



Year 6

Maths Parent Workshop

Thursday 16th 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.

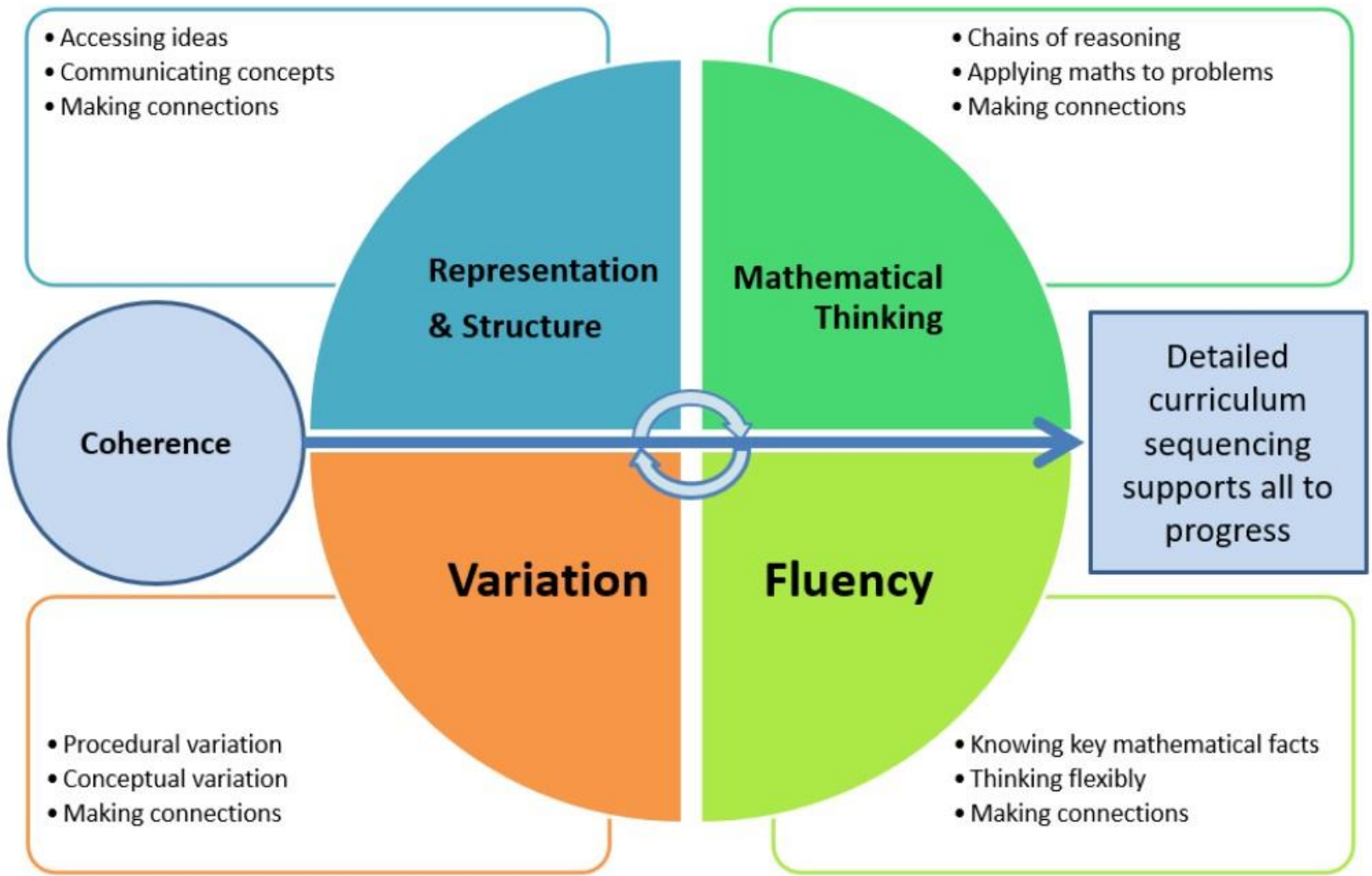


Maths Vision at Hazelwood

- **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.



