



Manor Primary School Curriculum Statement

Subject: Maths



Vision Statement for maths: The basic skills of mathematics are vital for the life opportunities of our children. Our aim is for all children to think mathematically, enabling them to reason, solve problems and assess risk in a range of contexts. Our mastery approach to the curriculum has been developed to ensure every child can achieve excellence in mathematics. Children can experience a sense of awe and wonder as they solve a problem for the first time, discover different solutions and make links between different areas of mathematics. It provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach. This ensures pupils fully understand what they are learning.

Intent:

At Manor Primary School we:

- . Follow the revised White Rose for our long-term sequencing and coverage, which includes recap lessons in order for all children to master the curriculum
- . Follow the suggested small steps from White Rose but resource these lessons from a range of different places (including: NCETM, Twinkl mastery and NRICH)
- . Know the end goals for each year group
- . Use the suggested mathematical models from White Rose, such as: part-whole models, bar models and place value charts
- . Ensure our children can access the abstract nature of maths with concrete and pictorial representations
- . Provide high-quality resources and training (Mobius Maths Hub mastery programme, mastering number programme and multiplication success programme)
- . Ensure all children access their age-appropriate maths curriculum (except from those children with significant educational needs)
- . Ensure that adequate time is given to the teaching of maths
- . Keep abreast of any national changes, research and initiatives
- . Support two practitioners working with the Mobius Maths Hub in developing our understanding of maths mastery across the two key stages
- . Focus on the attainment and progress of the lowest 20%
- . Access Third Space Learning online tuition for the children who are not making the expected progress and those that have suffered as a result of the pandemic
- . Focus on the rapid recall of suggested number facts for each year group and sequence these so that children can develop their fluency in number recall
- . Hold a times tables challenge for the pupils with an expectation that they complete it by Year 4 (Times Tables Rock Stars)
- . Liaise with secondary schools and take their advice to ensure that our Year 6 pupils go up secondary ready
- . Give pupils the opportunities to solve problems in real life contexts

Implementation:

In Nursery:

- . Every child receives a 10 – 15-minute input once a week, followed by a follow up activity
- . Concrete resources are used to directly teach the children how maths can be represented

- . Nursery rhymes are sung daily to encourage counting
- . Interventions are run for school-ready pupils
- . Children are encouraged to speak in full sentences when answering maths problems

In Foundation Stage 2:

- . Every child receives a 10 – 15-minute input each day, followed by a follow up activity
- . Concrete resources are used to directly teach the children how maths can be represented pictorially, before eventually removing these scaffolds so children can attempt the work abstractly when appropriate
- . Number formation is an early morning task
- . Children are encouraged to speak in full sentences when answering maths problems

In Key Stage One:

- . Every child receives at least a 50-minute maths lesson every day
- . Every lesson starts with a fluency starter based on knowledge that has previously been taught discretely (Flashback 4 and counting chanting)
- . Each lesson follows the structure of: instruct and model, provide guided practice then support independent practice (I do, we do, you do)
- . Concrete resources are used to directly teach the children how maths can be represented pictorially, before eventually removing these scaffolds so children can attempt the work abstractly when appropriate
- . In Year 2, when appropriate, children mark their own work so misconceptions can be addressed
- . Children are encouraged to speak in full sentences when answering maths problems

Assessment:

- . Children complete White Rose end of block assessments
- . Teacher assessment (each half term)
- . Children complete a White Rose end of term paper or SATs papers in Year 2 (termly)

In Key Stage Two:

- . Every child receives at least a one-hour maths lesson every day
- . Every lesson starts with a fluency starter based on knowledge that has previously been taught discretely (Flashback 4, fact chanting, counting chanting)
- . Each lesson follows the structure of: instruct and model, provide guided practice then support independent practice (I do, we do, you do)
- . Concrete resources are used to directly teach the children how maths can be represented pictorially, before eventually removing these scaffolds so children can attempt the work abstractly when appropriate
- . When appropriate, children mark their own work so misconceptions can be addressed
- . Children are encouraged to speak in full sentences when answering maths problems

Assessment:

- . Children complete White Rose end of block assessments
- . Teacher assessment (each half term)
- . Children complete a White Rose end of term paper or SATs papers in Year 6 (termly)

In Goldfinch (our internal resource unit):

- . Pupils are taught maths for at least 50 minutes a day
- . The children are grouped according to ability and divided into 3 groups with an adult supporting that group.
- . Goldfinch follow the National Curriculum, but with a focus on life skills.
- . Depending on the individual's need the work is usually very practical with lots of hands on learning.

Assessment:

- . Teacher assessment (each half term)

In Year 1 and Year 5 and 6, the bottom 20% of pupils are being taught by experienced teachers in intervention groups. They are receiving a 'cut back' curriculum of their current year group to ensure that they have the key skills needed to support them in their maths journey. In all other year groups, pupils will be supported in class by a TA or teacher and given concrete resources to support their learning alongside the use of pictorial and abstract representations. Some pupils from the bottom 20% have access to the Third Space national tutoring programme to help close gaps in their learning.

Star maths assessment data is used to provide a standardised score for each pupil, which we use to assess how much progress each pupil is making. White Rose assessments are used to allow children the opportunity to practice tests that are designed in a similar format to SATs papers. They also allow teachers to see what key information has been retained by pupils.

In Foundation Stage (currently) and Key Stage 1 (from September with the new White Rose scheme), children are read some stories to introduce new maths learning or to consolidate previous learning.

In each classroom there is a maths display which displays sentence stems and key maths vocabulary for the current topic. Each class has a hundred square that is on display for the children to use as and when needed.

Times Tables:

Year 4 are taught times tables explicitly during the White Rose learning sequence, then these are regularly revisited during maths starters, where they are chanted. Those Year 4 pupils who find times tables more difficult, attend twice weekly intervention sessions with Year 6 times tables mentors. Their times tables knowledge is assessed at the beginning of the intervention period and then regular two weekly checks are undertaken to assess whether they have retained the times tables they have been working on. Times Tables Rock Stars is also used to assess how pupils are progressing with their times tables knowledge.

Pupils in Year 1 and 2 have access to Numbots, which is an online platform that allows them to play games which assesses their subitising, counting and number bonds. This is an app which has been shared with parents at home so children can use it there also.

Pupils from Year 2 (from January each year) to Year 6 have access to Times Tables Rock Stars. Teachers set appropriate times tables for their pupils and do not move them on to the next set until they are secure in the ones that are being tested. The children's heat maps are assessed weekly and once children have securely learnt sets of times tables, there are badges and medals available. Once children have learnt their 2, 5 and 10 times tables, they will receive a bronze badge; once they have learnt their 3, 4 and 8 times tables, they will receive a silver badge; once they have learnt their 6, 7 and 9 times tables, they will receive their gold badge and after they have completed their 11 and 12 times tables, they will receive a medal.

Once pupils have completed the times tables challenge, they will be set extended times tables on Times Tables Rock Stars (13 to 19 and multiples of tens). These are set alongside the 1 to 12 times tables so that they can continue to improve their rapid recall of these facts.

Gifted and talented:

Gifted and talented children in KS2 are set homework on Mathletics

Gifted and talented pupils from Year 4 are offered an opportunity to take part in maths competition at St Edwards School.

Gifted and talented pupils from Year 5 & 6 attend STEM days at Leighton Park School

Impact:

- White Rose end of term assessment data
- Star Assessment data
- Lesson observations
- Learning walks
- Book scrutiny
- SATs analysis to aid long term planning for Year 6