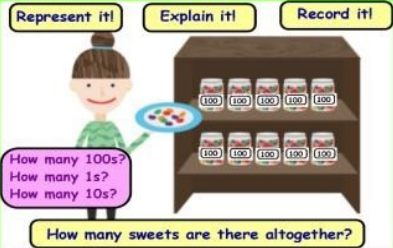


# Maths Lesson Structure

**Anchor Task**

Represent it! Explain it! Record it!



How many 100s?  
How many 1s?  
How many 10s?

How many sweets are there altogether?



**Anchor Task Shared**

There are .... one hundreds.



There are ..... sweets altogether.



**Episodic Teaching**

How many one hundreds in one thousand?



How many one hundreds in two thousands?



Lessons begin with a problem (usually linked to a context). Pupils explore, represent, and discuss in mixed prior attainment pairs. Teachers provide carefully selected concrete resources. Anchor tasks are designed to enable access for all, whilst also offering challenge. During this time, teachers/TAs circulate, observe and assess.

Responding to observation during the anchor task, the teacher draws out the maths through discussion, sharing of ideas and questions to lead the learning forward. Pupils model ideas at the board, using precise mathematical vocabulary in full sentences to explain ideas. Teachers have access to visualisers which can be used to effectively share pupil representations.

Teaching is episodic throughout the lesson. The teacher is assessing, responding, checking, and challenging through questions. Multiple representations are used to reveal the concept. Teachers and pupils model at the board. Strategies are compared & evaluated.

Representations, including 'stem sentences' are used to reveal the concept. Through carefully planned variation, one concept is looked at in different ways. These representations support access and enable pupils to spot patterns, make connections and understand more deeply.

Pupils think deeply and share understanding with partners and the class. Teachers consider the 'tricky bits' and potential barriers/misconceptions as lessons are designed. Common misconceptions are exposed and addressed. Opportunities for deeper thinking are planned for carefully.

Fluency is taught within lessons and developed through additional practice outside of maths lessons (daily fact fluency sessions, homework and Mathletics).

## Representation

5 342

| thousands | hundreds | tens | ones |
|-----------|----------|------|------|
|           |          |      |      |



The digit in the hundreds place is **3**  
It has a value of **300**



## Show, think, discuss ...



& share



## Fluency

### Addition and subtraction facts

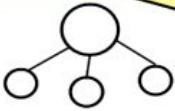
The full set of addition calculations that pupils need to be able to solve with automaticity are shown in the table below. Pupils must also be able to solve the corresponding subtraction calculations with automaticity.

| +  | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10    |
|----|------|------|------|------|------|------|------|------|------|------|-------|
| 0  | 0+0  | 0+1  | 0+2  | 0+3  | 0+4  | 0+5  | 0+6  | 0+7  | 0+8  | 0+9  | 0+10  |
| 1  | 1+0  | 1+1  | 1+2  | 1+3  | 1+4  | 1+5  | 1+6  | 1+7  | 1+8  | 1+9  | 1+10  |
| 2  | 2+0  | 2+1  | 2+2  | 2+3  | 2+4  | 2+5  | 2+6  | 2+7  | 2+8  | 2+9  | 2+10  |
| 3  | 3+0  | 3+1  | 3+2  | 3+3  | 3+4  | 3+5  | 3+6  | 3+7  | 3+8  | 3+9  | 3+10  |
| 4  | 4+0  | 4+1  | 4+2  | 4+3  | 4+4  | 4+5  | 4+6  | 4+7  | 4+8  | 4+9  | 4+10  |
| 5  | 5+0  | 5+1  | 5+2  | 5+3  | 5+4  | 5+5  | 5+6  | 5+7  | 5+8  | 5+9  | 5+10  |
| 6  | 6+0  | 6+1  | 6+2  | 6+3  | 6+4  | 6+5  | 6+6  | 6+7  | 6+8  | 6+9  | 6+10  |
| 7  | 7+0  | 7+1  | 7+2  | 7+3  | 7+4  | 7+5  | 7+6  | 7+7  | 7+8  | 7+9  | 7+10  |
| 8  | 8+0  | 8+1  | 8+2  | 8+3  | 8+4  | 8+5  | 8+6  | 8+7  | 8+8  | 8+9  | 8+10  |
| 9  | 9+0  | 9+1  | 9+2  | 9+3  | 9+4  | 9+5  | 9+6  | 9+7  | 9+8  | 9+9  | 9+10  |
| 10 | 10+0 | 10+1 | 10+2 | 10+3 | 10+4 | 10+5 | 10+6 | 10+7 | 10+8 | 10+9 | 10+10 |



## Split Lesson

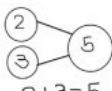
How many different ways could you partition 3406 ?



Where possible, split lessons are implemented.

## Representations

CPA ...



$$2 + 3 = 5$$

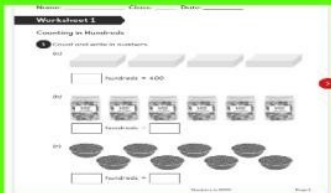
$$a + b = c$$

Concrete

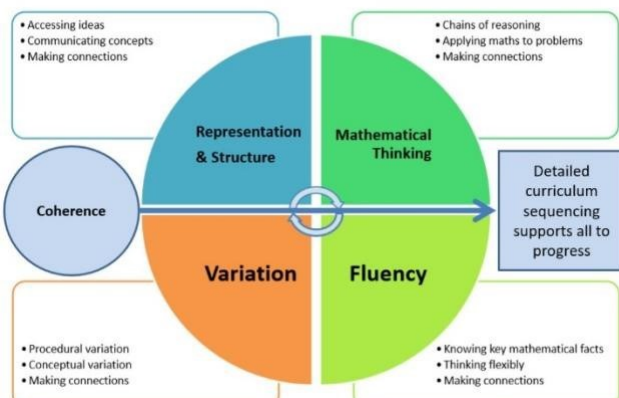
Pictorial

Abstract

## Learning in Books



## Teaching for Mastery



Lessons are designed around the 'five big ideas' of Teaching for Mastery (NCETM). Maths-No-Problem! is the DfE approved textbook used.

During break-time/snack-time (in Years 1, 2, 3 and 4), a thinking question is provided, allowing time for new learning to connect with prior knowledge. When children return, they are refreshed, ready to think deeply and work independently. Split lessons also allow the teacher time to respond to the first part of the lesson appropriately.

By the second half of the lesson, effective use of the CPA (concrete, pictorial, abstract) approach and skilful teaching enables pupils to move away from concrete representations and start to work independently.

**Maths No Problem practice books** contain 'intelligent practice' tasks designed using variation, which encourage deep thinking whilst working on the questions, rather than working through the questions quickly to produce answers.

**In Maths Journals**, pupils record diagrams, explanations, their own problems, investigations - all providing rich assessment data, revealing how deeply a concept has been understood.