



# Maths Parent Workshop

## Key Stage 1

Lydlynch Infant School  
Friday 24<sup>th</sup> January 2025



# Aims of the workshop

- ▶ Maths in Key Stage 1 - key aims and its importance
- ▶ How we teach Maths in Key Stage 1
- ▶ Ways you can help at home
- ▶ Watch a Maths activity in your child's class

# The Importance of Maths

Mathematics is ubiquitous in our daily routines.

**Shopping**

**Transport**

**Cooking**

**DIY**

**Time**

**Sport**

# Perception of Maths...

- ▶ What are your own perceptions of maths?
- ▶ What experiences of maths did you have at school yourself?  
What were your Maths teachers like?
- ▶ Children are more likely to take risks in their learning when an adult models a positive attitude towards a subject.



# Key aims of the Maths Curriculum in National Curriculum

## ▶ **Become fluent in the fundamentals of mathematics**

- Varied and frequent practice, increasingly with complexity over time
- Pupils develop conceptual understanding (seeing patterns and relationships)
- Recall and apply knowledge rapidly and accurately

## ▶ **Reason mathematically**

- Reasoning in maths is the ability to make links and connections which help you tackle a new maths problem
- Developing the ability to work out an answer and explain why

## ▶ **Problem solving**

- Applying what they know to solve word problems, number problems, money problems...

# National Curriculum- Areas of learning

<u>Year 1</u>	<u>Year 2</u>
Number and Place Value	Number and Place Value
Addition and Subtraction	Addition and Subtraction
Multiplication and Division	Multiplication and Division
Fractions	Fractions
Measurement	Measurement
Properties of Shape	Properties of Shape
Position and Direction	Position and Direction
	Statistics

# Mathematical Skills

During their time at school, children develop a variety of mathematical skills.

These skills can also be applied in other subjects and in everyday life.

Some of these include:

- ▶ Using mathematical vocabulary
  - ▶ Predicting and justifying
    - ▶ Making connections
    - ▶ Spotting patterns
  - ▶ Work systematically
    - ▶ Trial and error
    - ▶ Logical thinking
      - ▶ Resilience
    - ▶ Problem solving
    - ▶ Challenge ideas

# Hamilton Trust

- ▶ At Lydlynch, we follow a maths scheme called **Hamilton Trust**
- ▶ The scheme **builds upon prior knowledge and learning** and allows children to gain the fundamental building blocks to maths.
- ▶ **Learning is adapted and differentiated** to support children's learning and progress.
- ▶ Allows children opportunities for **problem solving and reasoning** and using calculations which is essential for mastery.
- ▶ Topics are learnt and revisited for consolidation and to build on prior knowledge.



# Hamilton Trust

Monday	Tuesday	Wednesday	Thursday	Friday
<p>Addition and Subtraction Day 1 Y1: Know number bonds to 8; Recognise that addition can be done in any order.</p> <p>Y2: Use number facts to add and subtract.</p>	<p>Addition and Subtraction Day 2 Y1: Know number bonds to 9; Recognise that addition can be done in any order.</p> <p>Y2: Use number facts and place value to add and subtract.</p>	<p>Addition and Subtraction Day 3 Y1: Relate addition and subtraction number facts.</p> <p>Y2: Add a single-digit number to a 2-digit number, bridging 10.</p>	<p>Addition and Subtraction Day 4 Y1: Add 3 numbers, using number bonds to 10.</p> <p>Y2: Subtract a single-digit number from a 2-digit number, bridging 10.</p>	<p>Addition and Subtraction Day 5 Y1: Add 3 numbers, using doubles and number bonds.</p> <p>Y2: Add 3, 4 or 5 numbers, using doubles and number bonds.</p>

# A typical Maths Lesson

1. Mental Starter - usually whole class and covers KIRFs and prior learning

2. Main input with cutaway groups

3. Activities at tables with adults or independently.  
The children record their learning in Maths books most days.  
Fluency often followed by a problem/reasoning activity

4. Address misconceptions

## Using a CPA approach

The Concrete, Pictorial, Abstract approach (CPA) is a highly effective approach that develops a deep understanding of maths in pupils

