

## What you say counts!

Parents/carers have a key role to play in helping children to understand that mathematics can be: fun, useful, sociable, challenging, relevant and can make sense! Frequent and varied practice of key skills in number can best be provided by games, particularly those involving dice and cards, as well as involving children in everyday activities that make use of maths (cooking, baking, buying shopping, preparing for a party and playing board games).



One of the most important ways parents/carers can support their child's learning in maths is to help give a positive image of maths and show that they believe their child can succeed.

### Top Tips!

*Please don't say...*

*Try to say...*

I can't do that.

That's what I need to learn next

I don't know how maths is taught these days.

How many different ways can we work it out together?

You've got I wrong.

This is a challenge- we can work this out together.

You've got seven right.

You've thought hard. Well done!

I didn't like maths at school.

I wish I learned maths the way you are learning.

That's really hard!

That looks like a problem we can solve together.

# Stanford Infant School



## MASTERY IN MATHS- 2020



## Teaching for Mastery

With the introduction of the New National Curriculum in 2014, schools adopted a new approach to the teaching of Maths. This is called a mastery approach and is based on good practice from successful countries such as China and Singapore. A mastery curriculum that has 'number' at the heart. A large proportion of time is spent reinforcing number to build understanding and competence. This allows for children to develop fluency in their learning, reasoning skills and the tools to solve problems.

The essential idea behind mastery is that all children need a deep understanding of the mathematics they are learning so that future mathematical learning is built on solid foundations.

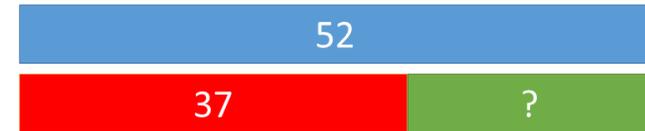
### Concrete– Pictorial– Abstract (CPA)



Objects, pictures, words, numbers and symbols are everywhere. Our mastery approach incorporates all of these to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding. Together, these elements help cement knowledge so children truly understand what they've learnt. Children start with concrete resources, moving to recording their learning and understanding in a pictorial format using pictures and symbols. Then when they are secure, they move to abstract.

## Problem Solving

Mathematical problem solving is at the heart of a mastery approach. Children are encouraged to identify, understand and apply relevant mathematical principles and to make connections between different ideas. This builds the skills needed to tackle new problems and allows the children to confidently apply their knowledge and understanding in unfamiliar contexts.



### Depth before Breadth

All learners benefit from deepening their conceptual understanding of mathematics, regardless of whether they've previously struggled or excelled. The mastery approach believes children must be given time to master their understanding, to explore and apply ideas in many different contexts, rather than accelerate through new topics.

### Greater Depth Challenges

- If this is the answer, what could the question have been?
- What if...
- True or false.
- Explain how you know.
- Captain Conjecture says 'The number in the place value grid is the largest 3-digit number you can make using all 10 counters.' Do you agree? Explain your reasoning.

