ST EDWARD'S CATHOLIC PRIMARY SCHOOL

Calculations Policy

Due for review: ........................................... 23.3.21
Head Teacher: ............................................. Mrs Wakefield
Maths Lead: ................................................ Mrs Underhill

School Mission Statement

St Edward's is at the heart of a community rooted in its core values. Our children, by their actions, grow in the image of God.
Introduction

St Edward’s Primary School has developed a consistent approach to the teaching of written calculations in order to establish continuity and progression throughout the school. An initial emphasis is placed on mental maths and informal written recording, which is practised regularly and is an important part of learning and understanding. More formal written methods follow when a child is able to use a wide range of mental strategies.

During their time at St Edward’s, the vast majority of children will progress steadily through each calculation method outlined in this policy. By the end of KS2, children will have been taught compact methods for each operation.

Aims

Children should be able to choose an efficient method; mental, written or Calculator, appropriate to the given task.

Children are encouraged to:

- Use models, images and manipulatives to aid conceptual understanding
- Establish mental methods, based on a good understanding of place value
- Use formal jottings to aid mental calculations
- Develop the use of empty number lines to help mental imagery and aid recording
- Use partitioning and recombining to aid informal methods
- Introduce expanded written methods
- Develop expanded methods into compact standard written form
Choosing a calculation method:

Children need to be taught and encouraged to use the following processes in deciding what approach they will take to a calculation, to ensure they select the most appropriate method for the numbers involved:

1. Can I do it in my head using a mental strategy?
2. Could I use some jottings to help me?
3. Should I use a written method to work it out?

To work out a tricky calculation:

- **Approximate**,
- **Calculate**,  
- **Use the inverse to check**

When are children ready for written calculations?

**Addition & Subtraction Steps to Success!**

1. Do they know addition and subtraction facts to 20?
2. Do they understand place value and can they partition numbers?
3. Can they add three single digit numbers mentally?
4. Can they subtract two digit numbers mentally?
5. Can they explain their mental strategies orally and jot them down if necessary?
Multiplication & Division Steps to Success!

1. Do they know the 2,3,4,5 & 10 times tables?
2. Do they know the result of multiplying by 1 & 0?
3. Do they understand the concept of zero as a place holder and can they explain it orally?
4. Can they multiply two digit numbers by 10 & 100?
5. Can they double and halve two digit numbers mentally?
6. Can they use multiplication facts they know to derive mentally other multiplication facts that they do not know?
7. Can they explain their mental strategies orally and record them using informal jottings?

Providing a context for calculation:

Being able to reason and problem solve is at the heart of our curriculum. It is important that any type of calculation is given a real life context or problem solving approach to help build children’s understanding of the purpose of calculation, and to help them to recognise when to use certain operations and methods when faced with problems. This must be a priority within calculation lessons.