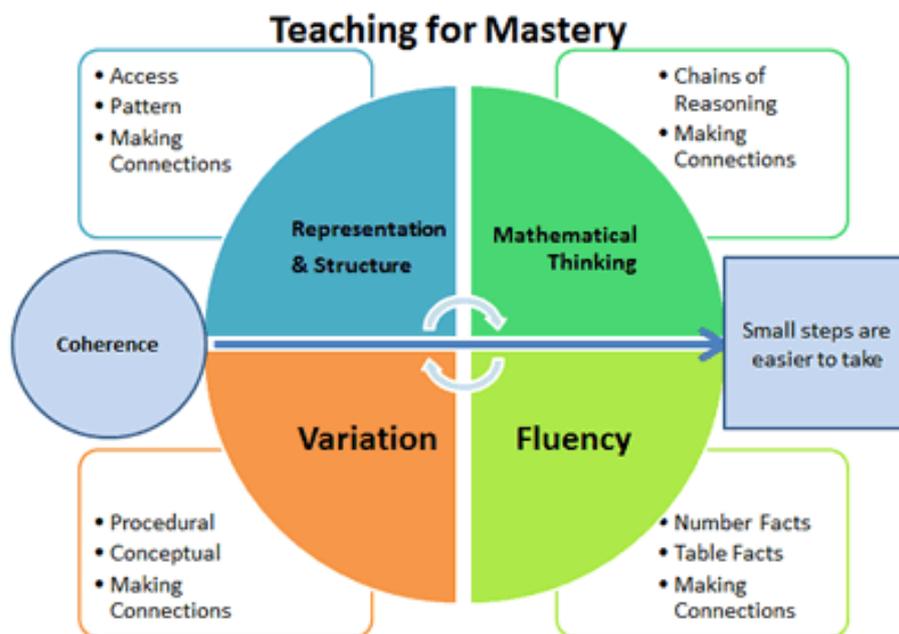


## Mastery Maths

Our teaching of Mathematics is based on the principles and practices of Mastery. Mastering Maths means pupils acquiring a deep, long-term, secure and adaptable knowledge and understanding of the subject. The phrase 'teaching for mastery' describes the elements of classroom practice and school organisation that combine to give pupils the best chances of mastering maths. Achieving mastery means acquiring a solid enough understanding of the maths that's been taught to enable pupils to move on to more advanced material.

Underpinning teaching for mastery in Maths are the Five Big Ideas, drawn from research evidence. This is the diagram used to help bind these ideas together:



### **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

### **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

### **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.

As well as the key skills and content in Maths, our curriculum will focus on nurturing overarching, cross curricular skills which will be applied in other subjects across the curriculum. For example, skills of reasoning and explaining, proving and justifying an opinion with reference to evidence are skills used as much in Reading and Science as they are in Maths. For a fuller list of these cross curricular skills, refer to curriculum rationale.

Furthermore, whilst the children are learning curriculum knowledge and practising and refining a range of skills, they will also be developing their character education through the explicit teaching of a range of learning dispositions, including the 6Rs. We aim to deliver, where appropriate, our Maths curriculum via activities which are successful incubators of these essential life skills, such as being self-directed, resilient and reflective. For a fuller list of these learning dispositions, refer to curriculum rationale.