# **Mathematics Policy**

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# **Mathematics Policy**

This policy reflects the school values and philosophy in relation to the teaching and learning of Mathematics. It sets out a framework within which teaching, and support staff can operate and gives guidance on planning, teaching and assessment.

It is intended for all teaching staff and support staff, school governors, parents and advisers /inspectors as appropriate.

### Context

Royal Cross is a special primary school that caters for deaf pupils. 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.

Pupils are taught Mathematics across Key Stages and access mathematical learning appropriate to their ability. Progression rates are dependent upon the individual child and all small steps of progression are recognised. Many opportunities for using and applying learned skills across different contexts are provided.

### Mission Statement

At Royal Cross we aim to ensure that all our pupils receive a high-quality education in Mathematics, enabling them to feel confident and become successful.

We do this by promoting:

- a positive attitude towards mathematics
- competence and confidence in mathematical knowledge, concepts and skills
- the 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
- the ability to communicate using the language of mathematics
- using and apply mathematics across the curriculum and in real life
- an understanding of mathematics through a process of enquiry and experiment

## Roles and Responsibilities

The Head Teacher and Governing Body provide support by:

- Ensuring teachers are able to deliver the curriculum by having access to the appropriate training and resources necessary
- Providing opportunities for the subject leader to work with staff across the school to improve the teaching of mathematics
- Reviewing policies relating to mathematics

The mathematics subject leader is responsible for:

- Preparing policy documents, curriculum plans and schemes of work for the subject
- Reviewing changes to the national curriculum and advising on their implementation
- Monitoring the teaching of mathematics, providing support for staff where necessary
- Ensuring continuity and progression through the school
- Encouraging staff to provide effective learning opportunities for pupils
- Helping to develop colleagues' expertise in the subject

- Organising and carrying out an annual audit of resources
- Communicating developments in the subject to all staff
- Organising, providing and monitoring CPD opportunities in the subject
- Advising on the contribution of mathematics to other curriculum areas
- Collating assessment data and setting new priorities for the development of mathematics in subsequent years

### The class QTOD is responsible for:

- Acting in accordance with this policy
- Ensuring progression of pupils' mathematical skills, with due regard to the national curriculum
- Planning effective lessons which cover appropriate content
- Liaising with the mathematics subject leader about key topics, resources and supporting individual pupils
- Monitoring the progress of pupils in their class and reporting this as required using B Squared
- Reporting any concerns regarding the teaching of the subject to the mathematics subject leader or a member of the senior leadership team (SLT)
- Undertaking any training that is necessary in order to effectively teach the subject

## Curriculum Organisation

### Early years provision

In the Foundation Stage, our pupils gain an awareness of mathematical concepts through play-based learning. We support pupils in developing their knowledge of mathematics in a range of contexts in which they can explore, enjoy, learn, practise and communicate about their developing understanding.

Activities and experiences for pupils will be based on the seven areas of learning and development, as outlined in the DfE's 'Statutory framework for the early years foundation stage'.

Provision for early years pupils focusses on the following:

- ·Literacy
- · Maths
- · Understanding the world
- · Expressive arts and design

We aim to provide our pupils with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and describing shapes, space and measurements.

All activities will adhere to the objectives set out in the framework.

## Key Stage 1-2

Mathematics in KS1 and KS2 covers:

- Number and Place Value
- Number-Addition and Subtraction
- Number- Multiplication and Division
- Number-Fractions
- Geometry-Properties of Shape
- Geometry-Position and Direction
- Measurement
- Statistics

## Knowledge, Skills and Understanding

In EYFS, QTODs use the 'Numberland' scheme to support pupils' development in maths. At KS1 and KS2, QTODs use either the 'Lancashire suggested sequences of learning' or the 'Red Rose mastery curriculum' as a basis for teaching our pupils. Teaching is adapted to fit the particular needs of our deaf children, ensuring that pupils can access key concepts.

