



Mathematics Policy

1. INTRODUCTION

This document is one of a series that make up the whole CRACKING Curriculum statement for the school. It states the school philosophy about the contribution which Maths makes to our pupils' education and the way in which the National Curriculum and Maths are delivered in practice. In effect it is an expanded policy statement and together with the long, medium- and short-term thematic planning constitutes the school scheme of work.

2. INTENT

Why is Maths important:

"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." (The National Curriculum for Mathematics 2014)

At Kings Meadow Primary School, we believe that 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. In addition:

- Maths gives children the ability to develop their conceptual understanding and the ability to recall and apply knowledge accurately;
- Maths develops problem solving skills and allows pupils to tackle problems in unfamiliar concepts and to model real-life scenarios;
- Maths helps children to present a justification, argument or proof using mathematical language;
- Maths is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy;

- Maths ultimately 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.

3. IMPLEMENTATION

When is Maths taught:

At Kings Meadow, we use the White Rose Maths Scheme of Work to help inform teaching from years 1-6. Teachers use this as a guide to ensure all areas of maths are covered within their year group but the order of teaching is informed by both summative and formative assessment to ensure that best progress is made.

Each class teacher is responsible for the Numeracy in their class in consultation with and with guidance from the mathematics subject leader.

There is a daily mathematics lesson between Monday and Thursday of 60 minutes. On a Friday, children complete 'Big Maths' in which they complete 25 questions from across the curriculum and may use their maths prompts to support them.

Complementing this, children also complete daily arithmetic tasks to help improve their mental strategies. They tackle arithmetic questions and consolidate number strategies.

Pre-determined children from Year 3, Year 4, Year 5 and Year 6 will have the opportunity during the week to complete activities on IXL which is a comprehensive online learning platform which supports children with areas of weakness in maths.

Children in Reception, Year 1 and Year 2 also take part in a short 'Mastering Number' session each afternoon.

How is Maths taught:

During lessons, children engage in:

- The development of mental strategies
- Written methods
- Practical work
- Investigational work
- Problem-solving
- Mathematical discussion using precise mathematical language.
- Consolidation of basic skills

We have developed a written Calculation Policy as well as Arithmetic Guidance so that strategies are consistently taught throughout school. These can be found on our school website so parents have access to them for when they are completing homework or children are being taught at home.

EYFS practitioners ensure the children learn through a mixture of adult-led activities and child-initiated activities both inside and outside of the classroom. Areas of provision within the classroom support maths, ensuring children are able to access throughout the day to practise and develop skills being taught. In addition, consistent daily maths lessons take the form of direct teaching, which is followed up by enhanced activities placed in areas of provision in the classroom which may be accessed independently or supported by an adult.

Roles and Responsibilities

1. Subject Leader:

- Support teachers in their planning and teaching
- Lead by example in the way they teach in their own classroom
- Monitor different aspects of maths teaching and learning feeding back to SLT and staff on findings and future actions.
- Attend training to better the ethos of the school and staff
- Be available to discuss with the head teacher, class teachers and parents the progress of maths in the school.

2. Class Teachers:

- To deliver a Daily Maths lesson to their children which is engaging and motivating, is informed by the National Curriculum for Mathematics 2014 and is accessible to all children.

3. Children:

- To develop their skills, understanding and attainment in Maths through engagement with the lesson, behaviour conducive to learning, independent work and thought and confidence to challenge or ask for help.

4. Parents / Carers:

- To support their children's learning in maths by taking an interest in their child's progress, encouraging the children to complete maths homework and having a good relationship with the class teacher so that queries and problems regarding maths can be dealt with easily.

Times Tables

Times tables are at the heart of mental arithmetic, which in itself, helps form the basis of a child's understanding and ability when working with number. If a child is secure and fluid with

their times tables knowledge, they are able to work more confidently with advanced calculations.

As well as learning time tables during maths lessons, children have access to Times Table Rockstars (TTRS). This not only allows children to confidently recall their times tables but helps them to increase their pace too.

In Key Stage 1, as well as being able to use Times Table Rockstars, children learn their times tables through counting and singing exercises. There is also an emphasis on the importance of concrete resources which allows children to deepen their understanding of patterns and sequences.

Every two weeks, during assembly, children are celebrated for their improvements. The top 3 children in the following categories are celebrated:

- Most Minutes Played over the last two weeks.
- Biggest Improvement in Accuracy over the last two weeks.
- Biggest Improvement in Speed over the last two weeks.

This allows all children of all abilities to be celebrated for their achievements.

