

The Grove Primary School

Mathematics Curriculum Statement

The Teaching and Learning in Mathematics

Quality First Teaching in Mathematics KS1 and KS2

Scheme: we use White Rose Maths as a supportive scheme to support planning and to break the National Curriculum into smaller steps. Teachers follow the small steps structure and use their judgement about the length of time needed to support their children's progress and understanding.

Our lessons are structured to ensure that children have opportunity to develop skills and knowledge.

Our lesson structure:

Fluency – In order to practice '**declarative knowledge**', we give the children daily chance to practise fluency of number facts and concepts to keep these fresh in their minds and allow regular practise and recall. This is currently achieved by using Flashback 4 questions – four daily questions (from previous week/project/term/year group), plus a roman numeral to convert.

The main body of our maths sessions allows the children to develop **procedural methods and conditional knowledge and strategies**. Children have opportunity to develop fluency in new concepts and have opportunity to practice and develop confidence before applying in more challenging contexts.

We use the **Concrete – Pictorial – Abstract** approach in every lesson and examples of how we work is in our Written Calculation Policy. We value the use of practical manipulatives in all year groups.

Every lesson is structured to allow the opportunity for children to answer retrieval questions, fluency questions and then apply into reasoning and problem solving questions. We allow our children to think deeply about the questions and skills and to support them to master the concept.

Planning – Is undertaken by the class teacher who have access to a range of high quality resources identified in the *Planning Support* folder are used when planning number to support the teaching sequence.

Termly overviews indicate approximate timings for each topic of learning.

Children are provided extra support through the use of their class based TA during, and outside, of lessons. Some children will be provided with small group tutoring to support their progress.

SEND - Children with an identified SEND in mathematics have short intervention provision based on their needs from our Wave 3 offer.

Reference Documents

<https://www.ncetm.org.uk/classroom-resources/progression-maps-for-key-stages-1-and-2/>

<https://www.ncetm.org.uk/classroom-resources/assessment-materials-primary/>

[Development Matters - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

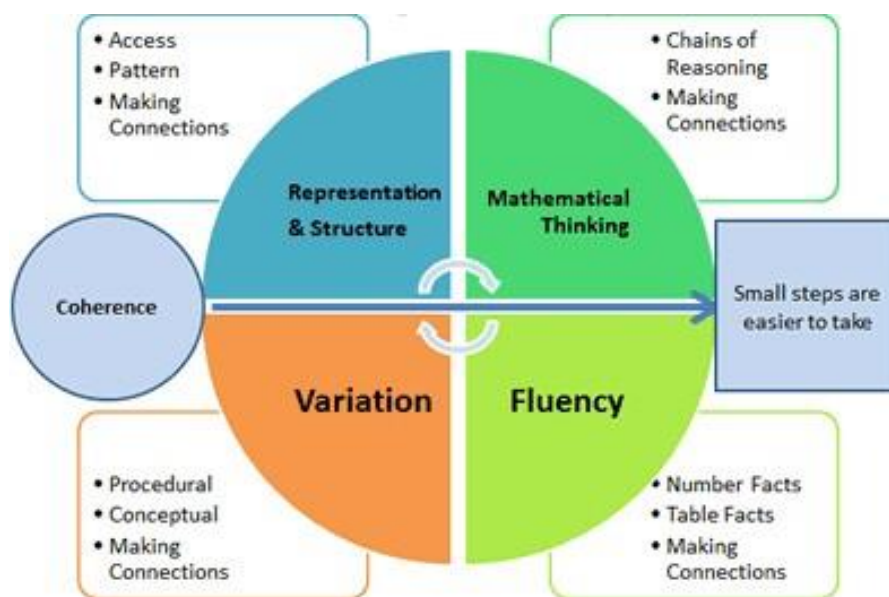
[Teaching mathematics in primary schools - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

Statutory Documents

[Early years foundation stage \(EYFS\) statutory framework – GOV.UK
\(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/429267/Early_years_foundation_stage_EYFS_statutory_framework.pdf)

[National curriculum in England: mathematics programmes of study - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/429267/National_curriculum_in_England_mathematics_programmes_of_study.pdf)

Our Approaches to Teaching and Learning



Lessons follow a three part approach (gradual release approach):

I do: teacher models the concept and strategies for tackling

We do: children work in pairs to practice the concept or strategy and develop

confidence **You do:** children practice independently or in groups

Coherence

Lessons are broken down into small connected steps that gradually unfold the concept, providing access for all children and leading to a generalisation of the concept and the ability to apply the concept to a range of contexts.

Representation and Structure

Representations used in lessons expose the mathematical structure being taught, the aim being

that students can do the maths without recourse to the representation. Children practice using manipulatives and teachers follow a concrete-pictorial-abstract approach.

Mathematical Thinking

If taught ideas are to be understood deeply, they must not merely be passively received but must be worked on by the student: thought about, reasoned with and discussed with others. Time to talk with peers, reflect and adapt is very important and a few high quality questions is better than pages of fluency questions.

Fluency

Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics

Variation

Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to mathematical relationships and structure.