Maths Mastery at Broughton CE Primary – KS1



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Workshop Overiew and Aims

- To help understand how maths is taught today, why manipulatives are essential, and how to confidently support children at home using simple, fun mastery-based techniques.

- Understand how children learn maths in KS1 using a mastery approach .
- Know what manipulatives are and why they support deep understanding.
- Key concepts are taught using hands-on resources and our Mastering Number Scheme.
- Learn activities that can be done at home.
- Feel assured that maths today is about understanding.

STARTER

TO START WITH... A BIT OF MATHS!

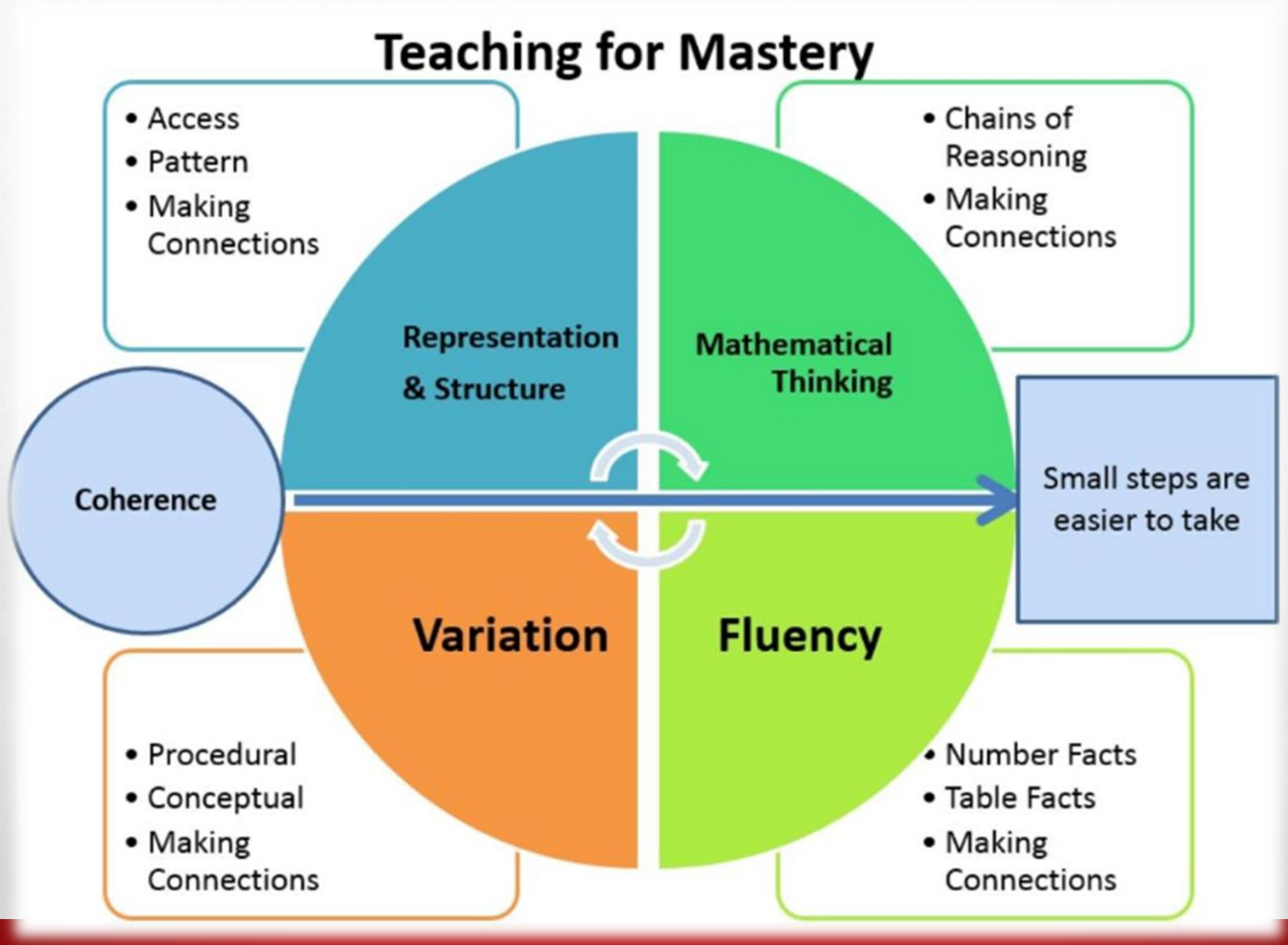


STORIES TO MATCH

- $5+5+5+5+5+5+5 = 35$
- $5 \times 7 = 35$
- $35 \div 7 = 5$

WHAT IS MASTERY?

- Children learn best when they understand *why* maths works—not just memorising steps.
- Mastery focuses on:
- **Hands-on exploration**
- **Talk and reasoning** (“How do you know?”)
- **Small, secure steps**
- **Fluency through understanding, not speed tests**
- We use CPA:
- **Concrete** (objects)
- **Pictorial** (drawings)
- **Abstract** (numbers and symbols)


Teaching for Mastery
• Access
• Pattern
• Making Connections
• Chains of Reasoning
• Making Connections
Representation & Structure
Mathematical Thinking
Coherence
Small steps are easier to take
Variation
Fluency
• Procedural
• Conceptual
• Making Connections
• Number Facts
• Table Facts
• Making Connections

Coherence	Representation & Structure	Mathematical Thinking	Fluency	Variation
Lessons are broken down into small connected steps that gradually unfold the concept, providing access for all children that enables them to apply the concept to a range of contexts	Representations used in lessons expose the mathematical relationships and structure being taught.	Ideas are worked on by the children: thought about, reasoned and discussed with 'talk partners.'	We promote quick and efficient recall of facts and procedures and the flexibility to move between different contexts & representations.	We aim to represent the concept being taught in more than one way. We encourage children to pay attention to what is kept the same and what changes.

OUR MASTERY JOURNEY...



Recent years – 2024/2025 – Continuation of implementation of Mastering Number @ KS1

2025/2026 – Focus on Oracy across school.

MANIPULATIVES WE USE

- TENS FRAMES
- BASE 10 (DIENES BLOCKS)
- NUMICON
- BEAD STRINGS & NUMBER LINES
- PART/PART/WHOLE MODEL

CPA APPROACH
CONCRETE – PICTORAL – ABSTRACT

(POWER MATHS LESSON)

MASTERING NUMBER

- STEM SENTENCES/LESSON EXAMPLE

TO CLOSE…

- DON'T WORRY!
- YOU DO *NOT* NEED TO TEACH THE SAME WAY THE SCHOOL DOES—YOU JUST NEED TO:
- ENCOURAGE TALKING ABOUT NUMBERS – VERBALISING LEARNING IS SO IMPORTANT AT SUCH A YOUNG AGE
- USE REAL-LIFE EXAMPLES – LET THE CHILDREN CREATE A STORY!
- GIVE CHANCES TO USE HANDS-ON EQUIPMENT
- AVOID JUMPING STRAIGHT TO FORMAL WRITTEN METHODS