



**Year 3**

**Maths Parent Workshop**

Friday 31<sup>st</sup> January 2025



# Maths Vision at Hazelwood

 **Our Vision and Values** 

At Hazelwood, we believe in nurturing responsible citizens to achieve educational excellence by inspiring awe and wonder through a real, relevant, immersive and purposeful curriculum.



Our shared values are at the heart of all we do.

**Believe and Achieve**

**AT HAZELWOOD SCHOOLS, WE BELIEVE THAT MATHS IS AN ESSENTIAL PART OF EVERYDAY LIFE. LEARNING IS, THEREFORE, FOCUSED ON CHILDREN SECURING A STRONG CONCEPTUAL UNDERSTANDING OF MATHS AND DEVELOPING THE SKILLS AND SELF-CONFIDENCE REQUIRED TO APPLY THEIR MATHEMATICAL KNOWLEDGE TO CREATIVELY SOLVE PROBLEMS.**

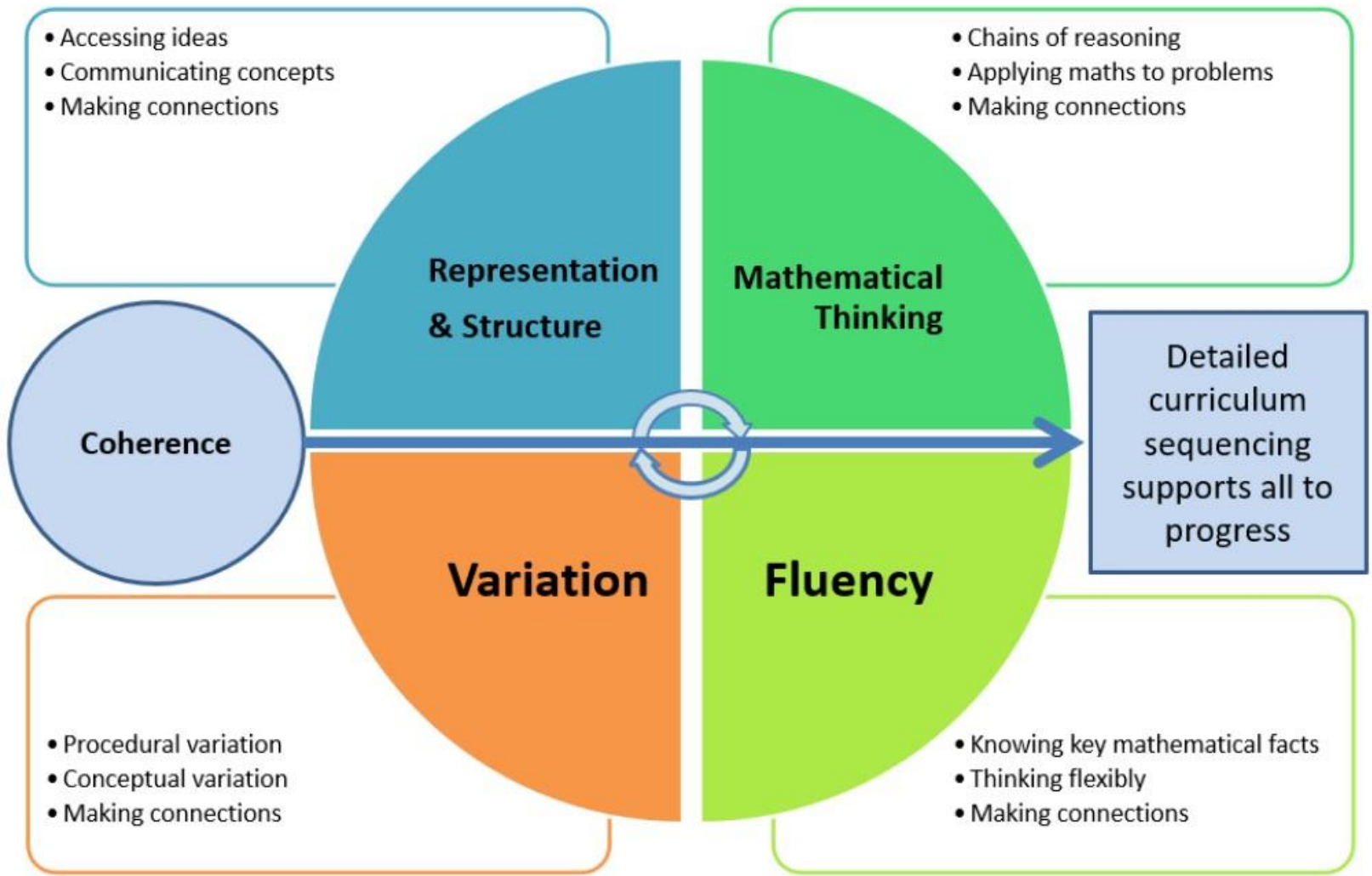


# Maths Vision at Hazelwood

- **Fluent recall of mental maths facts.** For example, times tables, number bonds.
- To **reason** mathematically – children need to be able to **explain** the mathematical concepts with number sense; they must explain **how** they got the answer and **why** they are correct.
- **Problem solving** – applying their skills to real-life contexts.