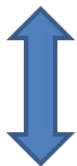
Concrete, Pictorial and Abstract

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



$$13 - 8$$

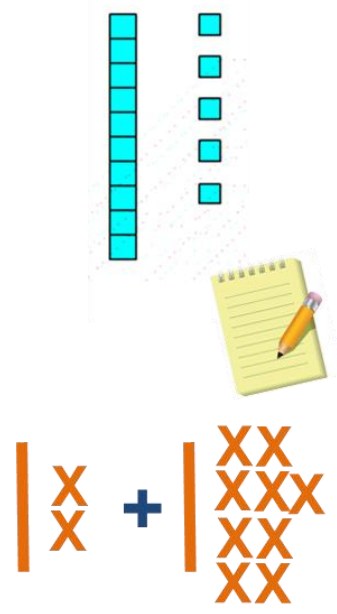
Active / Concrete



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.**





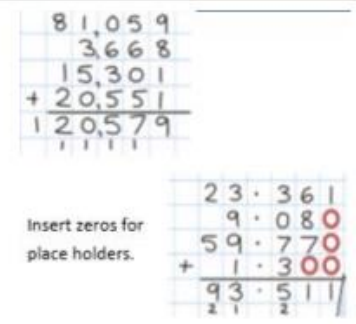
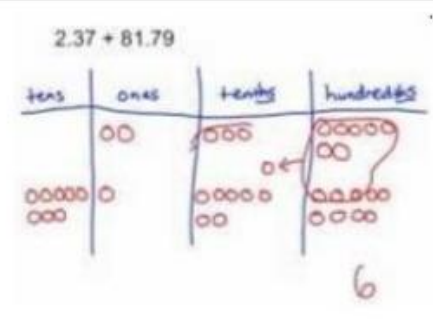
Year 6 Curriculum

Autumn term	<p>Number</p> <p>Place value</p> <p>FREE TRIAL</p> <p>VIEW</p>	<p>Number</p> <p>Addition, subtraction, multiplication and division</p> <p>VIEW</p>	<p>Number</p> <p>Fractions A</p> <p>VIEW</p>	<p>Number</p> <p>Fractions B</p> <p>VIEW</p>	<p>Measurement</p> <p>Converting units</p> <p>VIEW</p>	
Spring term	<p>Number</p> <p>Ratio</p> <p>VIEW</p>	<p>Number</p> <p>Algebra</p> <p>VIEW</p>	<p>Number</p> <p>Decimals</p> <p>VIEW</p>	<p>Number</p> <p>Fractions, decimals and percentages</p> <p>VIEW</p>	<p>Measurement</p> <p>Area, perimeter and volume</p> <p>VIEW</p>	<p>Statistics</p> <p>VIEW</p>
Summer term	<p>Geometry</p> <p>Shape</p> <p>VIEW</p>	<p>Geometry</p> <p>Position and direction</p> <p>VIEW</p>	<p>Themed projects, consolidation and problem solving</p> <p>VIEW</p>			

Calculation Policy – Year 6

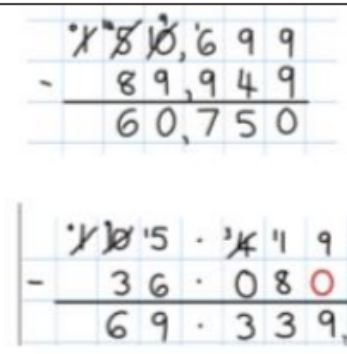
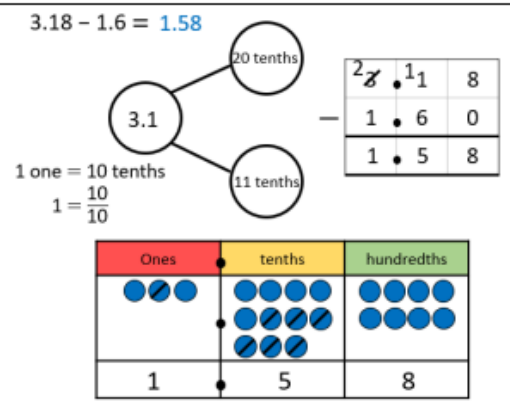
Year 6 – Addition

Year 6
Add several numbers of increasing complexity



Year 6 – Subtraction

Year 6
Subtract with increasingly large and more complex numbers and decimal values.



Calculation Policy – Year 6

Year 6 – Multiplication

Write the two missing digits to make this long multiplication correct.

$$\begin{array}{r}
 4 \square \\
 \times \square 6 \\
 \hline
 246 \\
 820 \\
 \hline
 1066
 \end{array}$$

Multiplication - Year 5 & 6

Column Method
Multiply by a 2-digit number

Grid-in: $\begin{array}{|c|c|c|c|} \hline 1 & 8 & & \\ \hline \times & 1 & 3 & \\ \hline \hline 5 & 4 & & \\ \hline 1 & 8 & 0 & \\ \hline 2 & 3 & 4 & \\ \hline \end{array}$

Handwritten: $\begin{array}{r} 1234 \\ \times 16 \\ \hline 7404 \quad (1234 \times 6) \\ 12340 \quad (1234 \times 10) \\ \hline 19744 \end{array}$

Record the 0 as a place holder

Year 6
Multiplying decimals

$4.3 \times 4 = 17.2$

Base ten blocks: 4 tens rods, 3 ones units, and 3 tenths units.

