

# Stratford-sub-Castle Church of England VC Primary School

*Life in all its fullness*

## Calculation Policy #1

The *Calculation Policy* was reviewed during the Spring Term 2019.  
This document is the result of that review.

DATE AGREED BY FULL GOVERNING BODY:	<b>25.03.19</b>
REVIEW DATE:	<b>March 2022</b>
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SIGNED:	
TO BE READ IN CONJUNCTION WITH:	<i>Aims of the School</i> <i>Assessment for Learning</i> <i>Curriculum Handbook</i> <i>Curriculum Map (Knowledge &amp; Skills)</i> <i>Curriculum Policy</i> <i>EYFS Policy</i> <i>Home-Learning Policy</i> <i>Marking for Learning Policy</i> <i>National Curriculum (2014)</i> <i>Planning for Learning Policy</i> <i>Presentation Policy</i> <i>Teaching for Learning Policy</i>

# Stratford-sub-Castle Church of England VC Primary School

*Our mission is to promote LIFE IN ALL ITS FULLNESS*

*Our values are PEACE, LOVE and JOY*

*Our commitment to learning is to make it ACTIVE and RELEVANT*

## Calculation Policy #1

*'Life in all its fullness' (John 10:10)*

### Introduction

The following calculation policy has been updated to link to the *White Rose Scheme of Work* that Stratford-sub-Castle Primary School has been following since September 2017. This *White Rose Calculation Policy* has been used as a basis for this calculation policy.

### Purpose

- to fulfil the aims of the school through a consistent approach to teaching and learning
- to deliver the requirements of the Mathematics National Curriculum
- to provide wide and effective learning experiences for all our pupils
- to raise standards of attainment and ensure all pupils make expected or better progress

### Aims

- The teaching at Stratford-sub-Castle Primary School aims to make pupils **active learners**. We aim to 'fuel' and sustain each pupil's learning journey by fostering the learning process: **DOING/THINKING/UNDERSTANDING**.

### Statement of Principles

The *Calculation Policy* comprises of all the calculation experiences provided for each pupil at our school and which:

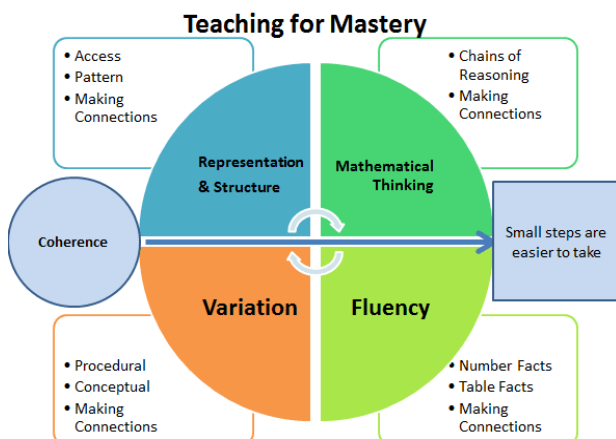
- prepares pupils at the school for the opportunities, responsibilities and experiences of their life now and in later life.
- ensures that pupils have acquired depth as well as breadth of knowledge, understanding and skill

### Implementation

The day-to-day implementation of this policy is a shared responsibility by all members of the teaching staff.

### Mastery Teaching Approach

At Stratford-sub-Castle CE Primary School we use a mastery teaching approach to teaching to Mathematics which follows the 'Five Big Ideas in Teaching for Mastery'.



ncetm - <https://www.ncetm.org.uk/resources/50042>

## **Concrete Pictorial Abstract (CPA) Approach**

An essential part of teaching for mastery is the CPA Approach (concrete, pictorial, abstract). The calculation policy focuses on the links between, and also the progression through, Concrete, Pictorial and Abstract. Teachers go between the three different stages to reinforce concepts.

Concrete is the 'active' stage, using concrete objects/manipulatives to solve problems. Manipulatives are chosen for the pupils by the teacher. Manipulatives are selected upon the most appropriate for the concept. Teachers may vary which manipulatives are used for a concept.

Pictorial is the 'seeing' stage, using representations of the objects involved in maths problems. This stage encourages children to make a mental connection between the physical object and abstract levels of understanding, by drawing or looking at pictures, circles, diagrams or models which represent the objects in the problem.

Abstract is the 'symbolic' stage, where children are able to use abstract symbols to model and solve maths problems. The 'abstract' concept is introduced when children has a firm understanding of the 'concrete' and 'pictorial'.

## **Language**

The calculation policy also includes vocabulary and stem sentences pupils are expected to use. This is to help reinforce concepts being learnt to result in greater understanding.



