CURRICULUM STATEMENT: Maths

Our Curriculum Intent for Maths

At Mountfields Lodge we want our children to

- understand important concepts and make connections within mathematics.
- have a fluent knowledge and recall of number facts and the number system.
- have the confidence to solve problems in a wide range of contexts.
- explore a range of strategies when solving problems, including using practical equipment.
- effectively communicate their mathematical thinking both orally and through writing using a range of mathematical vocabulary.
- use mathematical strategies to work with a growing independence
- be able to reason, spot patterns and generalise to make sense of their mathematical thinking

We believe that maths equips children with the uniquely powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to think in abstract ways.

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them. It is vital that a positive attitude towards mathematics is encouraged amongst all of our children in order to foster confidence and achievement.

Our Curriculum Implementation for Maths:

At Mountfields Lodge School we teach the National Curriculum for Mathematics primarily, although not exclusively, through our use of POWER MATHS (Y1-6). Our commitment to this ensures that all pupils achieve mastery in the key concepts of Mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education.

Our approach to teaching maths in Foundation Stage is based on developing secure early number sense to create a solid foundation to support and compliment the teaching of the Maths Mastery approach throughout the rest of school. Our approach to developing early number sense consists of building an awareness of the relationship between number and quantity, in addition to, a clear understanding of number symbols, vocabulary and their meaning. Teaching will develop children's ability to engage in systematic counting, specifically understanding cardinality and ordinality. Lessons will build an awareness of magnitude and comparisons alongside an understanding of different representations of number. Our children should develop a competence with simple mathematical operations and have a good awareness of number patterns including recognising missing numbers. Research studies support our revised practices and we believe that this is the best way for our pupils to achieve in their first years at school

Our short lessons are taught as whole class where all children are exposed to the same content. Sufficient time is spent on topics so the content can be mastered, this includes teaching each number to 10 for two weeks for the first part of the year. Precise mathematical language is used and explicitly taught. Discussion of tasks and methods are encouraged to promote reasoning and deeper understanding. Our continuous provision then provides opportunity for frequent additional practise which is encouraged, observed and when appropriate, facilitated by adults. Our

continuous provision is based on effective early years pedagogy where a mixture of adult led, adult initiated and child led learning takes place. Learning of maths is not confined to specific maths lessons, in our foundation stage opportunities for learning are fully embedded into our daily routines such as snack times, tidy up, registers and lining up.

Our expectations for Teaching and Learning are:

- Maths is taught daily, and discretely with a focus upon acquisition of essential skills and knowledge. However, it is important to use that application of skills are linked across the curriculum where appropriate.
- Teachers should find ways of contextualising Maths and helping pupils 'see where Maths fits in' to their everyday lives. Power Maths helps this approach as questions are always in everyday situations.
- Pupils should use practical approaches to mathematics (models and images).
- Pupils should be encouraged to independently select resources to help them. Pupils use mixed ability **'Power Partners'** to promote mathematical vocabulary and discussions.
- Children are taught in mixed ability classes. However, those pupils identified with a higher learning potential are challenged further in their learning and children who find aspects of their learning more difficult are appropriately supported so that they too are enabled to experience success.
- Class teachers are to make use of the **Power Maths planning** and annotate accordingly.
- Pupils should learn from teachers, peers and their own mistakes. Pupils have the opportunity to use **self-marking and peer marking** to encourage independence and opportunities to reflect on their own learning.
- A pupil's secure understanding of Mathematical language should be encouraged. Pupils communicate using **STEM sentences** to support their learning.
- Pupils should be expected to ask questions as well as answer them in full STEM sentences.
- All lessons to have **identified element of reasoning** in them.

Periodically whole-school MATHS WEEKS are planned to unite the school in an engaging and cross-age-group enrichment opportunity.

Where possible we use outside support, e.g. Pupils from the local Grammar School and our pupils have opportunities to enter MATHS Competitions e.g. Times Table Rock Star Challenges to motivate and inspire those with aptitude and skills to share their learning with other learners and parents/carers.

We look for opportunities to use the school grounds as a 'MATHS teaching resource' and as an 'active learning facility' to inspire and engage; this continues to be an aspect of provision that school is seeking to promote and develop further.

Our Curriculum Impact for Maths:

Marking and Feedback of our pupils' learning enables us to provide effective feedback to pupils on their learning performance. We can give recognition and appropriate praise for achievement. It helps us identify effective strategies and 'next steps' for improvement; it helps inform future planning.

We actively involve pupils in their own learning, by allowing specific time for children to read, reflect and respond to marking and feedback where appropriate. We aim to promote the motivation of our pupils and their desire to improve, asking them to evaluate their own learning and recognise their achievement through self and peer making.

We undertake both short formative tests and ‘check-ups’ to find out what our pupils know. We complete summative tests and assessments, ask pupil to self-assess and evaluate their learning, and we both acknowledge and quality mark the work of our pupils.

We measure progress through pupil work sampling and assessments. We monitor and evaluate end-of-term teacher assessment data in Maths. We use National EYFS, Y2 and Y6 data as our benchmark using this to make judgements of our successes and identify our ‘next steps’. Analysing our assessments we identify any ‘gaps’ at an early stage and ensure quick intervention.