

A



The Maths Journey



B



Familiar Start

Teaching for Mastery:
 Making Connections
 Seeing Patterns
 Small Steps

Be clear about the LIs in the learning sequence and which skills you are focussing on. Start with skills they already learnt from the previous year to allow for familiarity and children to then make connections with the new skills they are now learning.

Make use of the concrete resources for children to have a solid understanding of the Maths that is taking place and how numbers are being manipulated.

Consider how you will support / extend for the different needs within your class, e.g. use of images to support EAL learners / CPA / fluency tasks / use of bubbles to reflect / justify.

Reinforce Basic Skills

Teaching for Mastery:
 Chain of Reasoning
 Number Facts
 Table Facts
 Conceptual Variation

Be clear on the specific skill you want the children to learn within each lesson, before children then begin to apply and link multiple skills together.

Think about your journey carefully to make the small steps within each lesson so the links in learning are clear.

Focus on conceptual variation at this stage, manipulating the models being used for the same sums and building the fluency of the process you are teaching. Use a range of examples and non examples to address any misconceptions children may have.

Concrete and Pictorial Resources

Teaching for Mastery:
 Making Connections
 Chain of Reasoning
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 Small Steps

Using concrete resources is key to ALL learners in your class. It supports the childrens understanding of the Maths as well as it becoming a tool for explanations and reasoning.

See Representations and Structures document for guidance on concrete and pictorial representations.

Concrete will then lead into pictorial resources for children to see the link within the representations.

Tasks could be a range of guided and group work, building up to independent tasks. This allows for teacher AFL which can then inform the following lessons and pick up on any children which may require interventions or pretask teaching.

Fluency and Consolidation

Teaching for Mastery:
 Making Connections
 Conceptual Variation
 Procedural Variation

This is an opportunity to identify children which need further scaffolding to understand the skills being taught. Aswell as stretching rapid graspers through conceptual and procedural variation, where children can apply the new skill to problem solving tasks.

All children should have the opportunity to reason and problem solve. This could be done through reflection bubbles which could be used at the start or end of lessons or using starter tasks to recap the previous lessons learning.

Independent Tasks

Teaching for Mastery:
 Chain of Reasoning
 Number Facts
 Table Facts

At this stage, children should now be completing tasks with a greater independence. Applying their reasoning skills with tasks which require them to justify and explain their understanding.

Think about tasks which could require children to draw upon their previous learning and number facts.

Children which still require support to complete tasks can still have access to the same tasks but use adult and resource intervention to scaffold their learning.

Application Tasks

Teaching for Mastery:
 Making Connections
 Number Facts
 Table Facts
 Procedural Variation

Pupils to be given the opportunity to challenge their new skills through application based tasks. These could be in the form of open ended problems, investigations, reasoning style bubbles and more!

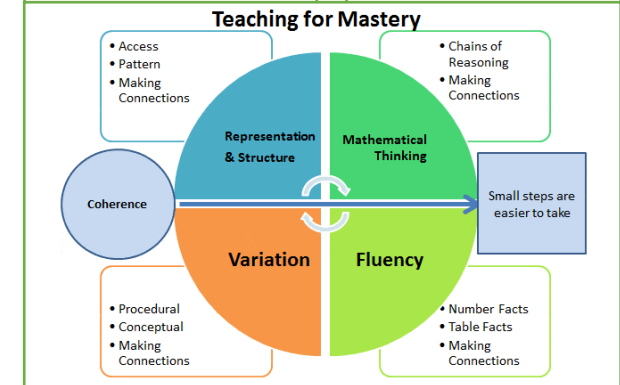
Ensure all children are given the opportunity to do this as it will show their progressions of skills.

Open ended challenge

Teaching for Mastery:
 Making Connections
 Number Facts
 Table Facts

Pupils can complete open ended challenges through bubbles and high quality task design. This could be done through bubbles at the end of lessons aswell as lessons with the primary focus of children developing their problem solving and reasoning skills.

Children can be scaffolded in their reasoning through the likes of sentence stems and modelling to build up their knowledge and ability to reason clearly.

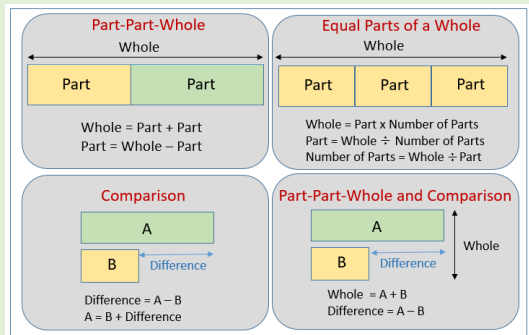

Reflection – Check and review understanding

Reflection bubbles are key to assessing childrens understanding of the skills being taught and their ability to apply the skill in a range of contexts and challenges. These reviews could also come through in starter tasks at the beginning of lessons to reflect on their previous learning.