Children's Records of Work

Children are taught a variety of methods for recording their work and they are encouraged and helped to use the most appropriate and convenient methods of recording. Children are encouraged to use mental strategies before resorting to a written method. All children are encouraged to work tidily and neatly when recording their work and follow the school Presentation Policy. When using squares, one square should be used for each digit.

In Y1 and Y2, 1cm square exercise books are to be used. This changes to 7mm square exercise books in Year 3 through to Year 6.

EYFS generally record informally within the setting. For example: - on the playground - on whiteboards - using jigsaws - physically ordering numbers. EYFS practitioners use photos to ensure records of each child's achievements are maintained.

Resources:

The White Rose Maths schemes are used as our main planning tool and learning objectives for teaching of the daily maths lesson are taken from these.

In order to support the delivery of maths lessons to all children, the school has a growing range of resources available. Within the classroom, maths resources are available to children which include basic resources such as number lines, 100 squares, rulers, counters, Numicon,

base ten, place value counters, etc. Other specific resources (e.g. balance scales, meter rulers) are made available as required and are housed in the main resource cupboard.

For children to achieve Mastery level in mathematics, resources are available on the staff drive in which children can complete to demonstrate Mastery level.

We recognise the importance of a stimulating learning environment. The school provides an environment, which is rich in a wide variety of print, pictures, diagrams, charts, tables, models and images. Each classroom has a mathematical display area, which includes a working wall with mathematical vocabulary, visual aids and interactive activities where appropriate. This is updated regularly in accordance with the area of maths being taught at the time.

Adaptive Teaching:

Adaptive teaching in maths involves tailoring instruction to meet the diverse needs and abilities of all pupils, including those with Special Educational Needs & Disabilities (SEND) and the More Able. For example, when introducing a new mathematical concept, teachers might use a variety of methods—such as manipulatives, visual representations, and interactive digital tools—to cater to different learning styles. Pupils who grasp concepts quickly can be challenged with extension activities, such as solving complex word problems, exploring real-world applications, or teaching their peers. Those who need additional support may benefit from step-by-step scaffolding, extra practice with concrete examples, or targeted small-group sessions. Teachers can also offer multiple ways for pupils to demonstrate their understanding, such as creating models, explaining their reasoning verbally, or working collaboratively on problem-solving tasks. By employing flexible and inclusive strategies, adaptive teaching in maths ensures that every child can engage with the subject at their own pace, building confidence and fostering a deep understanding of mathematical principles.

Oracy in Mathematics:

Oracy in maths supports pupils in developing their reasoning and problem-solving skills by encouraging them to articulate their thinking, explain methods, and justify solutions. Through purposeful discussions, collaborative tasks, and mathematical debates, children build confidence in using mathematical language while deepening their understanding of key concepts. This approach fosters critical thinking, clarity in communication, and the ability to engage in meaningful dialogue about maths.

4. IMPACT

In order to measure the impact of our teaching and learning, planning and work audits are carried out by the subject leader ensuring coverage and development of skills in line with specific year group expectations. The following monitoring activities also take place:

- **Short term**
Children's classwork is assessed frequently through regular marking, analysing children's errors, questioning and discussion. Children's work is marked and feedback is given with next steps as in line with the marking and feedback policy.
- **Medium Term**
Each term children in each class are assessed using the White Rose Assessments Reasoning and Arithmetic Test Papers. Year 6 frequently use past SATs papers to support their formal testing preparations. These materials are used alongside judgements from class work to form a teacher assessment for each child. These results are then inputted into our 'Insight Tracking' system where teachers and leaders can monitor the progress of children.
- **Long Term**
The following tests are also carried out annually:
 - SATs at the end of Year 6
 - Optional SATs at the end of Year 2
 - Year 4 Multiplication Check
 - The children are assessed in the early years using the Foundation Stage Profile

Monitoring Teaching and Learning

This is regularly undertaken by the subject leader and other members of SLT.

Results of any monitoring will be fed back to staff quickly and positively and to SLT at their meetings so that any action required can be carried out effectively. All monitoring of staff and their pedagogy will be delivered in a positive and open manner.

Contribution of Maths to teaching in other curriculum areas

Mathematics is a tool for everyday life. It is a network of concepts and relationships and is used to analyse and communicate information and ideas in practical tasks and problems. By making links to other subjects at the initial planning stage we aim to provide real context in which to apply skills taught during the maths lessons.

National Curriculum objectives can also be covered throughout our theme work within the CRACKING Curriculum.

Reviewed	January 2025
Approved by <i>Governing Body</i>	January 2025
Next Review	January 2028 or sooner if required.