# Mastery for all

## Teaching for Mastery



# Maths at Hazelwood

**Concrete** - Use of manipulatives to understand the concept.

**Pictorial** - A visual representation which cements understanding from the concrete phase.

**Abstract** - Written understanding of concepts.



# Concrete, Pictorial and Abstract

Although we've presented CPA as three distinct stages, it is important to go back and forth between each stage to reinforce concepts.

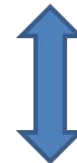


$$13 - 8$$

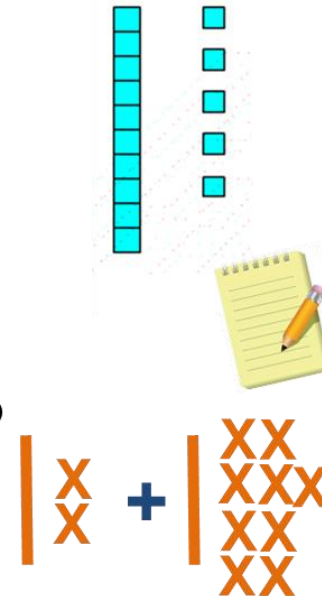
Active / Concrete



Building visual images



Abstract



$$12 + 19$$

# Metacognition

Examples of questions to promote metacognitive thinking include:

- How did you find out?
- Why do you think that?
- How do you know this?
- Can you show me?
- How do you prove this?
- Is there another way to solve this problem?

Metacognition is an important factor of mathematical problem solving. Metacognition is **the ability to monitor and control our own thoughts, how we approach the problem, how we choose the strategies to find a solution, or ask ourselves about the problem.**





# Year 3 Curriculum

Autumn term

Number

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**Place value**  
FREE TRIAL

VIEW

Number

---

**Addition and subtraction**

VIEW

Number

---

**Multiplication and division A**

VIEW

Spring term

Number

---

**Multiplication and division B**

VIEW

Measurement

---

**Length and perimeter**

VIEW

Number

---

**Fractions A**

VIEW

Measurement

---

**Mass and capacity**

VIEW

Summer term

Number

---

**Fractions B**

VIEW

Measurement

---

**Money**

VIEW

Measurement

---

**Time**

VIEW

Geometry

---

**Shape**

VIEW

**Statistics**

VIEW

Consolidation



# Calculation Policy – Year 3

## Year 3 – Addition

<p>Column method - no regrouping</p>	<p><math>24 + 15 =</math> Add together the ones first then add the tens. Use the Base 10 blocks first before moving onto place value counters.</p>	<p>After practically using the base 10 blocks and place value counters, children can draw the counters to help them to solve additions. <math>37 + 18 = 55</math></p>	<p><math>21 + 42 =</math></p> <p>Used for calculations where the ones do not require exchanging place value.</p>
<p>Column method - regrouping</p>	<p>Make both numbers on a place value grid.</p> <p>Add up the ones and exchange 10 ones for one 10. Repeat for each place value column</p>	<p>Children can draw a pictorial representation of the columns and place value counters to further support their learning and understanding.</p>	<p>Start with the ones, then 10s and so on. Carry over the 10s or 100s.</p>

# Calculation Policy – Year 3



## Year 3 – Subtraction

<p>Column method without regrouping</p>	<p><math>47 - 32</math></p>	<p>Draw representations to help to show working.</p> <p>Calculations</p> $\begin{array}{r} 54 \\ - 22 \\ \hline 32 \end{array}$	$\begin{array}{r} 32 \\ - 12 \\ \hline 20 \end{array}$
<p>Column method with regrouping</p>	<p>Exchange one ten for ten ones to subtract</p> <p>1 ten is equal to 10 ones</p> <p>We can <b>exchange</b> 10 ones for 1 ten</p> <p>How many pencils will be left?</p> <p>431 - 6 =</p>	<p><math>45 - 29 = 16</math></p> <p>Tens   Ones</p> <p><math>10 + 6 = 16</math></p>	$\begin{array}{r} 728 - 582 = 146 \\ \begin{array}{r} 728 \\ - 582 \\ \hline 146 \end{array} \end{array}$

