Maths Vision

At Park Hill our overarching aim is to provide a high-quality mathematics education so that all children have a deep, long-term, adaptable and secure understanding of the subject, that they can use in their everyday lives and further education.

INTENT

We believe that all children should have:

- A deep understanding of maths and number.
- A positive and resilient attitude towards mathematics
- Competence and confidence in mathematical knowledge, concepts and skills.
- an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- A range of learning strategies: working both collaboratively and independently.
- Fluency in mathematics where children can express ideas confidently and talk about the subject using mathematical language.
- An understanding of the importance of mathematics in everyday life.
- Independent learners who take responsibility for their own learning.

We believe that a mastery approach to the teaching and learning of mathematics is the key to achieving each of these things.

Our maths curriculum aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics through placing number at the heart of our curriculum with daily practice to ensure fluency of number facts
- reason mathematically by following a line of enquiry through ensuring discussion plays a vital role in all lessons. Children are actively encouraged to discuss with peers and teachers, how? Why? using mathematical language
- can solve problems by ensuring problem solving is embedded in every lesson and variation of questions are used to enable children to apply their knowledge to different situations.
- Rich connections across mathematical ideas to develop fluency are encouraged through variation of questions which can be seen in every lesson and evidenced in the maths books.
- Challenge is built into every lesson for pupils who grasp concepts rapidly through sophisticated problems and an opportunity for children to demonstrate their understanding creating their own problems.
- **Same day intervention is provided for children who are not sufficiently fluent with earlier material to consolidate their understanding.**

IMPLEMENTATION

- Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from year 3 through to the end of Y6.
- Manipulatives and representations are used to ensure children have a deeper understanding.
- In school, we follow the national curriculum and use White Rose Schemes of Work as a guide to support teachers with their planning and assessment.
- To learn mathematics effectively, some things have to be learned before others, e.g. place value needs to be understood before working with addition and subtraction, addition needs to be learnt before looking at multiplication (as a model of repeated addition).
- Our emphasis is on number skills first, carefully ordered, throughout our primary curriculum.

IMPACT

- Children demonstrate a deep understanding of maths. This includes the recollection of the times table.
- **Children display a positive and resilient attitude towards mathematics and an awareness of the fascination of mathematics.**
- **Children show confidence in Believing that they will achieve.**
- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.