Teaching for Mastery Parent Workshop

Wednesday 12th October 2022

Mr Short

Maths Lead

Mathematics curriculum in a nutshell

- Reception
  - Children become secure in numbers 0-20
  - Start addition & subtraction of one digit numbers
  - Shape and pattern
  - Maths in the environment
- Year 1
  - Addition and subtraction facts within 10 & 20
  - Unitising and coin recognition
  - Introduction to time
  - 2D and 3D shapes
- Year 2
  - Addition and subtraction within 100
  - Introduction to multiplication and division
  - Introduction to fractions
  - Key Stage 1 National Curriculum assessments

Mathematics curriculum in a nutshell

- Year 3
  - Place value to 1000
  - Addition and subtraction with up to three digits
  - Introduction of angles
  - Unit and non unit fractions
  - 2, 4, 8 times table
- Year 4
  - Place value to 10,000
  - Times tables
  - Division with remainders
  - Fractions greater than 1
  - Multiplication tables check (MTC)

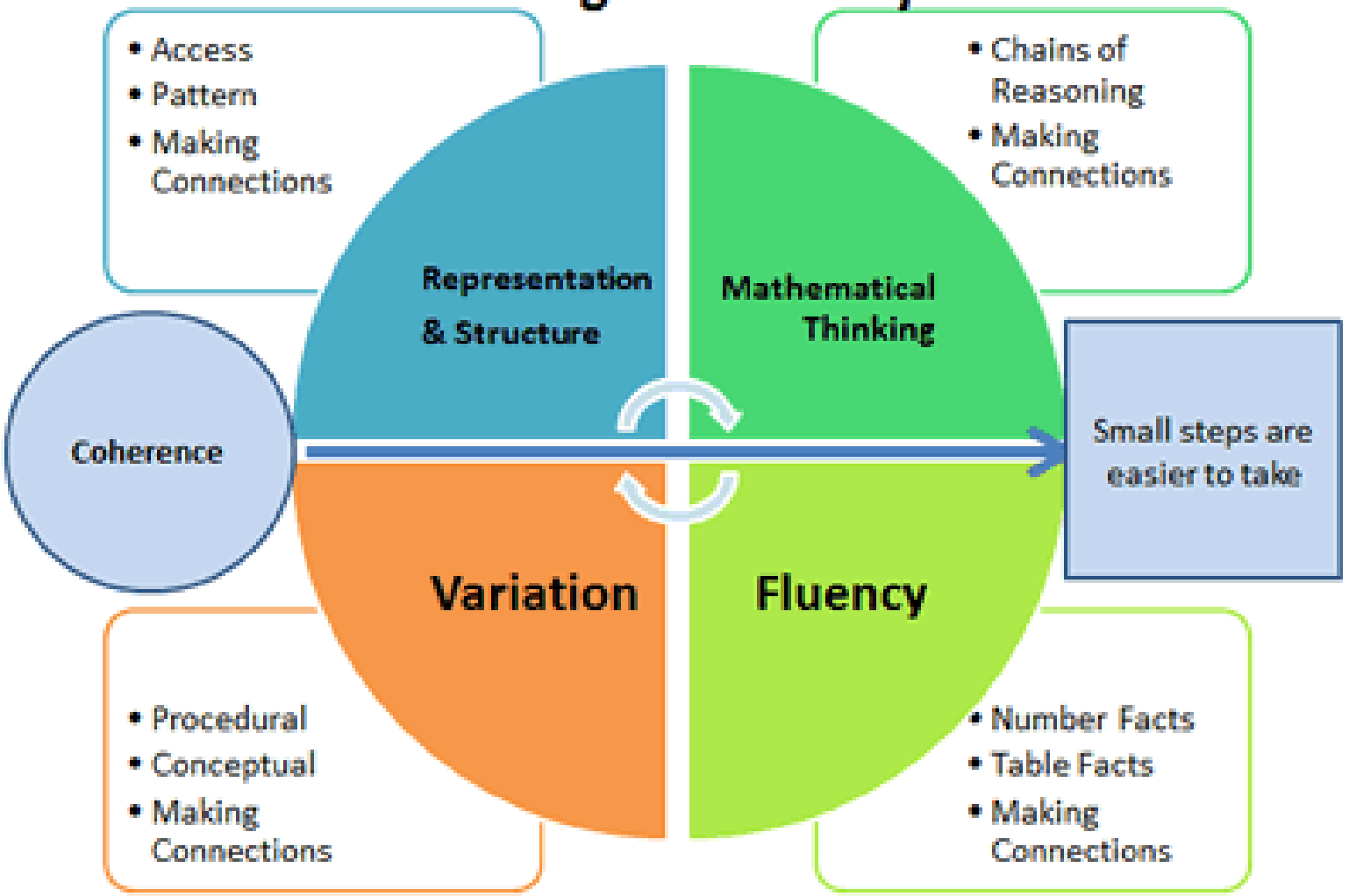
Mathematics curriculum in a nutshell

- Year 5
  - Decimals
  - Negative numbers
  - Calculating with fractions
  - Factors, multiples and primes
- Year 6
  - Numbers to ten million
  - Multiplication and division
  - Decimals, fractions & percentages
  - Ratio
  - Average
  - Algebra
