



Subject Intent and Implementation

Using White Rose Maths, our curriculum follows a mastery approach and means our students have a clear progression across concepts and the opportunity to deepen their understanding. Lessons follow a clear progression from lesson to lesson over units of learning. Calculation progression is modelled on the structures of White Rose Maths and ensures that pupils are moved through concrete, pictorial and abstract representations in a planned sequence and at an appropriate pace. Fluency of number is at the core of our curriculum and daily fluency sessions build this confidence through school. Problem solving is at the heart of our Math's curriculum and our lessons use real-life problems as their foundation. 'Tricky Traps' provide learners with an opportunity to go further if needed.

SEND

We have an ambitious curriculum and we aim for all children to be able to access it by supporting those children who are not as confident with concepts.

We provide support to those learners through adaptive teaching strategies such as adult support, concrete materials such as numicon or base ten, times table grids and through the use of pictorial representations.

We also use mixed attaining pairs to help support learners.

Mastery Curriculum

We believe that all pupils are capable of achieving and challenge is part of everyday maths for all pupils.

The majority of pupils will move through the curriculum at broadly the same pace with decisions about when to progress based on the security of pupils' understanding and their readiness to progress to the next stage.

Pupils who grasp concepts rapidly are challenged through questioning and being offered problems in the form of 'Tricky Traps' which promote deeper understanding.

Those who are not sufficiently fluent with earlier material consolidate their understanding, through additional practice, before moving on.

Planning for Mastery is developing across school and is supported by the Maths leader, the NCETM hub, Mastering number in EYFS and White Rose Maths schemes of learning.

Maths in Early Years

Maths in Early years follows the Number blocks long term planning. Number blocks enables our reception children to build a solid understanding of number.

In Early Years, there are number sessions and a space, shape and measure session (built up to throughout Autumn Term) which is supported by the White Rose resources.

Maths in Early Years is also supported by a daily mastering number session. Dedicated maths areas are planned for in provision and allow the children to explore maths naturally.

Fluency

NCETMs Mastering Number programme aims to build firm foundations in the development of good number sense for our children in Early years.

Daily fluency sessions in KS1 are a core part of our maths curriculum and the aim over time, is that children will leave KS1 with fluency in calculation and a confidence and flexibility with number.

In KS2, daily fluency sessions are a core part of our Maths curriculum and ensure pupils develop confidence across the 4 operations and develop the ability to retrieve number facts rapidly.

Subject Impact

Our children will leave Appleton Roebuck with a firm understanding of number and will be confident with written strategies across the four operations. Our pupils will be able to apply their knowledge of number to help them reason and solve problems. Children will have independence and be ready for the challenges that secondary school will bring.



Mathematics

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Lesson structure

Maths lessons at Appleton Roebuck follow a 5-part structure.

All lessons begin with **fluency, 'shape and/or measures question of the day' and a recap of the previous learning** before including the following elements.

1. Explore - lessons start with an opportunity to explore a real-life concept or problem
2. Master – master the core Maths concept
3. Guided – guided practice of tasks with a partner or teacher
4. Independent – solve tasks independently
5. Tricky trap – a chance to go deeper for those that need it

Mixed year groups

Maths is taught in mixed year groups in KS2. We have a mixed Year 3 and 4 class and a mixed Year 5 and 6 class.

In UKS2, the White Rose mixed age schemes of learning are used to deliver a mixed-year curriculum.

Due to the nature of the KS1 curriculum, Year 1 and 2 are taught separately. Both Y1 and Y2 use the corresponding single year group White Rose scheme of learning.

Assessment

The mastery lesson structure and curriculum design provides many opportunities for assessment. Within a Maths lesson, assessment takes place through questioning, recapping and children having to explain taught content.

Each lesson starts with a review of previous lesson and provides an opportunity to assess prior knowledge.

At the end of each block there is an end of block assessment which provides a summative assessment of pupils understanding of the topic. We use PUMA for summative assessment of Maths once a term. In Year 1, all assessment is done by formative teacher assessment. In Year 6, past SATS papers are also used to assess.

Reasoning (mathematical thinking)

Reasoning is a core part of our curriculum. All children are expected to respond using mathematical vocabulary to explain their thinking.

Our curriculum promotes enquiry and identifying relationships. We want our children to be able to provide an argument, justification or proof using mathematical language and our mastery curriculum is developing this.

Children have the opportunity to extend their understanding beyond arithmetic.

MTTC

We use TTRS to help our LKS2 children prepare for the MTTC. Times tables are also taught discretely through use of number sticks and pattern spotting. Weekly soundchecks are held to monitor progress and any children who are not as confident are highlighted and supported.

Work lower down the school in the form of fluency and Mastering Number, supports our children with the core number foundations to help them achieve success in LKS2.



Appleton Roebuck
Primary School

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