

Our Mathematics Intent, Implementation and Impact

(This document should be read in conjunction with Our Maths Curriculum).



Working Together to be the Best we can be.



Intent

At Marton Primary Academy and Nursery, we aim for all of our children to master highly effective maths skills where they are able to:

- Progress through school, focus on fluency, reasoning and problem solving; deepening their knowledge and understanding.
- Use high-order vocabulary, question, be curious and communicate their thoughts
- Acquire the skills and knowledge needed for future life-long learning

We intend for all Our children to have a knowledge and understanding of:

- Number and Place Value and rounding
- Addition and Subtraction
- Multiplication and Division
- Fractions
- Decimals (from Year 4)
- Percentages (from Year 5)
- Measures



Marton Primary Academy and Nursery

- Properties of Shapes
- Position, direction and movement
- Data
- Ratio and proportion (from Year 6)
- Algebra

Our children will be able to:

- Recall a range of number facts fluently and automatically
- Consider a range of problems, work out the steps needed and apply the appropriate mathematics to solve them
- Use a range of concrete materials to support their calculation, reasoning and to provide proof.
- Make cross-curricular links to secure application and mastery.

Implementation



Maths in Early Years

In Foundation Stage we follow the EYFS Curriculum and Development Matters. Teachers use NCTEM Mastery maths to support their planning and these are supplemented with White Rose materials for Foundation Stage. Daily sessions are dedicated to the teaching and learning of mathematics and opportunities for furthering children's thinking and understanding are exploited daily through continuous provision. Observation, photographs, records of discussion with children and some recorded maths work are the main sources of evidence in EYFS.

Key Stage 1 and 2

Throughout Key Stage 1 and 2, Mathematics is taught primarily through the White Rose schemes of learning, supplemented where appropriate with other materials such as the NCETM. White Rose promotes blocks of learning to allow children the time to fully master a concept before moving on. To ensure that key skills taught early in the year are not forgotten by the end, concepts are revisited, through a daily flash back 4 session or during the daily maths lesson as appropriate. 2 afternoon maths sessions a week ensure that the DFE ready to progress criteria are fully embedded. All children from year 2 onwards journal their mathematical thinking for new concepts or new methods. This ensures that all children are regularly developing their reasoning skills.

Number

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It is essential that children have a good knowledge of number facts. To ensure that this is developed, year groups from EYFS to Year 2 take part in numbots in which children work on learning number facts which are appropriate for their age and development. They also receive 3 Maths Mastery sessions a week.

Year groups from year 2 to year 5 use tt rockstars. A short, daily timed test is taken, and all number facts must be secure before moving on to the next level. Home learning is linked to rapid recall and parents are encouraged to support their children in their learning.

Staff are aware of and use opportunities for cross curricula skills practice.

Maths Environment

Throughout the school, working walls provide a scaffold and model for the children's learning and journal writing. Working walls are kept decluttered and show children's working out and methods for the lesson being taught. Every lesson is supported by a choice of manipulatives.





Assessment in Maths is ongoing as teachers carry out both daily formative assessment and summative assessment at the end of block or term. Teachers make informal assessments daily in order to plan the most effective learning for the following session. These assessments may be recorded as comments in children's books, or through discussion with the child. They could also be recorded as notes on teachers planning used. More formal assessments are made at the end of each block to ensure that children are ready to move on. These are made using the White Rose end of Block assessments. Results from these assessments do not need to be reported and are for the purpose of informing the teacher. Any misconceptions or areas of difficulty can then be addressed before moving on.

At the end of term, the White Rose end of term assessments are used and the information from them as well as any teacher assessment is transferred to our tracking system 'Eduacter' to build up a picture of progress and attainment in mathematics across the school.

In Years 2 and 6 teachers may decide to use past SATs papers at the ends of terms to give a clear picture of where the children are within the context of the end of Key Stage expectation.

Progress across classes is closely monitored by the subject leader and the senior leadership team. Monitoring includes: regular book looks, lesson observations, gathering evidence of good practice, pupil voice interviews, looking at data on our tracking system and regular learning walks.