  - Key stage 2 national curriculum assessments

How mathematics is taught at The Sherwood

- Children learning together with lessons being adapted for all learners
  - Support and challenge
- Children have access to resources and support through our CPA approach
- Children develop reasoning and problems solving skills throughout lessons
  - “what do you notice?” “explain why” “show me”
- The principles of maths mastery are applied to all lessons along every step of the way
- Children are encouraged to have a growth mindset

Teaching for Mastery



Fluency

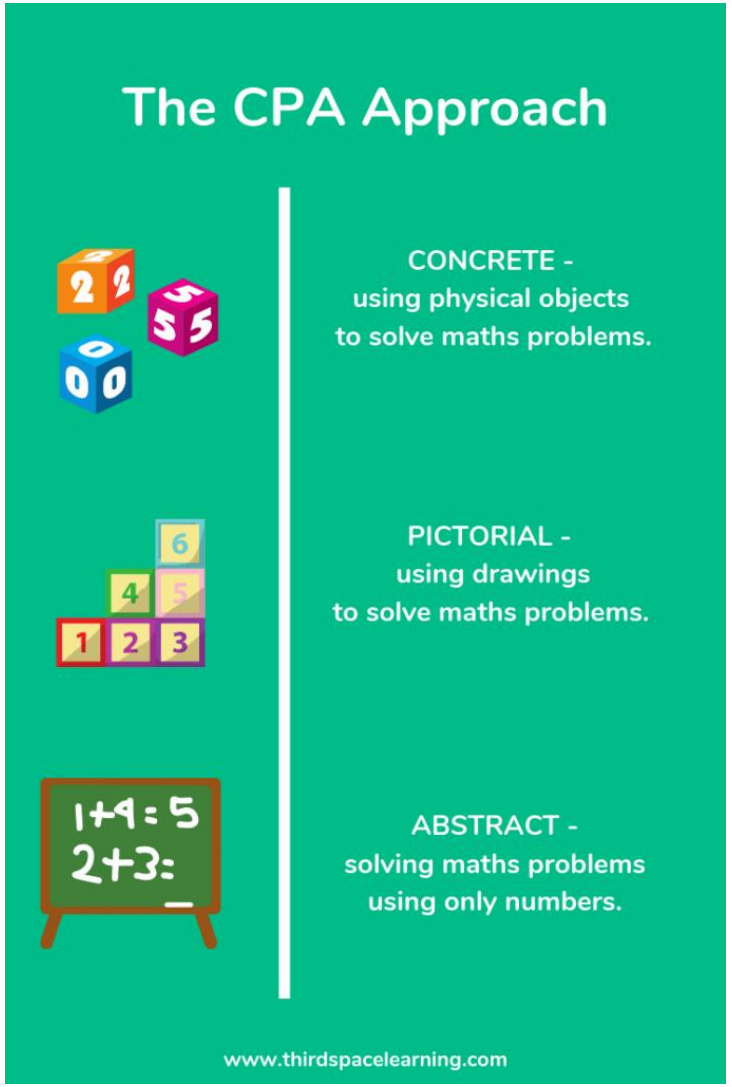
- Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics

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.

$58 - 24 = \_\_\_$	$36 - 25 = \_\_\_$	$53 - 22 = \_\_\_$	$49 - 24 = \_\_\_$
$57 - 25 = \_\_\_$	$46 - 24 = \_\_\_$	$64 - 23 = \_\_\_$	$48 - 25 = \_\_\_$
$56 - 26 = \_\_\_$	$56 - 23 = \_\_\_$	$75 - 24 = \_\_\_$	$47 - 26 = \_\_\_$

Representation & structure



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

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.

How to help at home

- Numbots
- Times table rockstars
- CGP books
- Homework
- Children encouraged to show their workings and representing the mathematics of the questions

Any questions?