- Concrete
- Pictorial
- Abstract




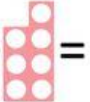



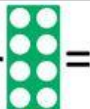



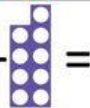



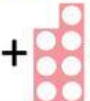

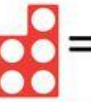



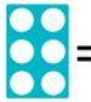


# Concrete

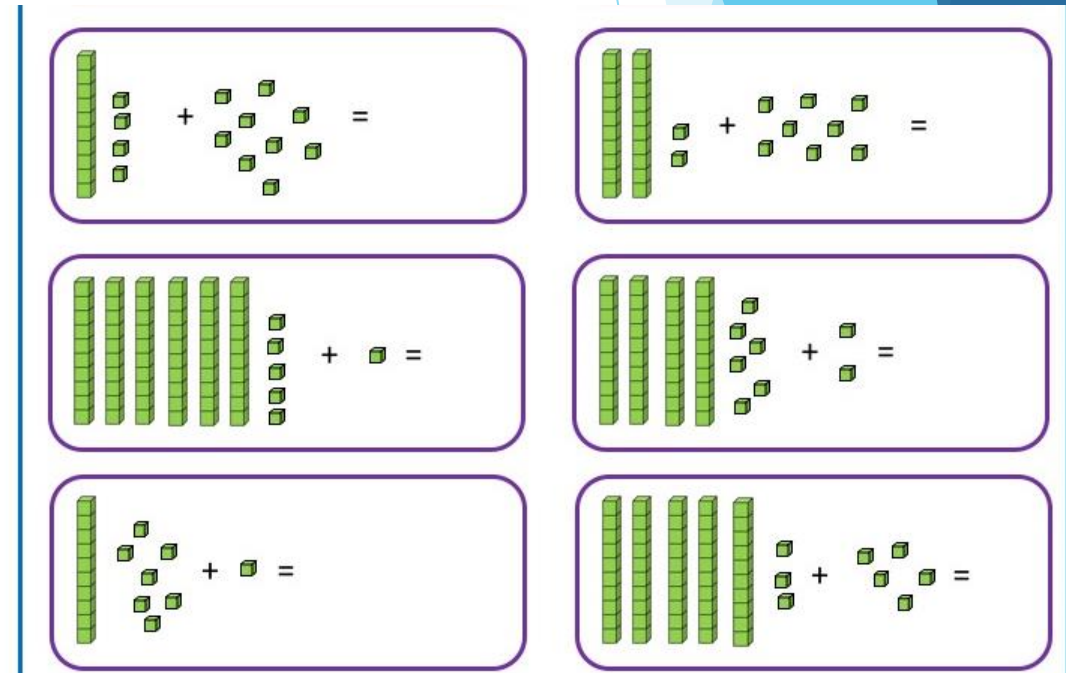
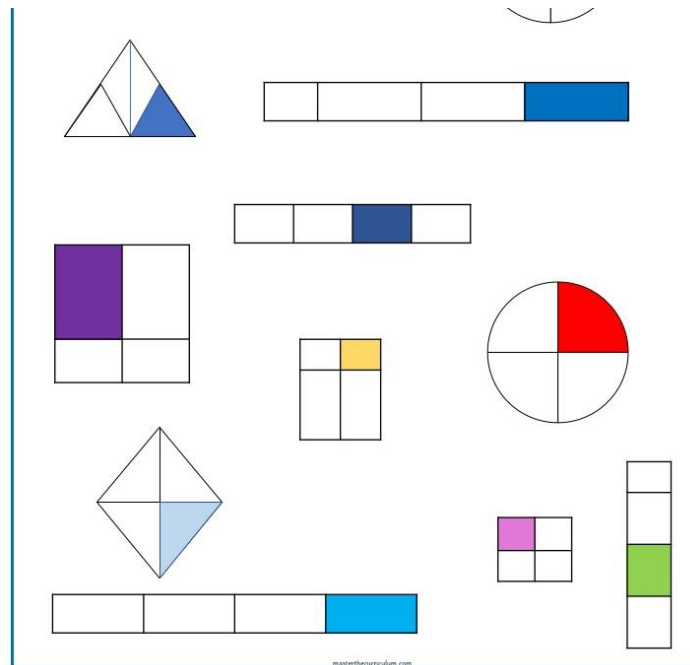
- ▶ Encourages children to use physical resources to support their maths learning. This can range from counters, multilink cubes, dienes, Numicon... And other objects.
- ▶ It allows children to visualise numbers and harder concepts they may not yet be ready to learn.



# Pictorial

- ▶ After concrete, the next progression is pictorial.
- ▶ Essential for children to consolidate and secure their understanding of concepts.

 +  =	 +  =
 +  =	 +  =
 +  =	 +  =
 +  =	 +  =
 +  =	 +  =
 +  =	 +  =



# Abstract

- ▶ With abstract, numbers and symbols or key vocabulary are used:

+ - X ÷ =

- ▶ For example, this could be:

- ▶  $19 + 2 = \underline{\quad}$

- ▶ What is  $\frac{1}{2}$  of 10?

- ▶  $4 \times 5 =$

# Ways to support at home

- ▶ Little and often
- ▶ Finding maths opportunities in everyday life- telling the time, prices of items in shops, counting in 2's with pairs of items such as socks
- ▶ Play board games- Snakes and Ladders, Monopoly, Connect 4 etc
- ▶ Measuring things at home and using the correct mathematical vocabulary - centimetres, grams, litres
- ▶ Reading numbers in a variety of places
- ▶ Kitchen- baking and weighing, cutting things in halves, quarters
- ▶ Key instant recall facts half termly sheet
- ▶ Practising in the car - counting in 2's, number bonds...

# Key Instant Recall Facts - KIRFs

- ▶ Mathematical facts children need to recall instantly without aids.

	Year 1	Year 2
Autumn 1	I know one more and one less than any number to 20.	I can recall addition and subtraction facts for each number up to 20.
Autumn 2	I can recall all addition and subtraction facts of all numbers to 6.	I know 10 more and 10 less than any number to 100.
Spring 1	I can count forwards and backwards in steps of 2, 5 and 10.	I can recall doubles up to $10 + 10$ .
Spring 2	I can recall all addition and subtraction facts of all numbers to 10.	I can recall multiplication and division facts for the 2 times table.
Summer 1	I can recall doubles up to $5 + 5$ .  I can halve even numbers below 10.	I can recall multiplication and division facts for the 10 times table.  I can recall multiplication and division facts for the 5 times table.
Summer 2	I can recall some addition and subtraction facts related to bonds within 20.	I can begin to recall some of the 3 times table multiplication and division facts.

# Useful Websites

- ▶ <https://www.topmarks.co.uk>
- ▶ <https://www.bbc.co.uk/cbeebies/topics/numeracy>
- ▶ <https://ictgames.com/>
- ▶ <https://home.oxfordowl.co.uk/maths/>