

# Maths at The Mill Academy

## Intent

At The Mill Academy we encourage our children to be creative and resilient mathematicians. We challenge children's thinking through varied fluency tasks to ensure that they are confident with key mathematical concepts. We also provide reasoning questions and problem solving so that they our children are equipped with vital critical thinking skills

We aim to encourage children to:

Be confident and competent with all areas of mathematics

Make links between the mathematical programme of study

Notice patterns

Have an enjoyment for maths and the challenges it brings

Become independent problem solvers

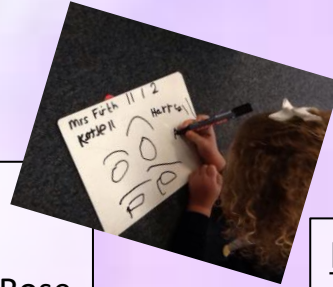
# Implementation

At The Mill Academy we follow the White Rose Maths scheme of learning throughout school to ensure coverage of the National Curriculum statutory programme of study and the Early Years Foundation Stage curriculum.



## Maths in Foundation Stage

Our youngest children in school have daily small group activities led by an adult. In Reception we follow White Rose maths. Children's main maths teaching is done through playful interactions in continuous provision. Children learn mathematical concepts in their play throughout the whole foundation unit. 'Big maths' is encouraged in our outdoor provision; the bigger the better! We like to weave maths into our everyday routine so that it becomes second nature to them. Key maths vocabulary is displayed in provision.



## Maths in Key Stage 1 and Key Stage 2

Maths is taught consistently throughout Key Stage 1 and 2. The lesson begins with 'Fast 5' where children have to rapidly recall learning done in a previous lesson or unit of learning. This is to encourage our children to be fluent in arithmancy and to commit learning to long term memory.

To ensure a broad and deep understanding of maths, our children are challenged throughout the lesson. Fluency, reasoning and problem-solving questions are used to ensure this. The Concrete, pictorial and abstract approach is used to ensure key concepts are embedded.

Maths vocabulary is a priority. We use our working walls to display key vocabulary needed in each unit of learning. It is our aim to expose our children to a wide range of mathematical language. Maths reasoning sentence stems are displayed to encourage our children to use during spoken and written tasks. Our maths working walls are current and used daily.

Fluency in Multiplication and division facts is a priority at The Mill Academy. We use Times Tables Rockstars to help with this. Children have regular practise and are rewarded for participation on the app at home. We have also had some very competitive rock battle tournaments.



# Impact

## EYFS

Photographs and children's mathematical recordings are saved and displayed on the child's square for the half term and then are transferred to their learning scrapbook. Reception children discuss their learning each half term and their comments are recorded in their scrapbooks. Teacher judgement is used at the end of reception to judge whether a child has met the Early Learning Goal and this is discussed with staff in internal moderations and external moderation between the schools in the trust.

## Key Stage 1 and Key Stage 2

Teachers use live-marking to move children on quickly in a lesson for that all children are making progress. On the spot, verbal feedback is crucial to ensure children know how they are meeting learning objective and the next steps that they need to take.

Analysis groups are used to address any misconceptions and plug gaps in learning. They also allow for rehearsal of previous learning.

Knowledge and understanding is tracked at the end of every unit using White Rose End of Unit Assessments. Gaps are noted and acted upon in future planning and analysis groups

Formal assessment are completed termly in Years 2 and 6 (SATs papers)

End of year assessments are used to years 1,3,4,5 to evidence teacher's judgements for attainment.

Each terms teachers provide judgements of current attainment for their class and this is then quality assured through internal (with the subject leader) and external (trust) moderation, using book work and tests as evidence.

The subject leader uses lesson observations, book evidence and pupil voice to ensure the impact of the teaching of maths in school