



Rode Heath Maths Mastery Definition

When taught to master maths, children develop their mathematical fluency without resorting to rote learning and are able to solve non-routine maths problems without having to memorise procedures. Evidence shows that children need to be able to understand a concept, apply it in a range of situations and then be creative to really understand it.

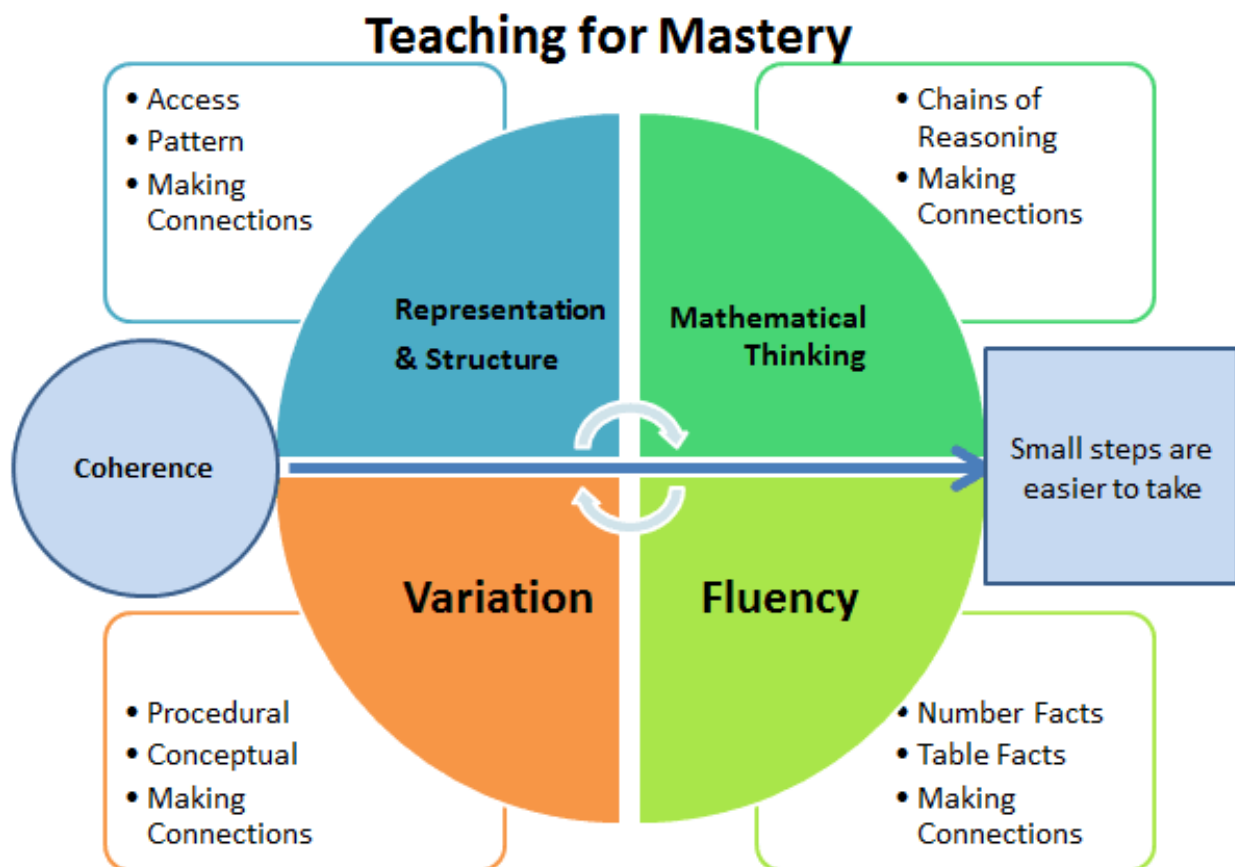


Diagram taken from the NCETM



Rode Heath Primary School

'Inspiring learning; nurturing minds; achieving for life'

We aim to provide the pupils with a mathematics curriculum, which will produce individuals who are numerate, creative, curious, reflective, resilient and confident

Intent

Here at Rode Heath Primary School we are embracing a Mastery Curriculum approach to our mathematics teaching. This means spending greater time going into depth in particular areas/concepts as opposed to quickly moving through the curriculum and the year group objectives.

We have high expectations that all children will achieve and to do this, we believe that all children should be given the opportunity to explore, pattern find, become fluent, reason and problem solve and that there should be carefully crafted questions and activities and a wide range of manipulatives at hand for each child to accomplish this.

We strive to ensure that the whole class moves through content at the same pace and when we differentiate, it is through depth rather than acceleration; everyone is given time to think deeply about the maths and we strive to develop a positive attitude in order to build self-confidence, resilience and a sense of achievement.

Implementation

In EYFS, we ensure that maths is part of their daily diet and give the children a wide range of experiences and opportunities to apply their mathematical skills. In order for the mastery approach to become successful in KS1 and KS2, we have created a bespoke maths lesson structure, incorporating the Maths No Problem scheme.

The way we structure our lessons ensures a more consistent approach to teaching maths; a greater emphasis on the sequence of learning; a better use of open ended investigational type questions and the continued development of mathematical pedagogy.

The mastery approach at RH has also ensured that there is a greater expectation on all children; little chance for passive learning as there is a greater emphasis on talking maths, collaborating, exploring and investigating; the use of equipment is encouraged and there are always planned opportunities for children to make connections between subjects. Children are constantly pushed to the limits of what they are learning.



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In Lessons we are now:

- Structuring our lessons into four parts (exploration, structured learning, practice and apply and extension/deepening of understanding)
- Spending longer on one concept/idea
- Teaching all children in class, together, most of the time
- When we do differentiate, it is through depth rather than acceleration
- We use the Concrete, Pictorial, Abstract (CPA) approach to support learning
- Verbal feedback during lessons, shortened comments in books and more ticking of correct concepts. (misconceptions and incorrect concepts are addressed in the children's responses to feedback and marking)
- Problem solving/ deep thinking questions built into each session to encourage mathematical reasoning skills
- Daily/weekly/unit mini reviews with a few formal tests over the year
- Allowing the children opportunities to explore, discuss (talking maths using rich, sophisticated language) and challenge each other
- Putting in place immediate intervention to keep all children on track
- Giving children who need it, additional support over shorter, more intense periods, like a day or week