

Maths at St. Mary's RC Primary

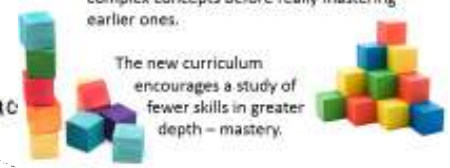
What is $\frac{3}{4}$ of 2 ?

$$\frac{3}{4} \times 2 = \frac{6}{4}$$

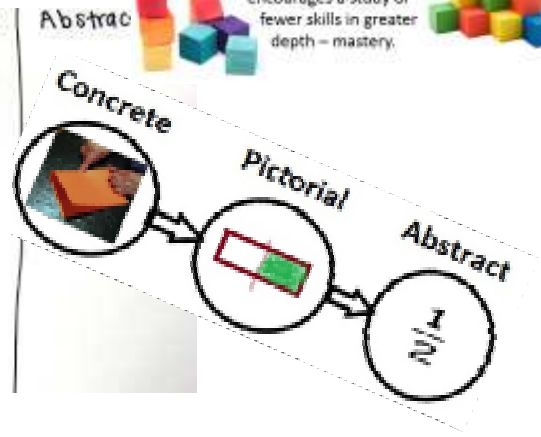
$$= 1 \frac{1}{2}$$


Depth not acceleration...

The old curriculum, measured in terms of levels, encouraged undue pace. Children were accelerated onto more complex concepts before really mastering earlier ones.



The new curriculum encourages a study of fewer skills in greater depth – mastery.



$$9 + 9 + 8 = \square$$

$$10 + 10 + 6 = \square$$


What is Mastery?

A 'mastery' approach – set of principles and beliefs

A 'mastery' curriculum – access to concepts for all

Teaching for 'mastery' - a set of pedagogic practices

Achieving 'mastery' of particular topics and areas of mathematics - deep and sustainable learning



MASTERY

INVOLVES THE DEVELOPMENT OF THREE
FORMS OF KNOWLEDGE

Factual – I know **that**
procedural – I know **how**
conceptual – I know **why**



The Curriculum

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace.

(National Curriculum for Mathematics page 3)