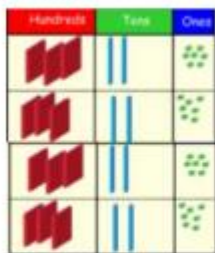
# Calculation Policy – Year 3



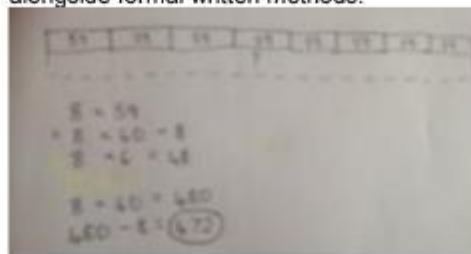
## Year 3 – Multiplication

Column Method  
Multiply by a 1-  
digit number

$$327 \times 4$$



Bar modelling and number lines support learners when solving problems with multiplication alongside formal written methods.



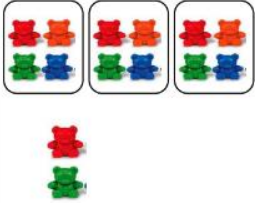
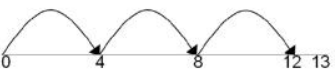
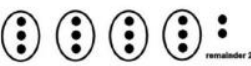
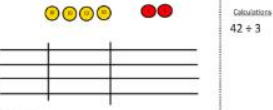
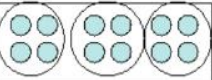
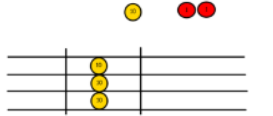

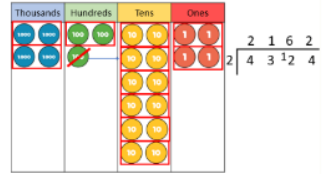
Use 'multiple by multiples of 10' and adjust.

	3	2	7	
x			4	
<hr/>				
	1	3	0	8
		1	2	

# Calculation Policy – Year 3

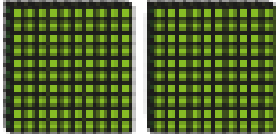
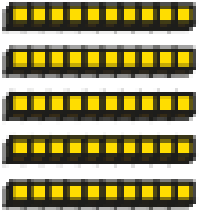



## Year 3 – Division

<p><b>Division with a remainder</b></p>	<p><math>14 \div 3 =</math> Divide objects between groups and see how much is left over</p> 	<p>Jump forward in equal jumps on a number line then see how many more you need to jump to find a remainder. <math>13 \div 4 =</math></p>  	<p>Complete written divisions and show the remainder using r. e.g. <math>29 \div 8 = 3 \text{ r}5</math></p> <p><math>29 \div 8 = 3 \text{ REMAINDER } 5</math></p> <p>↑   ↑   ↑   ↑ divisor   divisor   quotient   remainder</p>
<p><b>Short division with no remainders</b></p>	<p>Use place value counters to divide using the bus stop method alongside</p>  <p><math>42 \div 3 =</math> Start with the biggest place value, we are sharing 40 into three groups. We can put 1 ten in each group and we have 1 ten left</p>	<p>Draw dots and group them to divide an amount and clearly show a remainder. <math>14 \div 3 =</math></p> <p>Children can continue to use drawn diagrams with dots or circles to help them divide numbers into equal groups.</p>  <p>Encourage them to move towards counting in multiples to divide more efficiently.</p>	<p>Begin with divisions that divide equally with no remainder. Start with the digit with the largest place value. Carry over what you can't divide e.g. the 3 tens.</p> $\begin{array}{r} 2 \ 1 \ 8 \\ 3 \overline{) 4 \ 8 \ 7 \ 2} \end{array}$
	<p>over.</p>  <p>We exchange this ten for ten ones and then share the ones equally among the groups.</p>  <p>We count how much is in 1 group. The answer is 14.</p>	<p><math>4,324 \div 2</math></p> 	

# Year 3 – Example Questions

$254 - 125$

Hundreds	Tens	Ones
		

		<b>H</b>	<b>T</b>	<b>O</b>	
		2	5	4	
	-	1	2	5	



# Year 3 – Example Questions

44 children are put into 4 equal teams.

How many children are there in each team?

# Year 3 – Example Questions



Tick the sets of coins which total £1



# Parent in Class Sessions

- You will now go and visit your child's classroom.
- They will be working on a whole class maths investigation working on reasoning & problem solving skills
- Children will be working in groups so please do support the whole group/table your child is working with.
- Please do remain in the classroom until you are collected by a member of Hazelwood Staff.
- We hope you enjoy the session!

