

# How can I support my child?

Look for maths problems you can solve together, making connections between what your child has been learning at school and the world around them. Demonstrating these connections - and representing them in multiple ways - not only supports your child's understanding and cements their knowledge; it reinforces the relevance of maths in our lives and makes it fun. Here are just a few simple ideas:

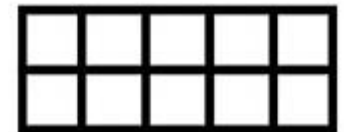
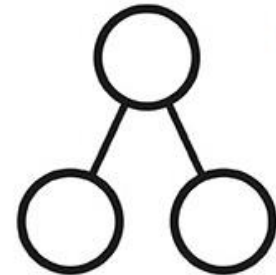
- Follow a recipe: work together to find out the quantities needed, ask your child to weigh the ingredients, discuss how you'd halve or double the recipe or discuss the ratio of ingredients.
- Talk about the weather forecast: is today's temperature higher or lower than yesterday's? What do the numbers mean?
- Going shopping: talk about the cost of items and how the cost changes if you buy two items instead of one. Let your child count out the coins when paying and discuss the change you get back. Use coins to explore addition, subtraction, multiplication and division.
- Planning an outing: discuss how long it takes to get to the park, and work out what time you need to leave the house. Encourage your child to work out the best solution based on the time and distances.

Always encourage your child to *explain* how they have gone about solving a problem, and work with them to test, prove, explain, reflect and spot patterns. Communicating and discussing maths problems (in a way that others can understand) demonstrates depth of understanding - another fundamental aspect of mastering mathematics.

'What do you think...?' 'Why ...?' 'What will happen if...?' 'What do you notice about...?' 'Can you see a pattern between...?' and 'What if we try...?' are all good sentence starters for discussions.



## A Guide to Maths Mastery at Hipsburn Primary School



Maths Mastery Showcase  
20<sup>th</sup> June 2018

## Our Definition



At Hipsburn Primary School we see teaching for mastery as allowing pupils to gain a deep understanding of maths. This approach helps them to acquire a secure understanding of key mathematical concepts.

## Our Ethos



We believe that *everyone* can do maths and there's no such thing as a 'maths person'. Maths is a subject that everyone can and should be able to perform confidently and competently.

## Teaching for Mastery



We teach maths by breaking objectives down into small steps, so that every pupil is secure in each new concept before moving on. We focus upon teaching for fluency, reasoning and problem solving.

## What does maths mastery look like?

### The whole class working together

We have a strong emphasis on every child making progress in every lesson. Classes work together until specific concepts or skills are mastered and then move on together. This does not mean that some children will be left behind or others not challenged. Differentiation is achieved through intervention and 'greater depth' challenges, as explained below.

### Concrete, pictorial and abstract representations

Representations used in lessons expose the mathematical structure being taught. We use a wide range of representations, such as Numicon, dienes, peg boards, money, lolly sticks and multilink cubes.

### Mathematical thinking

If taught ideas are to be understood deeply, they must not merely be passively received but worked on by the student: thought about, reasoned with and discussed with others.

### Fluency

This is the quick and efficient recall of facts (such as number bonds or times tables) and the flexibility to move between different contexts and representations of mathematics.

### Challenge is provided by going deeper, not accelerating

For those children that have mastered the skill, concept or procedure they will be presented with higher order thinking activities, rather than accelerating through the curriculum.