



Mathematics Curriculum Statement



At Vallis, our maths curriculum is designed to be accessible to all and help children reach at least age expectations, taking advantage of reasoning, problem solving, practical and cross curricular opportunities. The curriculum is planned with the support of White Rose Maths materials to emphasise mathematical language, as well as the concrete, pictorial and abstract aspects of maths.

Intent

Maths is a skill we use on a daily basis and is an essential part of everyday life. Therefore, at Vallis, mathematics forms an important part of our broad and balanced curriculum where we endeavour to ensure that children develop an enjoyment and enthusiasm for maths that will stay with them throughout their lives and empower them in future life. We believe that unlocking mathematical fluency is an essential life skill for all learners and is a pre-requisite to being able to reason and solve problems mathematically. Our aim is to develop a positive culture of deep understanding, confidence and competence in maths that produces strong, secure learning.

Implementation

In EYFS, children build their mathematical understanding through daily taught sessions as well as through stories and child-initiated play. The environment supports early number recognition and development as well as an understanding of numerical patterns. Continuous assessment informs planning and delivery to ensure children make rapid progress.

Across the school, we follow the scheme of White Rose Maths to support the delivery of high-quality lessons that ensure children learn the fundamentals behind the meanings of numbers and are also given the opportunity to explore other key mathematical areas. Learning is delivered in blocks using 'small steps' to break down the teaching sequence into achievable parts; this allows children to focus on one concept at a time. When confident to do so, children are set tasks to extend their thinking and encourage them to reason and problem solve. Where children require additional support, 'scaffolds' are used to support children further to ensure that they have secured the small step before moving on. For children who understand a concept quicker, challenges are used to deepen and challenge learners further within the curriculum area. Progression documents such as our calculation policy are carefully used to ensure that children are not being stretched outside their year group but rather deepened within it.

Maths lessons are taught daily. At the start of the lesson, teachers spend time recapping and revisiting children's prior learning using our 'Flashback Four' approach. This is followed by teaching which stretches and supports children's understanding using a variety of questions in varying formats. Children then complete a task, either independently or as part of a group to demonstrate their skills. Further problem solving and reasoning challenges provide depth and breadth of learning and allow the teacher to assess the understanding during the lesson.

Outside of the daily maths lesson, children receive additional sessions devoted to number fluency and times tables. In KS2 we follow a systematic 'Ninja Math' approach to developing the rapid recall of arithmetic skills and of tables up to 12×12 by the end of year 4.

Assessment forms an important element of our curriculum. Termly assessments are used as a diagnostic tool to ensure that teachers are adapting learning to meet the needs of all children and ensure that any necessary interventions are targeted specifically to meet.

Impact

The impact of our mathematics curriculum is that children understand the relevance and importance of what they are learning in relation to real world concepts. As a result of our teaching children will:

- Children know that maths is a vital life skill that they will rely on in many areas of their daily life.
- Children have a positive view of maths due to learning in an environment where maths is promoted as being an exciting and enjoyable subject in which they can investigate and ask questions; they know that it is reasonable to make mistakes because this can strengthen their learning through the journey to finding an answer.
- Children are confident to 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem.
- Our children have a good understanding of their strengths and targets for development in maths and what they need to do to improve.
- Our maths books evidence work of a high standard of which children clearly take pride; the components of the teaching sequences demonstrate good coverage of fluency, reasoning and problem solving.
- Our feedback and interventions support children to strive to be the best mathematicians they can be, ensuring a high proportion of children are on track or above.
- Our school standards are high, we moderate our books both internally and externally and children are achieving well.

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