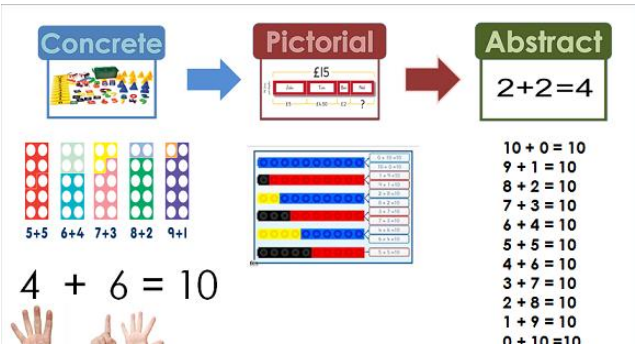
Challenge for all

Ensuring you are providing opportunities for all children to be challenged and apply their skills is important to childrens development of Maths. Using low ceiling, high threshold tasks to ensure all children can access the problems is an effective way of ensuring this is happening.

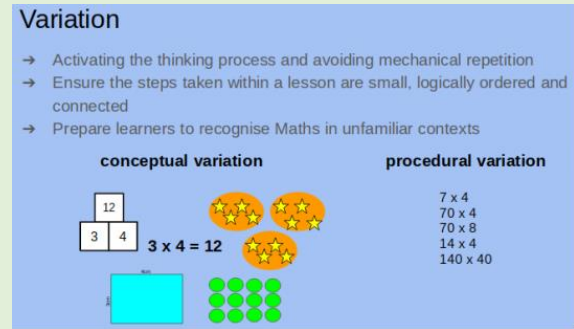
Part whole model as a representation:



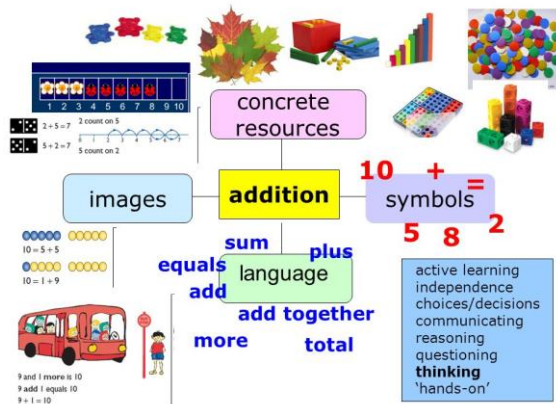
Bringing the gap between concrete pictorial and abstract:



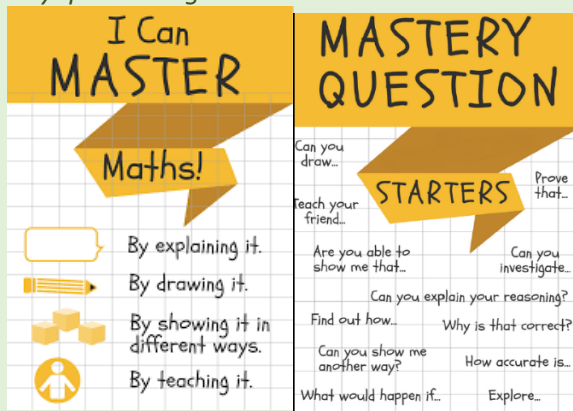
Conceptual and procedural variation:



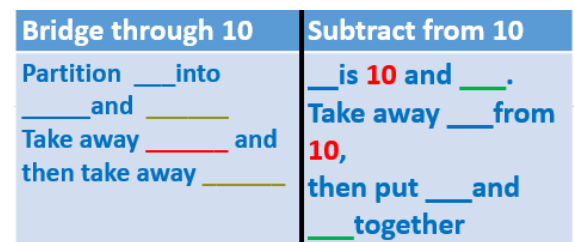
Showing the different elements:



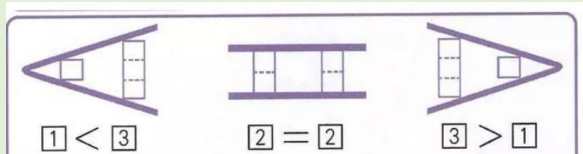
Mastery questioning:



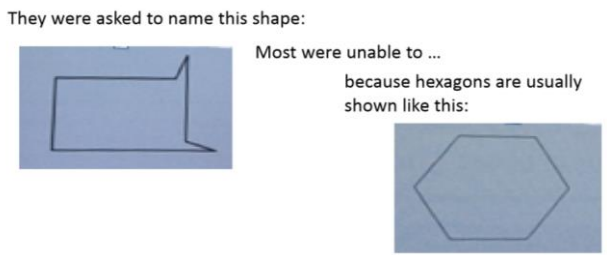
Examples of using sentence stems:



Representations which expose the structure:



Using examples and non-examples:



Ways of demonstrating mastery in Maths:

