

Maths Intent, Implementation and Impact statement

Intent

At Holmesdale Infant School, we believe mathematics is an important part of children's development throughout school, right from an early age. We intend on delivering a curriculum which:

- Allows children to be a part of creative and engaging lessons that will give them a range of opportunities to explore mathematics following a mastery curriculum approach.
- Gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges.
- Recognises that mathematics underpins much of our daily lives and therefore is of paramount importance in order that children aspire and become successful in the next stages of their learning.
- Engages all children and entitles them to the same quality of teaching and learning opportunities, striving to achieve their potential, as they belong to our school community.
- Makes rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Provides equal opportunities for children to apply their mathematical knowledge to other subjects (cross-curricular links).
- Is in line with the expectations in the National Curriculum 2014.

Implementation

Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y2.

Teaching and Learning, Content and Sequence

- In school, we follow the National Curriculum. Spine Materials from the NCETM and White Rose schemes of work 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, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses.



- Stem sentences form an important part of lessons and support children in making links throughout the lesson. Children are encouraged to speak about their learning throughout group activities and use stem sentences as a scaffold for their learning.
- Children are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts. The mastery approach incorporates using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.
- The majority of lessons will follow the same structure with guided and mixed ability paired work as a whole class. Children will then complete independent activities based on the teaching and learning acquired during the lesson. In the independent part of the lesson, children will complete differentiated work based on their learning/understanding in the first part of the lesson.
- 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 integral to the activities children are given to develop their mathematical thinking at all levels of ability.
- Resources are readily available to assist demonstration of securing a conceptual understanding of the different skills appropriate for each year group.
- Children are encouraged to explore, apply and evaluate their mathematical approach during investigations to develop a deeper understanding when solving different problems/puzzles. This is done in some lessons and in the Star Challenges provided in Continuous Provision each week.
- A love of maths is encouraged throughout school via links with others subjects, applying an ever growing range of skills with growing independence.
- 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.

Leadership, Assessment and Feedback

- Assessment informs the teaching and learning sequence, and children work on the objectives they are assessed as being at, with fluid boosting available within a 'keep up no catch up' culture.
- Marking and feedback is given on children's learning in line with our marking policy. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and who are ready for greater stretch and challenge through planned questioning or additional activities.



- In order to support teacher judgements, 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.
- Summative assessments are completed three times a year and reported to parents in the end of year report. Shorter summative assessments are also used at the beginning and end of each block to identify gaps which then inform planning.

Impact

- Children demonstrate a quick recall of facts and procedures.
- Children show confidence in Believing that they will achieve.
- Each child achieves objectives (expected standard) for year group.
- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- Children show a high level of pride in the presentation and understanding of the work