A significant change

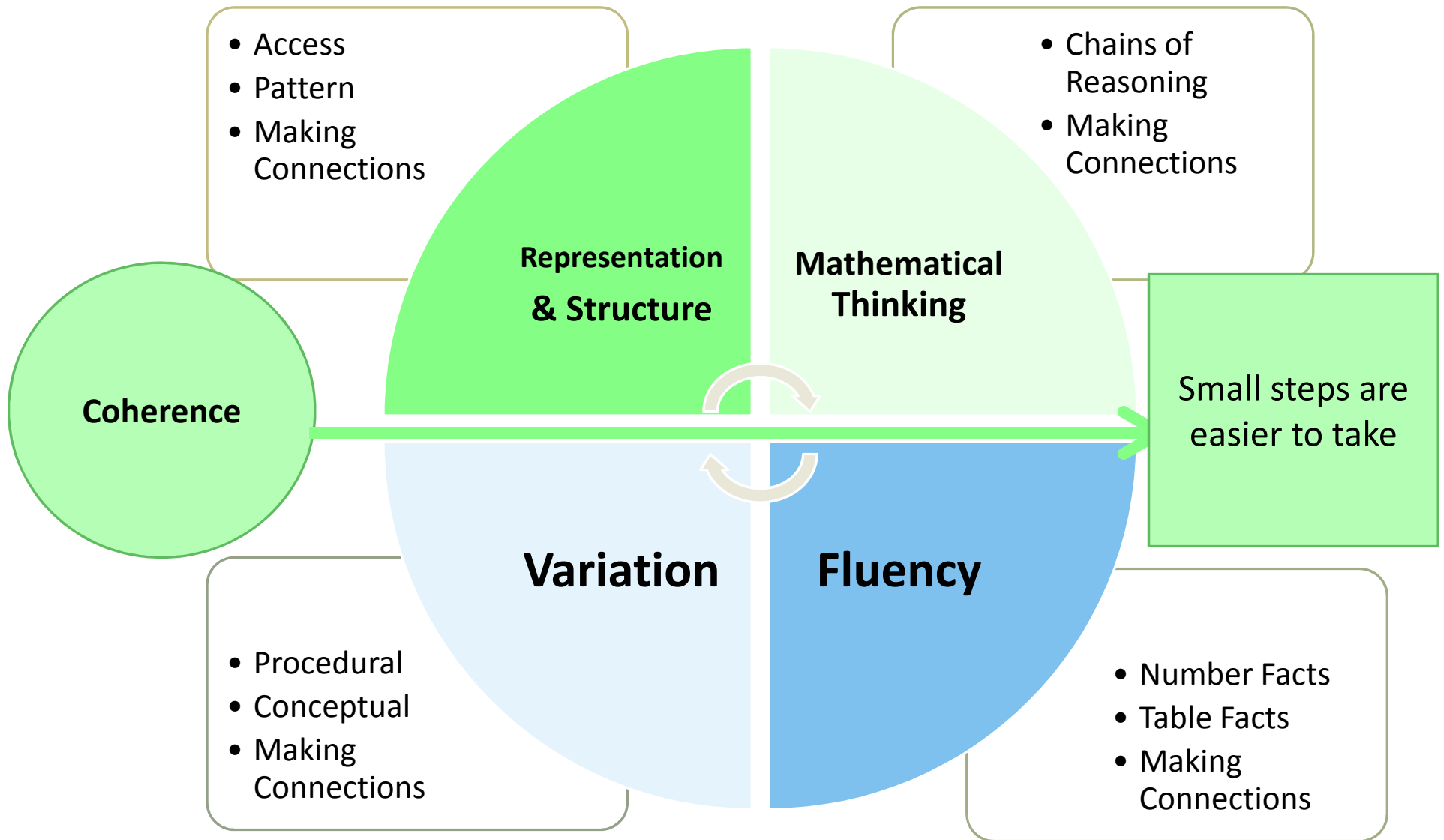


Fewer Things
Greater Depth
Class working together
Longer time on topics

Together these reflect the features of
[A Mastery Curriculum for Mathematics](#)



Teaching for Mastery: The 5 Big Ideas



Maths : Non negotiables

Sustainable.

Whole class working together.

Same day intervention.

Daily homework – small and often

Belief that everyone can achieve – ability not fixed.

Children can see and explain the maths.

Understand the structures not focussed on learning the rules and methods.

Fluency Toolkit , knowing tables, number bonds.

Simplicity.



Features of Mastery

Curriculum Design

Lesson Design

Pupil Support

Teaching resources

Teaching methods of differentiation

Productivity and practice



Key aspects for St Mary's School

1 hour 15 minutes a day

KS1	20 mins Number Sense	35-40 mins Direct Teaching	15 mins intervention
KS2	20 mins Number Sense	35-40 mins Direct Teaching	15 mins intervention

Mastery teaching : Small Steps, longer periods of time

Problem Solving : One stand alone lesson, teaching skills in progression

Intervention : Immediate, teacher led

Number sense : Using School Calculation Policy

5 sessions of concepts – close link with Arithmetic and based on Non negotiables.

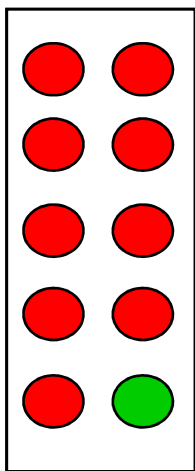


What will you see in maths lessons?

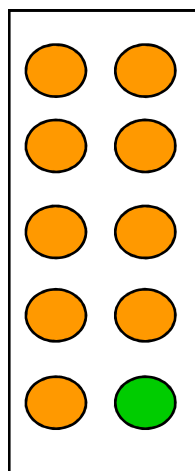
- Whole class teaching
- Whole class response/ talk to partner/tell yourself
- Extended partner practice
- Variation
- Depth not acceleration
- Limiting the number of calculations children do before applying (between 5-10)
- Ensuring links between questions to encourage children to look for patterns/relationships



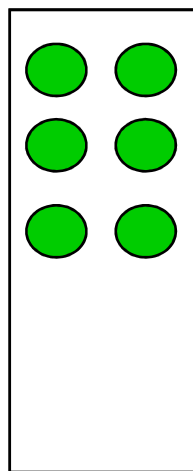
Conceptual understanding leads to *mastery*...



