

Intent

GROWTH: Teaching staff are good role models to our children. Cross curricular maths offers a way for pupils to develop their knowledge, skills and understanding. Helps them to become motivated to learn through a series of interconnected topics. Children begin to think about problems in a logical and sequential way.

RESILIENT: Core maths lessons are taught daily. Mathematical learning runs throughout the school day and we operate additional fluency to embed children's knowledge and understanding (maths blast). Roe farm staff promote confidence and competence with numbers at levels appropriate to individual children. We focus on developing the individual ability to solve problems through decision making and reasoning in a range of contexts.

OPPORTUNITIES: Teachers always support and encourage and actively assist our pupils to ensure success in maths. Pupils are happy and motivated to challenge themselves through a variety of mathematical questions. Children are encourage to take risks in maths in order to strengthen their perseverance and love of learning.

WONDER: At Roe farm we aim to ensure all pupils are proficient mathematicians. We want to create a culture of deep understanding and competence in maths—a culture that produces strong secure learning and real progress. We believe that the concrete, pictorial, abstract method greatly supports children's ability to make connections and develop mathematical talk and reasoning.

TEAM WORK: The MNP framework adopts a maths mastery approach which supports all children to achieve in mathematics. A positive can do attitude is encouraged and children are taught to enjoy working with numbers and problem solve. Collaborative learning is used to give children the opportunities to discuss their ideas and results.

HEAD, HEART, HANDS: Working walls are used in classrooms to support and facilitate learning. These aid retention, encourage independence and support the development of vocabulary. Verbal feedback is the first point of marking. Whole classes are taught together with the expectation that every child will be successful in the concept, whilst some will work more deeply on challenging tasks.

Subject on a Page

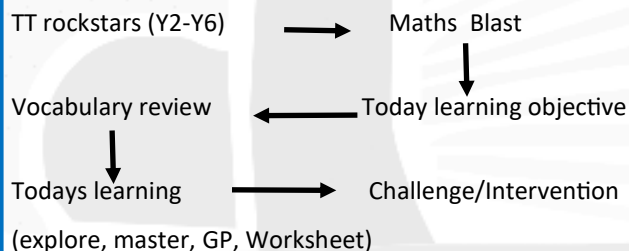
MATHS

Implementation: Planning

Maths — No Problem! is a comprehensive series that adopts a spiral design with carefully built-up mathematical concepts and processes adapted from the maths mastery approaches used in Singapore. The Concrete-Pictorial-Abstract (C-P-A) approach forms an integral part of the learning process through the materials developed.

Planning slides are consistent across school (Reception–Y6) to build repletion and vocabulary is reinforced throughout.

Implementation: Learning Sequence



Implementation: Teaching and Learning Pedagogies

Each maths lesson begins with a 'Maths blast': an opportunity for children to practice and consolidate prior learning. This will ultimately help them remember/retain information. (Rosenshine)

Children build upon their knowledge and skills throughout their time at Roe Farm, allowing them to build upon what they already know. (progression maps)

Implementation: Resources

- ⇒ Subscription for each year groups for the MNP scheme
- ⇒ Physical resources for each year groups e.g. cubes, deans and fraction resources.
- ⇒ Bank of challenge (T drive)
- ⇒ TT rockstars subscription

Implementation: Curriculum Links

When planning any other subject it is integral to provide opportunities to integrate maths. At Roe Farm we weave 'real life' or everyday maths into other curriculum areas as this is the most natural thing in the world. E.g. science, computing and geography .



Implementation: Environment

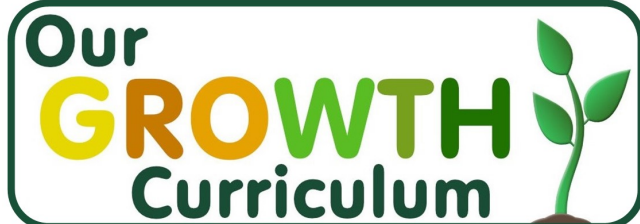
Classroom displays are expected to be functional working walls that aid teachers in their delivery and pupils in their learning.

Each classroom displays:

- Working flipchart paper. (relevant strategies)
- Unit vocabulary
- Visualise, represent, calculate posters.
- Current challenges

Displays can be used by pupils to familiarise themselves with current learning and prior learning. Our language rich learning environments promotes a love of Maths.

Consistent concrete manipulatives, and pictorial representations are used throughout to support conceptual understanding.



Implementation: Feedback

Pupils are given regular, immediate feedback in lessons as this can have the biggest impact on learning. Where appropriate, comments may be written in books to praise, support or further challenge pupils.

In addition to this Pupils are encouraged to peer and self assess their own work against the objectives. This further develops their understanding and enables them to learn through their own mistakes. This is also enables children to become more resilient.

Implementation: Support

Quality first teaching strategies to support all learners to reach their full potential.

Use of questioning to guide pupils to self support.

Scaffolding of tasks (use of visual resources) where appropriate to support independence whilst continuing to access the intended learning outcomes.

Direct adult support on a 1:1 or small group as required.

Formative and summative assessments to inform next steps for individuals or groups. Furthermore this will then inform maths blasts that are undertaken.

Differentiated questioning to support or challenge as required.

Learning challenges to stretch the more able.

Open door policy which allows teachers to observe good practice.

Impact: Evidencing

Written outcomes will be recorded in their maths blast/ maths book/ TT rockstars folders.

O track data/ TT rockstars data

Some non-written outcomes may be photographed or videoed.

Impact: Assessment

Maths Blast retrieval tasks at the start of each lesson to assess prior learning and retention.

Live marking in lessons and through review questioning at the end of a lesson.

End of unit formative assessments (Y1 MNP reviews, Y2-6 test base)

Impact: Monitoring

Following the school's tiered approach to monitoring every term.

Book looks, pupil voice, learning walks and staff voice play an important part of our tier 1 monitoring.

This is supported by an annual more in depth dive with SLT.

Outcomes fed back to SLT which then is relayed to year groups.

Associated Maths governor meeting twice a year to share outcomes.