



# MATHS ON A PAGE



MALVERN WELLS  
C.E. PRIMARY SCHOOL

*Let Your Light Shine!*

## Introduction

The Malvern Wells aim is to improve life chances for all individuals and nurture the potential for the brightest future in all areas of the curriculum. All our learning is rooted in our 4 core values of courage, commitment, compassion and community and we want to see all children LET THEIR LIGHT SHINE as Mathematicians.

We aspire to provide an ambitious Maths curriculum which enables children to become fluent in the fundamental of Mathematics, including the ability to recall facts quickly, and develop understanding of key concepts in order to mathematically reason and problem solve.

## Intent – What do we aim to deliver?



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 variety of routine and non-routine problems with enquiry, identifying relationships, making increasing sophistication, including breaking down generalisations and developing an argument, problems into a series of simpler steps and persevering justification or proof using mathematical language. in seeking solutions.

**Solve problems** by applying their mathematical understanding to a variety of routine and non routine problems with increasing sophistication. This includes breaking down problems into a series of simpler steps and persevering in seeking solutions.

## Implementation – How do we teach our Maths curriculum?

Our belief is that maths is crucial to achieving academic success, therefore, opportunities are provided on a daily basis for new learning and retrieval of key number facts. As well as regular maths lessons, children are provided with regular opportunities to develop their understanding in a range of sessions including daily KIRFs sessions, Times Table Rockstars and retrieval activities.

## Mastery



Children through out the school are taught using a mastery approach. This involves the children being introduced to new concepts in small, manageable steps. It does not mean every child will 'master' every concept by the end of a session but, will instead, be increasingly confident and fluent with the unfamiliar.

## Lesson Structure



Throughout the school, a teaching for mastery approach is used to ensure that learning is deep, long-term, secure and is adaptable. Our children are taught in their mixed ability classes using the White Rose progression framework for mixed year groups which carefully sequence National Curriculum objectives into smaller steps, providing extended opportunities to deepen learning through intelligent practice. At times, teachers supplement intelligent practice with high quality resources from NCETM and other well-recognised schemes. Our expectation is that all children work on the same concept, and the majority of children progress at a similar pace.

All our lessons follow the Malvern Wells Teaching model.

## Keep up / Teach Up



At the mid point of our maths lesson (45 minutes in), our children attend assembly which allows teachers to make in the moment formative assessment judgements based on a child's performance in the intelligent practice. Children who have not met full expectations and learning is not secure, will receive same day intervention by the class teacher to ensure they are at the same starting point as their peers in the next lesson. Children who have demonstrated a secure understanding will use this time as an opportunity to deepen and make connections within the same areas of maths; independent challenge.

## Developing Arithmetical proficiency



There is a shared belief at Malvern Wells that being able to recall key number facts is an essential characteristic of a successful Mathematician. To develop fluency and a rapid recall of number facts, teachers regularly hold KIRF sessions. These sessions, which are mapped using a whole-school long term plan, provide an opportunity to learn mental strategies for specific number facts. Despite this session being separate from the regular maths lesson, children develop a rapid recall of facts which they can automatically apply in later learning as they are embedded in the long term memory, reducing cognitive overload.

## Vocabulary



The use of accurate and concise mathematical vocabulary is something which we strive for within our mathematics sessions from children and teachers. To promote this, teachers use carefully considered sentences with support from sentence stems, which allow concepts and procedures to be verbalised in a clear manner.

## Impact – How do we evaluate our Maths curriculum?

### Engagement and Participation

Children demonstrate and articulate that they enjoy maths and are able to complete challenges set as shown by their productivity in their books.

### Formative Assessment

Children are assessed on a daily basis in order to assess the level to which a child is heading towards mastery of a concept. This informs the direction of teaching and any additional support required.

### Summative Assessment

Termly, children in Y1-Y6 sit a formal test which is analysed. This is used to identify areas of strength and inform required areas for focussed teaching.

### Application across the curriculum

Children use learnt maths skills in other subjects with fluency such as DT, Science and Computing