

Maths at Great Moor Junior School



What does a Maths lesson look like in our school?

- Children enjoy Maths and are engaged and challenged.
- Children have a growth mind set and respond positively to challenge and new concepts. They persevere with tasks and challenge themselves.
- There are a variety of tasks and challenges set, in different formats, which require the children to work and respond to, using their skills in different ways.
- Children are working towards mastery of the same Age-related expectations. Therefore, apart from SEN children, all children should have the same conceptual work to complete, but differentiated to challenge the most able through the use of higher numbers, specific criteria, or more challenging questions.
- Collaboration in groups or with a talk partner is frequent and productive.
- Seating and talk partners are changed regularly to allow children the opportunity to work with and learn from a variety of different peers. Mixed abilities work (and learn) together within their class.
- There is lots of maths talk: children are confident to talk about the maths they are learning and have regular opportunities to use reasoning skills.
- Problem-solving opportunities are threaded through lessons.
- Real-life situations and contexts are used as much as possible.
- Concrete materials and manipulatives are available for use, if required, but not be over-relied upon at the expense of children challenging themselves.
- Misconceptions are identified promptly and addressed as soon as possible.
- Mini-plenaries are used in a timely manner to address misconceptions, pose further questions or move children on within lessons.
- Teachers use questions that are more open-ended and enable mathematical talk with their talk partners. Questions such as the ones below are commonly used.

What do you notice?

What is the same? Different?

Which is the odd one out?

Always? Never? Sometimes?

If we know this, what else do we know?

The answer is.... What is the question?

Give me....tell me....show me.....

How does Maths work at Great Moor Junior School?

- The *National Curriculum in England: Mathematics Programme of Study* is the statutory curriculum.
- Year Groups create a Yearly overview of the order in which topics will be taught throughout the year. Medium term planning is based around the AREs that need to be taught during the topic, the ARE's from the previous year in order to understand what learning has happened previously, vocabulary which will need to be used as well as common misconception which will need to be addressed. Then weekly planning will include how each day will be taught, the

models that will be used, as well as how to accommodate all learners including SEND. Teachers will plan according to their children's needs.

- During lessons, a sequence of Concrete, Pictorial and Abstract materials and models are used to teach concepts, where necessary. These models and materials are consistent throughout the school and follow the Calculation Policy and Fraction Policy. Children will also have opportunities to apply their knowledge to various reasoning and problem-solving activities.
- Teachers will adapt a task as appropriate for all learners. They will provide planning/work to cater for any SEN children that require additional support. High attaining children will have greater challenge within lessons, but the conceptual work will remain the same as the rest of the class. As a result, apart from those with SEN who cannot access the curriculum, all children should have the same conceptual work to complete. In addition, work is adapted to challenge the most able through the use of higher numbers, specific criteria, or more challenging questions. There is a high expectation for all pupils.
- Lesson objectives are not fixed to a rigid order but are based primarily on the needs of the class. If more time (or a different approach) is needed on an objective to be successful within a particular class, it is given
- Lesson planning is "fluid" and responds to the needs of the class. Teaching is based on formative assessment from previous lessons or assessment during the lessons.
- There are repeated opportunities to practise, become fluent, to reason and achieve mastery of skills.
- Regular assessment and high-quality marking is used to determine learning and progress towards mastery. Verbal and written feedback is used to support the children in moving on with their learning.
- Addressing misconceptions as soon as possible is a key priority and focus for the class teacher.
- Support staff are deployed effectively and efficiently to maximise progress in the class.
- The teachers follow the Calculation and Fraction Policy. The policy consists of Concrete - Pictorial – Abstract methods and models. The aims of the policy are to ensure consistency across the school, so that there is clear progression within each concept and to help children's mathematical understanding. The Secrets of Success (and other PSHE work), along with praise and modelling of positive responses to challenge, foster a growth learning attitude in the children. Mistakes are viewed positively and are used to support learning
- Maths homework is assigned once a week (on a Wednesday) and is an opportunity for children to consolidate, extend or practise their skills out of school.
- Maths is visible around school through the Maths working wall, resources and vocabulary wall.

What Assessment takes place?

- Year 6 children complete statutory end-of-key-stage SATs.
- Year 2 SATs assessments are given at the beginning of Year 3 to provide a baseline assessment when children enter the school.
- Daily formative assessment (gathered within and after the lesson via marking) is supported by summative assessment and is used to determine progress against the Age-related Expectations which are found in children's books. Assessment is used as a basis on which to plan future lessons based around the children's needs.

- Summative assessments are taken termly. They include Testbase Termly Tests for Year 3-5 and SAT papers for Year 6.
- Teachers will also track 4 pupils. They will assess them individually every term to identify any gaps in learning and inform future intervention groups.
- Year 4 will complete the multiplication tables check assessment.
- The children regularly self-assess and reflect on their progress.