

MATHEMATICS AT WILLAND SCHOOL

INTENT

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

- meets the requirements of the Early Years Foundation Stage Framework and the National Curriculum programmes of study by ensuring that all pupils become fluent in the fundamentals of mathematics, including tackling increasingly complex calculations that may relate to real life situations;
- enables children to reason mathematically and solve problems by applying their mathematics to a variety of tasks with increasing sophistication;
- promotes mathematics as an essential element of communication, which allows pupils to describe, illustrate, interpret, predict and explain;
- encourages pupils to work systematically and efficiently and to show a respect for accuracy and meaning;
- 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;
- shows pupils the fascination of mathematics and promotes ways of doing mathematics which harness their imagination, initiative and flexibility of mind;
- gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges;
- 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;
- encourages pupils to work independently and with others.

IMPLEMENTATION

Our 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 Year 6.

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 Ready to Progress Criteria are used to identify the key objectives that the children must be fluent in before they leave a year group. Sometimes, these objectives may have more time given to the teaching of them than other objectives.

The calculation policy is used within school to ensure a consistent approach to teaching the four operations across the school.

Throughout a topic, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses. This key vocabulary will be displayed on the maths working wall in yellow for Tier 2 words and blue for Tier 3 words.

At least three times per week, Tough Ten is used as the lesson starter. This builds up fluency and helps children to become efficient in number.

Children are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts. We incorporate using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.

Work is differentiated for children as necessary. This may be by task, through the level of support or by outcome.

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.

Reasoning and problem solving are integral to the activities children are given to develop their mathematical thinking.

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. For objectives which are part of the Ready to Progress criteria, there should be at least one problem solving activity seen in the children's books.

A love of maths is encouraged throughout school via links with other subjects, applying an ever growing range of skills with growing independence.

LEADERSHIP, ASSESSMENT AND FEEDBACK

Assessment informs the teaching and learning sequence. For some units, teachers may choose to do an elicitation or cold task to assess where the children are. This is not necessary for every unit.

Feedback is given on children's learning in line with our feedback 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.

At the end of a unit, a hot task is completed to allow teachers to see who has achieved the objectives and who needs further support. The objectives are clearly written at the bottom of the hot task and will be ticked if they are achieved and clouded if they are not. These judgements are then transferred to Insight.

When key objectives are taught and achieved, these are ticked on the Key Objectives sheet at the front of the children's books. Where they have been taught but not yet achieved, teachers put a dash.

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 may also be undertaken and fed into future planning.

Summative assessments are completed at the end of the academic year and reported to parents in the end of year report.

The maths leaders have 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.

IMPACT

As children progress through Willand School, they will:

- show confidence in believing that they will achieve in mathematics;
- achieves objectives (expected standard) for their year group;
- develop the ability to recognise relationships and make connections in lessons;
- use mathematical vocabulary correctly and with confidence to explain their thinking;
- demonstrate a quick recall of facts and procedures. This includes the recollection of times tables;
- master mathematical concepts or skills and can show it in multiple ways, using the mathematical language to explain their ideas;
- independently apply concepts to new problems in unfamiliar situations;
- show a high level of pride in the presentation and understanding of their work.

Our maths leads are: Leah Shapcott and Louisa Ruffle

Our maths governor is: Tim Child

