

Mathematics

Deep and sustainable learning delivered through a curriculum with high expectations for all



Curriculum

- ✓ Fluency
 - ✓ Reasoning
 - ✓ Problem solving
- CPA – well-chosen models and images explore mathematical concepts at depth.
- Everyone can – high expectations for all, mixed attainment

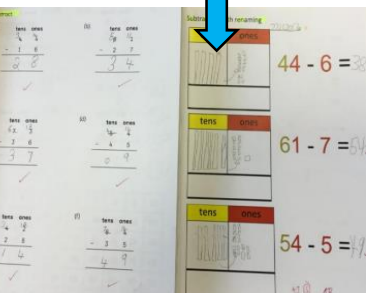
Teacher Toolkit

- Maths No Problem
- WRM activities
- NCETM documents
- Nrich and other websites
- Arithmetic quizzes
- Times Tables Rockstars
- Tutorial and assembly time
- Catch up interventions



In the Workbooks

- Intelligent practice for all
- Capture depth with jottings
- Support with adaptations

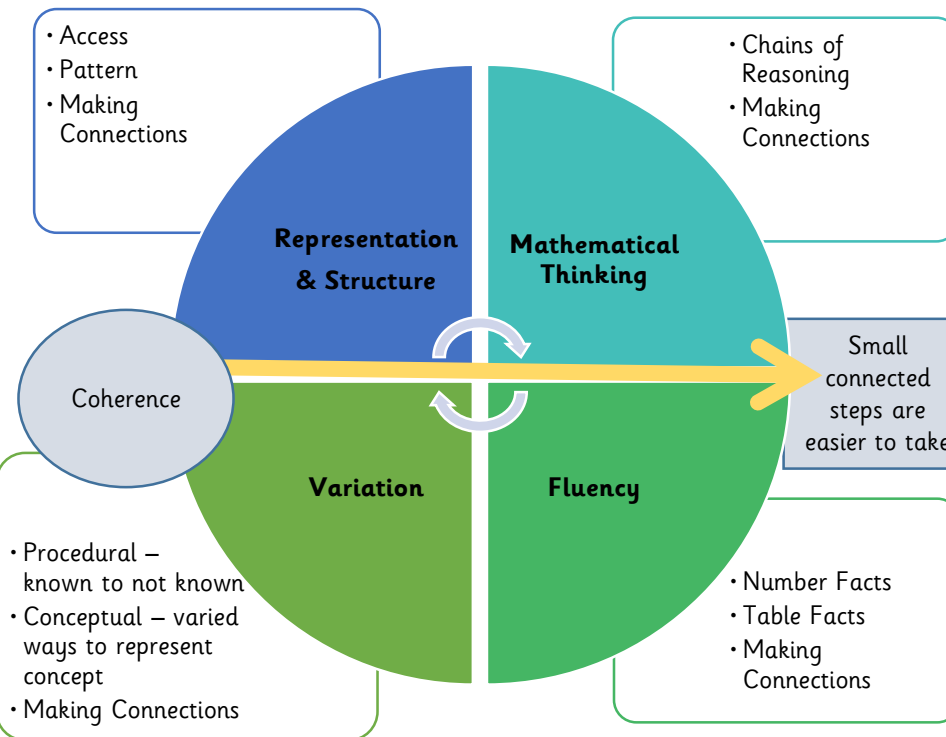
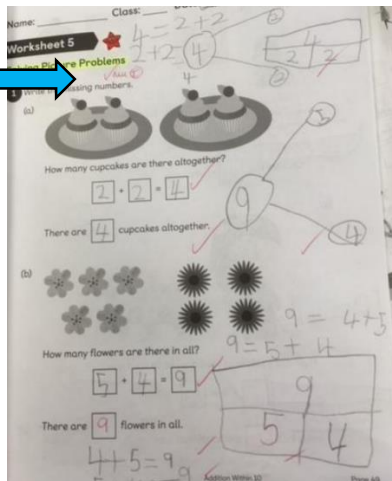


Episodic Lesson Structure

- In focus explore task - exploring
- Guided practice – modelling, questioning and explaining – 'Ping-Pong'
- Independent, intelligent practice – journaling, workbook and depth tasks
- Review and challenge

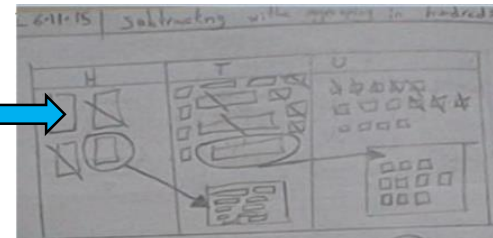
Arithmetic Fluency

- Instant recall of key facts – teach strategies
- Regular low-stakes quizzing
- Tracked and analysed – intervention required?
- Linked to home learning
- Developing number sense



In the Journals

- Journaling - capturing children's thinking
- Depth tasks – higher order thinking skills



Differentiation

- Challenge
- Scaffolding
- Targeted to individual needs (SEND)

Strand	Rating scale			
	(low) 1	2	3	4 (high)
Depth of understanding	recall of facts or application of procedures	use facts and procedures to solve simple problems	use facts and procedures to solve more complex problems	understand and use facts and procedures creatively to solve complex or unfamiliar problems

Working Wall

- Used to support learning in the classroom through capturing the learning journey.
- Models and images used in teaching
 - Key vocabulary applicable to learning
 - Fluency facts (as taught)

CPA including...

Tens frames
Part-part-whole models
Bar models
Base 10

Mathematical Vocabulary including...

Addend + addend = sum
Minuend – subtrahend = difference
Multiplicand x multiplier = product
Dividend ÷ divisor = quotient

Go Deeper when Journaling through...

- Draw it
- Explain it
- Write a maths story
- Prove it
- Challenge yourself