Grid-in: $\begin{array}{|c|c|c|} \hline 4 & 3 & \\ \hline \times & 4 & \\ \hline \hline 1 & 7 & 2 \\ \hline 1 & & \\ \hline \end{array}$

Multiply the numbers removing the decimal place. Then put the decimal point back in, ensuring that the amount of digits after the decimal point is the same as in the question.

$3.77 \times 2.8 = ?$

$$\begin{array}{r}
 3.77 \quad (2 \text{ decimal places}) \\
 \times 2.8 \quad (1 \text{ decimal place}) \\
 \hline
 3016 \\
 +754 \\
 \hline
 10.556 \quad (3 \text{ decimal places})
 \end{array}$$



Calculation Policy – Year 6

Year 6 – Division

Division - Year 6

Short Division
Leaving your answer as a decimal

Move onto divisions with a remainder. Once children understand remainders, begin to express as a fraction or decimal.

$$8 \overline{) 57.125} = 7.125$$

Long Division

1. Divide.	2. Multiply & subtract.	3. Drop down the next digit.
$\begin{array}{r} \text{h t o} \\ 2 \overline{) 278} \\ \underline{2} \\ 0 \end{array}$ <p>Two goes into 2 one time, or 2 hundreds ÷ 2 = 1 hundred.</p>	$\begin{array}{r} \text{h t o} \\ 2 \overline{) 278} \\ \underline{2} \\ 0 \end{array}$ <p>Multiply $1 \times 2 = 2$, write that 2 under the two, and subtract to find the remainder of zero.</p>	$\begin{array}{r} \text{h t o} \\ 18 \\ 2 \overline{) 278} \\ \underline{-2} \\ 0 \end{array}$ <p>Next, drop down the 7 of the tens next to the zero.</p>
$\begin{array}{r} \text{h t o} \\ 2 \overline{) 278} \\ \underline{-2} \\ 07 \end{array}$ <p>Divide 2 into 7. Place 3 into the quotient.</p>	$\begin{array}{r} \text{h t o} \\ 2 \overline{) 278} \\ \underline{-2} \\ 07 \\ \underline{-6} \\ 1 \end{array}$ <p>Multiply $3 \times 2 = 6$, write that 6 under the 7, and subtract to find the remainder of 1 ten.</p>	$\begin{array}{r} \text{h t o} \\ 13 \\ 2 \overline{) 278} \\ \underline{-2} \\ 07 \\ \underline{-6} \\ 18 \end{array}$ <p>Next, drop down the 8 of the ones next to the 1 leftover ten.</p>
$\begin{array}{r} \text{h t o} \\ 2 \overline{) 278} \\ \underline{-2} \\ 07 \\ \underline{-6} \\ 18 \end{array}$ <p>Divide 2 into 18. Place 9 into the quotient.</p>	$\begin{array}{r} \text{h t o} \\ 2 \overline{) 278} \\ \underline{-2} \\ 07 \\ \underline{-6} \\ 18 \\ \underline{-18} \\ 0 \end{array}$ <p>Multiply $9 \times 2 = 18$, write that 18 under the 18, and subtract to find the remainder of zero.</p>	$\begin{array}{r} \text{h t o} \\ 139 \\ 2 \overline{) 278} \\ \underline{-2} \\ 07 \\ \underline{-6} \\ 18 \\ \underline{-18} \\ 0 \end{array}$ <p>There are no more digits to drop down. The quotient is 139.</p>

Children will use long division to divide numbers with up to 4-digits by 2-digit numbers.

$$\begin{array}{r}
 24 \overline{) 85,582} \\
 \underline{72} \\
 125 \\
 \underline{120} \\
 58 \\
 \underline{48} \\
 102 \\
 \underline{96} \\
 6
 \end{array}$$

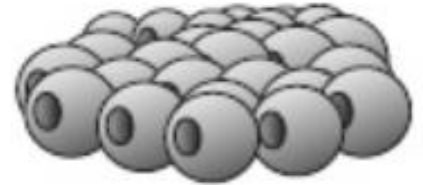
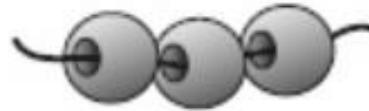
3,524 R 6

Year 6 – Example Questions

Layla makes jewellery to sell at a school fair.

Each bracelet has **53** beads.

She makes **68** bracelets.



Each necklace has **105** beads.

She makes **34** necklaces.

How many beads does Layla use **altogether**?

Year 6 – Example Questions



3 pineapples cost the same as 2 mangoes.

One mango costs £1.35



How much does **one** pineapple cost?



Year 6 – Example Questions

A class votes for a captain.

Three-quarters of the class vote for Sam.

The remaining 7 pupils vote for Alex.

How many pupils are in the class?

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!