## **Breadth of Study**

Through planning and preparation we aim to ensure that pupils:

- Access a personalised teaching approach at their appropriate level.
- Access a creative curriculum to ensure that Mathematics is not taught only
  as a discrete lesson but is embedded through our topic-based work so
  pupils have the opportunity to use their mathematical skills in a range of
  different lessons throughout the day.
- Engage with practical activities and mathematical games
- Solve mathematical problems
- Experience individual, group and whole class discussions and activities
- Work on open and closed tasks
- Learn a variety of methods of calculating

## Planning

Our mathematics schemes of work are based on the Lancashire schemes of learning and Red Rose mastery curriculum. These schemes support both the National Curriculum and the Ofsted Inspection Framework. The schemes are adapted to take

into consideration the specific needs of our pupils.

All pupils have a mathematics-based target in their Personalised Learning Plan (PLP) so staff can work on specific areas where they may need more focused support.

Our medium-term plans define what is taught and ensure an appropriate balance and distribution of learning across each term.

Planning is used to set clear, achievable goals matched to pupils' own abilities and PLP targets, as well as ensuring progression, breadth, continuity and subject coverage throughout the school. Planning is the responsibility of individual QTODs and is shared via Sharepoint.

Mathematics activities are planned so that they are relevant to the curriculum and build upon the prior learning of the pupils. We strive to ensure pupils of all abilities have the opportunity to develop their skills, knowledge and understanding.

We plan our teaching and learning to ensure that every pupil can progress and achieve at a rate that matches their individual abilities. More able pupils are encouraged to extend and apply their mathematical skills in problem solving and activities which promote higher order thinking.

### Time Allocation

In the EYFS a continuous provision approach is used with pupils accessing mathematical learning as part of this approach. In addition to this, focussed mathematical learning activities are undertaken regularly throughout the week. In Key Stage 1 and 2, each QTOD is responsible for the teaching of a daily mathematics lesson with guidance from the subject leader.

## Teaching and Organisation

In mathematic lessons a variety of teaching and learning styles are used. The methods employed vary according to the age, ability and experience of our pupils and the concept being taught.

Mathematics lessons are delivered in an interesting and stimulating way, making use of commercial materials, teacher-prepared materials, practical equipment, visual aids, online programmes, and iPad applications, to maintain the pupils' attention and reinforce learning and development.

We do this through a mixture of whole-class teaching and individual/group learning.

## Assessment, Recording and Reporting

Assessment in mathematics is on-going and is conducted in accordance with the schools Assessment, Recording and Reporting Policy.

Mathematics is assessed and reviewed at regular intervals. Progress is recorded each term through summative assessments using the B-Squared assessment application. This application is used to record small steps of progress across all abilities and key stages. It enables effective tracking of pupils' progress throughout their school life and is used for accurate reporting to parents and carers.

During the year, 3 to 4 pieces of mathematical work are kept for each pupil to reflect the breadth of mathematics covered. This forms part of the individual child's Record of Achievement.

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.

Copies of the pupils' PLPs are sent home so parents are aware of specific targets the children are working on. Parents are encouraged to discuss these targets with staff.

### **Equal Opportunities**

All pupils have equality of access to a broad and balanced mathematics curriculum irrespective of gender, ethnicity, sexual orientation, religious identity, special educational need, communication mode or social circumstance. The entitlement of

all pupils to a full curriculum is acknowledged and teaching promotes spiritual, moral, social and cultural development.

The mathematics curriculum contains highly differentiated learning objectives to base teaching and learning around and QTODs provide any other adaptations, specific teaching techniques and resources required to overcome individual pupils' barriers to learning.

We teach mathematics using both speech and BSL. Research has found that this helps children to develop their understanding and recall of key vocabulary.

## Monitoring and Evaluation

Monitoring and evaluation is carried out in order to develop the teaching and learning of mathematics within our school.

The subject leader is responsible for monitoring standards and quality in mathematics. She attends regular network meetings alongside other mathematics subject leaders from SEN schools across Lancashire. The subject leader is given the opportunity to feedback any relevant information to staff.

Work is scrutinised on a termly basis by the subject leader through book looks, lesson observations with peer-peer mentoring and learning walks. Feedback from this scrutiny is delivered to staff to enhance the teaching of mathematics in the school.

Regular staff meetings are held which include opportunities for internal moderation across key stages of learning.

#### Resources

A range of mathematical resources are available in school and are centrally located in the resource room. Some resources are accommodated in individual classrooms.