

Maths at the Willows

Vision

We aim for pupils to have mastered the primary mathematics curriculum by the time they leave KS2, so that they are ready for the next step in their education.

They will master this by:

- being fluent with the basics (rapid recall, conceptual understanding);
- being able to reason mathematically (making generalisations, justifications and proofs using mathematical language);
- being able to solve problems (applying, breaking down problems).

Statement of Intent:

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

To ensure our children have access to a high quality maths curriculum that is both challenging and enjoyable, we:

- Provide our children with a variety of mathematical opportunities, which will enable them to make the connections in needed to enjoy greater depth in learning.
- Ensure children are confident mathematicians who are not afraid to take risks.
- Fully develop independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.

Implementation

At The Willows we are outward looking and creative in our approach to implementing a high quality mathematics curriculum. Our implementation is develop through secure understanding of the curriculum and subject area.

Planning

Long term:

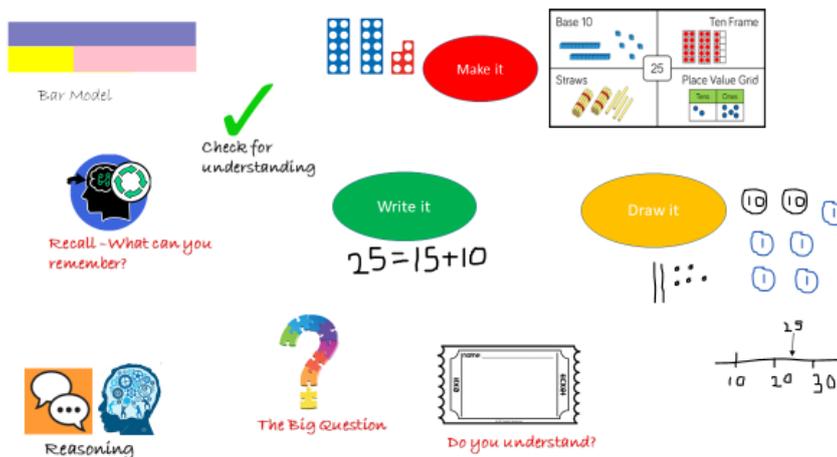
- Yearly Overview based on year group objectives taken from the National Curriculum Progression Maps and Development Matters

Medium term:

- Half Term Overviews outlining the topics for areas that will be covered

Short term:

- Daily lessons include a clear lesson intention 'Oli'
- Daily lessons are taught using the model boards
-Retrieval, Reasoning, Greater Depth (Big Question), Checking for understanding, Learn together ('I Do'), Guided Practice ('We Do'), Independent Practice ('You Do'), Big Question



Short term planning is supported by the use of:

- White Rose Maths Hub materials
- Gareth Metcalfe I see Maths
- NCETM Progression Maps
- Numicon Handbooks(Y1-Y6)

Teaching 'Quality first teaching' linked to teaching standards:

All teachers:

- 'Know where their children are' through the use of concise summative assessment, prior learning, assessment, maths talk
- 'Understand where their children need to be' through a secure understanding of year group expectations and/or pre key stage expectations and incisive, ongoing, formative assessment
- 'Know how they are going to get them there' through the use of a range of strategies to promote independence, mastery and high expectations of ALL.
- Plan for progression during and between lessons.

Assessment

- Summative/reported - Standardisation (Y1 - Y6)
- Summative/ diagnostic - White Rose, Test Base, NCETM, Check for understanding model board, retrieval model board
- Formative / ongoing - * See Marking, Assessment & Feedback policy
- Prior & Post learning - informs future planning, demonstrates progress in books, celebrates effort and achievement.

Impact

By the end of KS2 we aim for children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

This will be viewed through:

1. Attainment records
2. Progress records
3. Benchmarking against national (APS)
4. Linked to Performance Management targets