

INTENT

We aim to deliver a high quality, inspiring maths curriculum that ensures children are lifelong learners. Lessons will be taught by highly enthusiastic staff, which will spark curiosity and excitement. Children will become confident, competent and independent mathematicians. They will build a deep, conceptual understanding of maths and its content so that they can apply their learning in different situations. The children will be able to articulate, discuss and explain their mathematical thinking using appropriate vocabulary. Every child and staff member will have the mindset that Maths is for everyone and that everyone can succeed.

Deliver an inspiring and engaging mathematics curriculum, taught by highly enthusiastic staff, which sparks curiosity and excitement and which nurtures confidence in Maths.



BIG IDEAS

MATHS at Boxgrove

• Mathematics teaching for mastery assumes everyone can learn and enjoy mathematics.

• Mathematical learning behaviours are developed such that pupils focus and engage fully as learners who reason and seek to make connections.

• Teachers continually develop their specialist knowledge for teaching mathematics, working collaboratively to refine and improve their teaching.

• Curriculum design ensures a coherent and detailed sequence of essential content to support sustained progression over time.

• Pupils are taught through whole-class interactive teaching, enabling all to master the concepts necessary for the next part of the curriculum sequence.

• In a typical lesson, the teacher leads back and forth interaction, including questioning, short tasks, explanation, demonstration, and discussion, enabling pupils to think, reason and apply their knowledge to solve problems.

• Use of precise mathematical language enables all pupils to communicate their reasoning and thinking effectively.

CONTENT & SEQUENCING

- The curriculum is progressive throughout the whole school, with a linear approach which means that children spend longer time on topics ensuring that they are embedded and secure
- The White Rose scheme of work is used across EYFS, KS1 and KS2 to ensure consistency
- Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics- EVERYONE CAN!
- There is deep, conceptual understanding which is achieved through a concrete, pictorial and abstract approach which uses varied representations and structures
- NTS assessments are completed each term which supports fluency, reasoning and problem solving
- If a pupil fails to grasp a concept or procedure, this is identified quickly, and gaps in understanding are addressed systematically to prevent them falling behind
- Significant time is spent developing deep understanding of the key ideas that are needed to underpin future learning
- Key number facts are learnt to automaticity, and other key mathematical facts are learned deeply and practised regularly, to avoid cognitive overload in working memory and enable pupils to focus on new learning
- Children's attainment and progress is discussed with SLT termly in pupil progress meetings and actions are put in place in order for all children to achieve



RETRIEVAL PRACTICE

LINKS WITH ENGLISH & MATHS

٠



- Lesson design links to prior learning to ensure all can access the new learning and identifies carefully sequenced steps in progression to build secure understanding.
- Examples, representations and models are carefully selected to expose the structure of mathematical concepts and emphasise connections, enabling pupils to develop a deep knowledge of mathematics.
- Procedural fluency and conceptual understanding are developed in tandem because each supports the development of the other.
- It is recognised that practice is a vital part of learning, but the practice must be designed to both reinforce pupils' procedural fluency and develop their conceptual understanding.

\mathcal{O}_{1}^{\times}

The White Rose scheme is used to develop vocabulary and stem sentences





- Units are carefully selected to ensure prior knowledge and concepts are built upon using retrieval tasks.
- Teaching for mastery supports children to progress using the five big ideas: coherence, representation and structure, mathematical thinking, fluency and variation
- The NTS assessments alongside teacher assessments ensures that gaps in children's learning are identified



Everyone has access to the White Rose scheme of work and NCETM materials

- Pre-teaching of vocabulary and topics
- Training to be available through the Maths Hub
- Retrieval activities to support key learning
- Sentence stems