Maths

Intent

We believe that mathematics is a tool for everyday life. It is a network of concepts and relationships that provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real-life problems. The mathematics curriculum is currently delivered through a framework developed by consultants and coordinators within the Local Authority and supported by the White Rose Scheme of Work. We follow the White Rose planning schedule and are currently developing a teaching for mastery curriculum, which enables children to develop their fluency, reasoning and problem solving.

Implementation

We are in our first year of implementing a mastery approach to our curriculum, which is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6.

Teaching and Learning, Content and Sequence

- In school, we follow the national curriculum and use White Rose Schemes of Work as a guide to support teachers with their planning and assessment.
- The calculation policy is used within school to ensure a consistent approach to teaching the four operations over time.
- At the start of each new topic, an elicitation task is completed to assess the children's prior knowledge and inform planning.
- Teachers plan for progression, resources, misconceptions and key vocabulary through collaborative S:plans and assessment of learning.
- Key vocabulary is introduced and revisited regularly to develop

language acquisition, embedding as the topic progresses.

- Children are taught through a three stage model approach using concrete, pictorial and abstract methods., which includes using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas,
- Children are encouraged to move through the different stages of their learning at their own pace.
- Children who have shown their understanding at a deep level within the unit, will have opportunities to apply these skills in a greater depth activity. This should be challenging and ensure that children are using more than just one skill to be able to answer the mathematical problems.
- Reasoning and problem solving are fundamental all activities that children are given, to provide opportunities for mathematical thinking.
- All children are taught through whole-class interactive teaching, giving them access to resources which allow them to secure a conceptual understanding of the different skills appropriate for each year group.
- Lessons feature STEM sentences to support retrieval practice and develop long-term memory.
- Children are provided with opportunities to explore, apply and evaluate their mathematical approach during investigations to develop a deeper understanding. To support this, they are encouraged to use 'because' to justify their reasoning and explain how they know.
- An 'everyone can do Maths' attitude is promoted throughout the school to enhance a love of learning and self-confidence within all children.
- Children with additional needs are included in whole class lessons and teachers provide scaffolding and relevant support as necessary. For those children who are working outside of the year group curriculum, individual learning activities are provided to ensure their progress and where possible they are supported by an adult,

Leadership, Assessment and Feedback

- Assessment elicitation tasks inform the teaching and learning sequence, and children work on the objectives they are assessed as

needing to develop or improve.

- Assessment of learning is also gathered during each lesson through questioning, discussion and outcomes.
- At the end of each topic, the elicitation task is revisited to assess progress and identify gaps that are filled through intervention and additional support.
- Summative assessments are completed at the end of the academic year and reported to parents in the end of year report.
- Feedback is provided to children though guided group work, discussions, activity outcomes, marking and pupil conferencing.
- In order to support teacher judgments, children may be assessed using current and reliable tests in line with the national curriculum for maths. Gap analysis of any tests that the children complete is undertaken and fed into future planning.
- Teacher assessments are reviewed through moderation across year groups and where possible other schools within the learning hubs.
- The maths leader has a clear role and overall responsibility for the progress of all children in maths throughout school. Working with SLT, key data is analysed and regular feedback is provided, to inform on progress and future actions.
- Up to date CPD is provided to Teachers and Teaching Assistants through online activities and inset training.

Impact

- Children demonstrate a quick recall of facts and procedures. This includes the recollection of the times table.
- Children show confidence in believing that they 'can do maths'.
- Children show that they can confidently talk about their learning using resources and mathematical language to explain their ideas.
- Children can complete assessments independently and with the confidence to choose models and methods to support their reasoning.
- Each child achieves objectives (expected standard) for year group.
- Children can recognise relationships and make mathematical connections.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language and apply the concept to new problems in unfamiliar situations.

- **Children show a high level of pride in the presentation and understanding of the work.**