

P

pupil voice

R

respect

I

independence

D

dignity

E

entitlement



## MATHEMATICS POLICY

<b>Date Published</b>	<b>August 2016</b>
<b>Version</b>	<b>1</b>
<b>Approved Date</b>	<b>August 2016</b>
<b>Review Cycle</b>	<b>Every 3 Years</b>
<b>Review Date</b>	<b>August 2019</b>

An academy within:



“Learning together; to be the best we can be”



## Introduction

Mathematics is a core curriculum area and pupils at Kelford School are entitled to receive a broad and balanced Mathematics curriculum. We aim to help our children and young people realize their full potential, providing them with a Mathematics curriculum which is appropriate to the child / young person's needs and ability. We want pupils to 'be the best that they can be' ensuring that individuals become successful learners who enjoy learning, making progress and achieve.

### 1. Aims

The aim of this policy is to ensure that each child has access to a broad, balanced and personalised Mathematics curriculum that:

- Matches their learning needs and abilities
- Ensures progression by building on prior knowledge and experiences
- Ensures application of Mathematics skills is cross curricular and embedded within thematic learning sessions and through independent learning opportunities
- Follows statutory guidance provided from DfE inclusive of National Curriculum and EYFS Curriculum
- Used additional documents to support personalised learning inclusive of SCERTS, Routes for Learning targets and learning goals embedded through the TEACCH framework
- Values all forms of communication and gives pupils opportunities to develop their skills and achieve their fullest potential
- Provides access to high quality Mathematics resources and support for pupils

### 2. Objectives

Kelford School recognises the importance of enabling pupils to become confident and effective within their Mathematic skills and the application of these. We want to develop the necessary skills for pupils to use and apply their knowledge, skills and understanding encompassing number, counting and place value, addition and subtraction, multiplication and division, fractions, measurement, properties of shape, position and direction and data handling, but we also endeavour to foster and stimulate enjoyment and a love of number and Mathematics in as wide a form as possible. We have high expectations of pupils and actively strive for each child to reach their fullest potential. We want to ensure that we help our pupils to develop the skills and capabilities they need to:



- Use a wide variety of multi sensory activities relating to topics, individual areas of interest and real life situations.
- Experience enjoyment and enthusiasm for learning through practical activity, exploration and discussion.
- Have confidence and competence when using numbers and the number system.
- Develop the ability to solve problems through decision-making and reasoning in a range of contexts.
- Develop a practical understanding of the ways in which information is gathered and presented.
- Explore features of shape and space, and develop measuring skills in a range of contexts.
- Understand the importance of mathematics in everyday life.
- Acquire and increase their range of vocabulary to use across the curriculum through their individual communication system.

### **3. Organisation**

The teaching of Mathematics can be broadly categorised into three strands:

- Number
- Using and Applying
- Shape, Space and Measures.

Pupils at Kelford School follow a coloured assessment and curriculum pathway and this will determine how their Mathematics teaching is delivered. Pupil following the yellow pathway P1 – P4 will complete their Mathematics through their Routes for Learning sensory curriculum and assessed accordingly through MAPP.

Pupils following blue or green assessment and curriculum pathway P4 – P8 will complete Mathematics sessions linked to the above three strands, focusing on individual needs and following the long term plan of coverage to ensure a broad and balanced curriculum is delivered. This will ensure that pupils are able to succeed through each strand of their Mathematics.

Pupils following the orange assessment and curriculum pathway P8+ will use the assessment of ARE, targets will be taken from different aspects of number: number and place value, addition and subtraction, multiplication and division and fractions. Additionally to this pupils will have access to measurement activities alongside geometry: shape and position and direction following the long term plan to ensure coverage. The application of number skills will be through all aspects of the



curriculum preparing pupils to access the community and become confident in the use of Mathematics as they enter adult life.

#### **4. Approaches to Teaching and Learning**

Mathematics is taught discreetly at Kelford School as it is a core subject, but contributes too many subjects. Opportunities should be sought to draw Mathematic experiences and application of the skills learnt within Mathematics lessons to a wide range of activities across the curriculum. Additional Mathematics may be taught within other subject lessons when appropriate, providing cross curricular links within the thematic, topic based sessions. Teachers will seek to take advantage of opportunities to make cross-curricular links; they will plan for pupils to apply the skills, knowledge and understanding acquired through Mathematic lessons to other areas of the curriculum.

At Kelford School every pupil accesses four Mathematics sessions per week, these may be two double sessions or four single sessions across the week. Within these sessions there will be a good balance between whole class, group work and individual practice whilst pupils will be working on their own personalised learning skills.

Numicon is used throughout Mathematics sessions to support the teaching of number and number value / place value. Numicon is a multi sensory approach to understanding the abstract concept of number. Numicon is designed to give pupil's a visual concrete understanding of number. At Kelford School Numicon is used throughout school to support the development of the knowledge, skills and understanding required to raise achievement within Mathematics.

Kelford's Mathematics Curriculum operates alongside a thematic based Curriculum and is outlined on the long term plan. The long term plan identifies the main Mathematic strand and theme to be covered. This informs the medium term plan which details what will be taught and specifically the learning objective for each pupil, including an overview of how this will be done / taught. Long term planning at Kelford incorporates activities from the following areas:

- Number and place value;
- Addition and subtraction;
- Multiplication and division;
- Fractions;
- Measurement;
- Properties of shape;
- Position and direction;
- Statistics (ARE 2 and above).



## 5. Monitoring, Assessment and Recording

Mathematics is assessed in the following ways:

- Summative assessments are carried out mid-year and end of year using PIVATS
- Summative assessments are carried out end of year using P-Levels for Mathematics
- Pupils following alternative curriculum pathways – yellow (Routes for Learning) will complete alternative MAPP assessments
- Pupils following alternative curriculum pathway – orange will complete ARE assessments mid-year and end of year using stage assessments
- Evidence of progress recorded using photographs, observations, assessment files, Evidence for Learning App, evaluated planning and targets
- Developmental curriculum booklets are completed for pupils following green pathway and are kept up to date to inform planning and evaluate progress
- Pupil's attainment is reported to parents and carers in end of year reports and during a pupil's Annual Review
- Pupil's progress is evaluated by class teachers and the senior leadership team through planning scrutiny
- Pupil's progress is monitored through the pupil progress cycle by teacher and senior leadership team
- Assessments to be used as a tool to inform future planning and teaching

## 7: Responsibilities

The **Senior Leadership Team** is responsible for:

- Overseeing the whole school curriculum within each phase.
- Supporting and challenging the thinking of the staff within Primary and Secondary Departments.
- Monitoring progress through data analysis and pupil progress meetings.

The **Mathematics Subject Leader** is responsible for:

- Ensuring coverage and breadth through long term plans
- Keeping policies up to date
- Ensuring pupils progress through school is tracked and measured
- Action planning and completing data analysis
- Ordering / maintaining whole school resources to support learning

## 8: Parental Involvement

Parents / carers have the opportunity to discuss their child's pathway and learning achievement at their annual review meeting. They also receive and comprehensive annual report at the end of the year. Effective communication with parent / carers is



vital in supporting each pupil. Parent / carers can support the teaching of Mathematics at Kelford School by:

- Applying knowledge, skills and understanding of Mathematics with their child at home;
- Attending whole school events / family learning days
- Attending parent / carers meetings and annual reviews