

Mathematics at Hopton Primary School



At Hopton Primary School, we view mathematics as essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. With this in mind we endeavour to ensure that children develop a positive and enthusiastic attitude towards mathematics that will stay with them for life.

Our intent is to provide children with a mathematics curriculum that will allow them to become confident individuals through developing their mathematical skills to their full potential with an understanding that maths is accessible to all. We promote positive 'can do' attitudes and we promote the fact that 'Maths is a whole life skill for every one of us.'

We aim to present maths as a challenging, exciting, creative and relevant subject through a mastery approach in order to promote a positive and confident attitude. At our school, the majority of children will be taught the content from their year group only in small accessible steps. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways.

In line with the National Curriculum (2014), our overall intent focuses on all pupils being able to:

- Use and understand a wide range of appropriate mathematical language and stem sentences to discuss, explain, justify and represent their mathematical thinking and reasoning.
- Explore and deepen their mathematical understanding of new mathematical concepts using a 'concrete, pictorial and abstract' (CPA) approach; enabling all children to experience hands-on learning when discovering new mathematical topics, and allowing them to have clear models and images to aid their understanding.
- See mistakes and misconceptions as an essential part of learning that help craft our understanding and provide challenge through rich and sophisticated problems.
- Develop a strong number sense and fluency in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately using both mental and written methods.
- Move fluently between a wide and diverse range of representations of mathematical ideas including learning opportunities in subjects such as science, computing and topic
- Access challenges of rich and sophisticated problems when they grasp fluency concepts rapidly rather than progressing to new content.
- Consolidate learning and concepts through repetition and intervention to acquire sound foundations for fluency of mathematics

EYFS Intent in Mathematics

This area focuses on learning through practical activities to develop a sense of number and numerical patterns. Whilst the development matters guidance makes reference to shape, space and measures, it is no longer an Early Learning Goal (ELG), at Hopton we feel that this area of mathematical development is important throughout the EYFS to develop an holistic understanding of mathematics.

'Developing a strong grounding in number is essential so that all children develop the

necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationship between them and the patterns within those numbers.'

Development Matters DFE 2021.

Our objectives for Mathematics in the Foundation Stage are to:

- Encourage children to participate and discuss mathematical activities using mathematical terms;
- Approach number activities with enthusiasm and confidence;
- Enable children to initiate activities within a carefully planned environment that promotes and extends mathematical thinking;
- Help children to see themselves as mathematicians;
- Encourage mathematical development through careful intervention during play, e.g. I wonder if we have enough plates? How many pairs of socks can you find?
- Maintain enthusiasm and confidence when the recording of mathematics begins, valuing children's own methods of graphic and practical explorations;
- Plan a range of meaningful mathematical opportunities and provide a variety of resources to discover new words, ideas and concepts;
- Make good use of opportunities to talk 'mathematically' during play and group times, supporting bilingual children by valuing knowledge of problem solving, reasoning and numeracy in the language/communication system used at home;
- Develop children's thinking by showing an interest in methods;
- Encourage children to problem solve exploring number, counting and calculating;
- Consolidate and extend learning through fun games, stories, number rhymes, songs and imaginative play;
- Allow time for children to revisit, repeat and practise mathematical skills and knowledge;
- Ensure that mathematical resources are readily available both indoors and outside;
- Exploit the mathematical potential of outdoors, enabling children to discover things about shape, distance and measures through physical activity.