

St. James CE Primary School



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Maths Calculation Policy in alignment with White Rose Maths: *addition & Subtraction *Multiplication & division

Flourish
Respect Courage
Friendship Develop
Strong Growth
Community StJames' Strive
God Trust Kindness
Freedom Unique Perseverance
DeepRoots Positivity
WholeChild
Responsibility

Statement of Vision and Values

In consultation with pupils, parents, governors, community members and staff our vision and values were generated based on our inspiration from the Parable of the Sower and how this links to our children and their journey with us.

Our School Vision:

Within our community we strive to develop deep **roots**, strong **growth** and freedom to **flourish** as a unique and whole child of God.

Matthew 13 - The Parable of the Sower – ‘... but the seed falling on good soil refers to someone who hears the word and understands it.produces a crop, yielding a hundred, sixty or thirty times what was sown.’



Values

We decided at St James CE Primary School that **Kindness and Respect** are values which we feel underpin our vision and are incorporated in all we do and say – so therefore these two values will be taught alongside all the other six values we have chosen.

½ termly focus	Value
Autumn 1	Responsibility
Autumn 2	Friendship
Spring 1	Perseverance
Spring 2	Trust
Summer 1	Courage
Summer 2	Positivity

St James' CE Primary School is committed to the safeguarding of our pupils and staff.

Vision of the Calculation Policy

The following calculation policy has been devised to meet requirements of the National Curriculum 2014 for the teaching and learning of mathematics, and is also designed to give pupils a consistent and smooth progression of learning in calculations across the school. The aim of this policy is to ensure all children leave St. James' Primary School with a secure understanding of the four operations and can confidently use both written and mental calculation strategies in a range of contexts.

This policy states the required mental strategies and sets out the progression of written procedures that the children will use as they progress in their understanding of the four operations.

Note that in order for children to develop a full understanding of the written procedures, they must first have a firm understanding of place value.

It is expected that the majority of pupils will progress through the calculation stages as stated in this policy.

However, children **should not** be made to go onto the next stage if:

- 1. They are not ready.**
- 2. They are not confident.**

Children who do grasp concepts rapidly should be challenged through sophisticated and diverse problems, before being accelerated through new content, a focus on mastery.

Furthermore, it is essential that at each stage, children are making choices about whether to use a mental or written method.

Finally, it is essential that the **strategies in this policy are being taught through mathematical problems and activities that are contextualised**, relevant and rich in key mathematical vocabulary.

White Rose Maths Calculation Policy

White Rose primary maths resources are designed to instil a deeper understanding of mathematical concepts using a full range of fun, inspiring classroom activities and this is one of the reasons why we at St James' follow the White Rose Scheme and believe that provides a diverse curriculum that allows children to grow and flourish together.

Teaching for Mastery

We use a mastery approach to maths teaching. This is a research-driven teaching and learning method that meets the goals of the National Curriculum.

What does it mean in practice? In summary, a mastery approach...

- **Puts numbers first:** Our schemes have number at their heart, because we believe confidence with numbers is the first step to competency in the curriculum as a whole.
- **Puts depth before breadth:** we reinforce knowledge again and again.
- **Encourages collaboration:** children can progress through the schemes as a group, supporting each other as they learn.

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- **Focuses on fluency, reasoning and problem solving:** it gives children the skills they need to become competent mathematicians.

Concrete, Pictorial, Abstract

At the heart of our mastery approach is the Concrete Pictorial Abstract (CPA) approach. Research shows that when children are introduced to a new concept, working with concrete physical resources and pictorial representations leads to a better understanding of abstract concepts. We use CPA throughout our schemes of learning.

Concrete – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.

Pictorial – children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems.

Abstract – With the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence.

Together, these elements help cement knowledge so pupils truly understand what they've learnt and can apply them to other, unfamiliar mathematical situations. Therefore, this policy is sectioned under concrete, pictorial and abstract to highlight how our children progress with mathematical understanding.

Please refer to the calculation policy attachments for:

- Addition and Subtraction
- Multiplication and Division

Written: October 2023
Review Date: October 2025