10



10

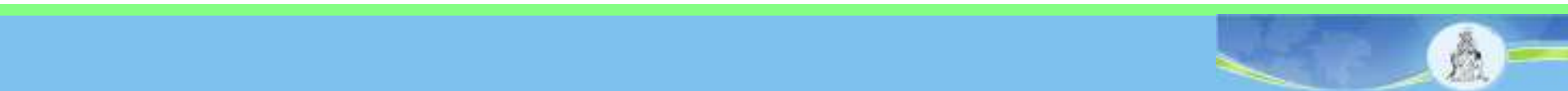


6

$$9 + 9 + 8 = \square$$

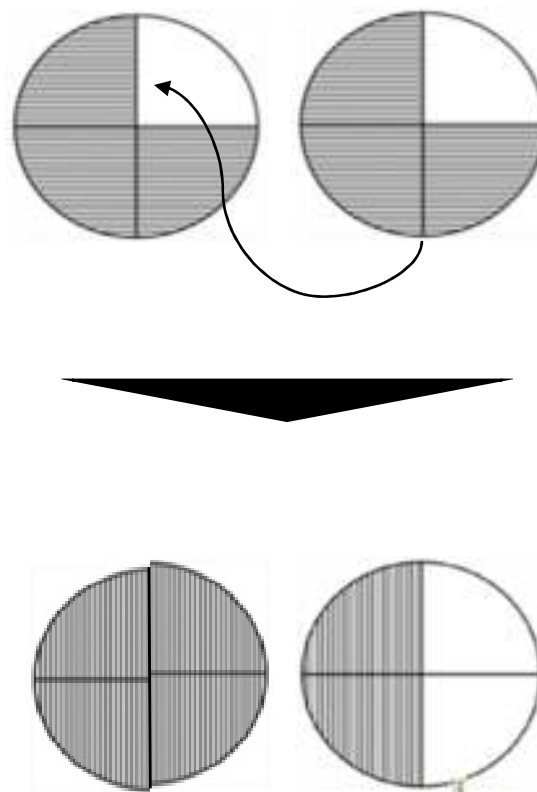
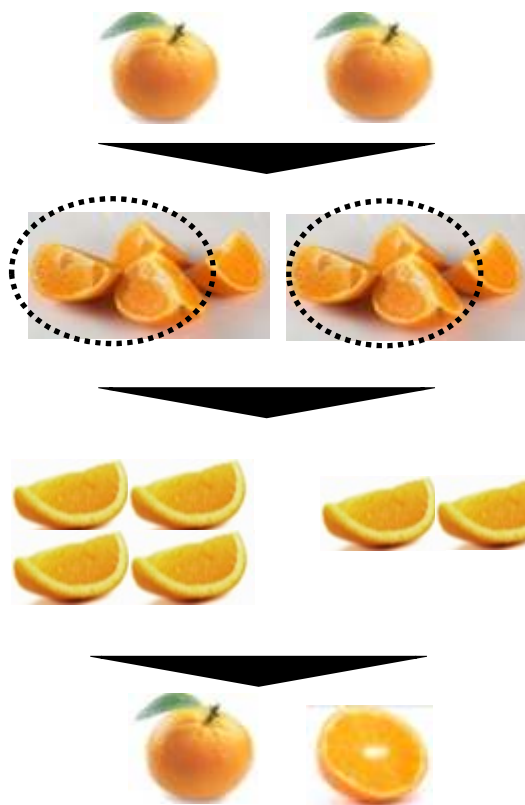
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graph TD; 8((8)) --- 1a((1)); 8 --- 1b((1)); 8 --- 6((6));
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$$10 + 10 + 6 = \square$$



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