

# Maths in our schools

## Curriculum Drivers

**Ambitious:** We aim to enable children to have access to the world around them through finding examples of maths in real life situations. We want all children to be ambitious and have the desire to challenge themselves to achieve highly. Our curriculum encourages lots of reasoning opportunities to allow all children to master mathematics.

**Inclusive:** We want every child to know that they can be mathematicians. We use a variety of techniques and resources to ensure that all children succeed at a level appropriate to them. We want maths lessons to be something all children look forward to and can engage with.

**Knowledge Rich:** Our mathematics curriculum is informed by Development Matters and the National curriculum. We use White Rose Maths and the NCETM Mastering Number programme to sequence the knowledge in small steps. We plan for lots of retrieval time to ensure children retain the knowledge they have learnt.

**Fluent:** From NCETM: Efficient, accurate recall of key number facts and procedures is essential for fluency, allowing pupils' minds to think deeply about concepts and problems, but fluency demands more than this. It requires pupils to have the flexibility to move between different contexts and representations of mathematics, to recognise relationships and make connections, and to choose appropriate methods and strategies to solve problems. This is what we aim to deliver to our pupils in our schools.

## Sequencing of content

In the EYFS, we use the NCETM Mastery Number and White Rose to deliver the six key areas of early maths: cardinality and counting, comparison, composition, pattern, shape and space and measures.

White Rose mathematics small steps planning is used throughout KS1 and KS2.

In a maths lesson we will see: fluency, reasoning, problem solving, introduction of vocabulary, use of sentence stems to support oracy and varied representations. We also incorporate Mastering Number into our timetables separate to our Maths lessons to embed and aid number fluency.

## Diversity

We believe that mathematics is for everyone, and that everyone can be a mathematician. We know that some of the families in our school don't yet believe this and want this to change for our children. We aim to foster a growth mindset and show all children they can achieve. Misconceptions are a part of our learning, and we address these as they arise, we even highlight that sometimes teachers make mistakes too! We recognise we have a diverse cohort of children some with a variety of SEN need and aim to make maths a lesson everyone can enjoy.

## Big Ideas:

**Coherence:** Material is designed to give pupils a deep understanding of concepts that can be applied throughout the maths curriculum.

**Mathematical thinking:** Problem solving, reasoning and discussion are key to developing a deeper understanding of mathematical concepts. Pupils will communicate their ideas using precise mathematical language.

**Representation and structure:** Teachers carefully select representations of mathematics to expose mathematical structure.

**Variation:** We aim to draw close attention to mathematical concepts through varying some elements and keeping some constant.

## Retrieval practice

All lessons include an element of retrieval, as new knowledge is embedded by building on previous learning.

We give children the chance to remember learning within a sequence, but also over time to support long term memory and foster connections between concepts.

We aim that over time children's retrieval speed will increase as their confidence and knowledge grows.