Sebert Wood Primary School
Maths (including Calculation) Policy

Date reviewed: Spring Term 2025	
Date to be reviewed: Spring term 2026	*(or as and when required)*
Approval by: Headteacher	
Signature of Headteacher:	

Purpose

At Sebert Wood Primary School, we value the importance of providing all children with opportunities to engage in mathematics. This policy outlines the teaching, learning, planning and assessment of the mathematics taught and learnt. The school's policy for mathematics is based on the statutory objectives set within the National Curriculum 2014. All staff will also understand the sequencing of teaching and progression of methods relating to the four rules of calculation – addition, subtraction, multiplication and division. This will allow consistency across the school, aiding children's progression in learning and transition between classes and key stages.

Our Vision

Maths is a fundamental skill which is used in everyday life; it is therefore important for children to develop a positive and passionate attitude towards maths, which will stay with them for the rest of their lives. We want teachers and pupils to enjoy and be enthusiastic about maths and for teachers and pupils to have high expectations, which is reflected in the quality of their work.

Intent

Our aims in mathematics are that all children will:

- Understand the importance of maths
- Have a positive attitude towards maths
- Become independent mathematicians
- Have a strong understanding of various calculation methods, using these methods accurately and confidently
- Develop knowledge, understanding and fluency of mathematical concepts
- Enable pupils to think critically and communicate their understanding in order to reason mathematically, using the correct mathematical language

- Adapt learnt mathematical skills in different contexts across the curriculum
- Deepen understanding through the use of concrete manipulatives and pictorial representations
- Develop problem solving skills to real and unfamiliar situations beyond the classroom and in everyday life situations
- Recognise that making mistakes is an essential part of the mathematical process

Implementation

To ensure high quality teaching and learning of mathematics, pupils are taught maths every day. Teachers ensure progression throughout the year groups by making reference to the Calculation Policy for written methods. Short term planning based on the small steps from the 'White Rose' scheme outlines the topic area/strand with specific learning objectives and success criteria to be taught that week, vocabulary, stem sentences and manipulatives to be used, oral and mental starters, main teaching activities and extension activities.

Maths in the Early Years Foundation Stage

In the EYFS, children are encouraged to develop their own early mathematical knowledge and their efforts are valued and praised. Our objectives for those working in Early Years are to ensure that all children develop firm mathematical foundations in a way that is engaging, and appropriate for their age. There are six key areas of early mathematics learning, which collectively provide a platform for everything children will encounter as they progress through their maths learning at primary school and beyond. The six areas of early mathematics learning are:

Cardinality and counting – understanding that the cardinal value of a number refers to the quantity, or 'howmanyness', of things it represents
Comparison – understanding that comparing numbers involves knowing which numbers are worth more or less than each other
Composition – understanding that one number can be made up from (composed from) two or more smaller numbers
Pattern – looking for and finding patterns helps children notice and understand mathematical relationships
Shape and Space – understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking
Measures – comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later

A wide variety of opportunities are provided for the children to engage in maths activities in both indoor and outdoor environments:

- Engaging maths opportunities linked to a whole class topic
- Weekly planned adult-focussed activities
- Opportunities to explore number and numerical patterns using a variety of manipulatives and objects

In the EYFS, children will begin to learn using the 'White Rose' approach, and will additionally use 'Mastering Number' to enhance the children's learning to aid with transition into Year 1.

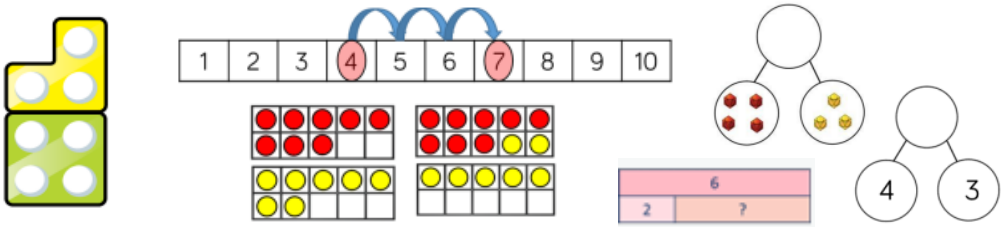
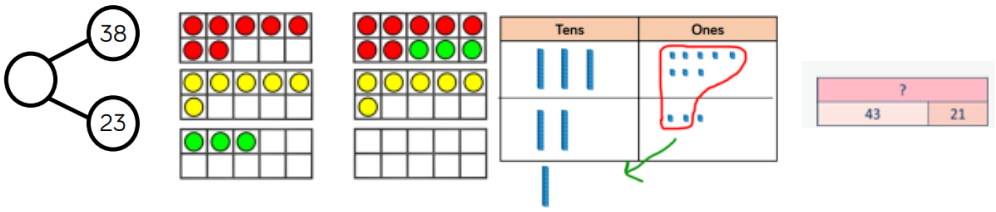
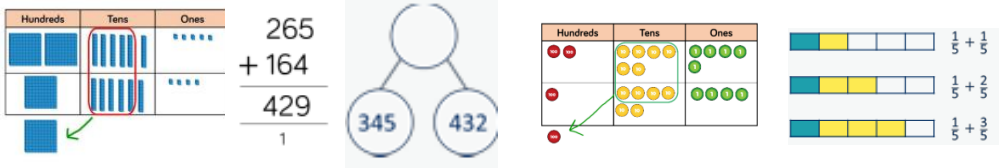
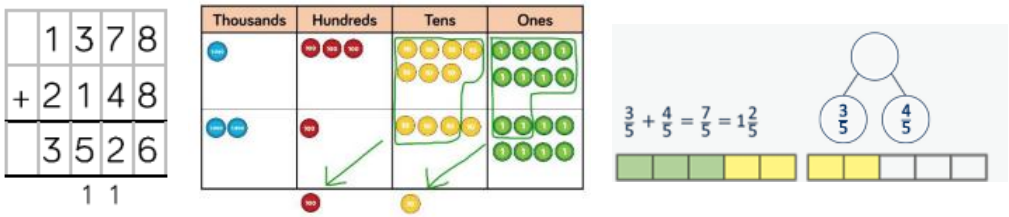
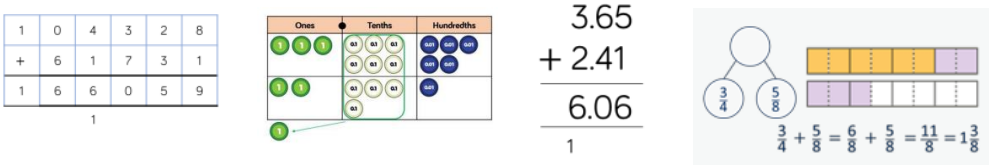
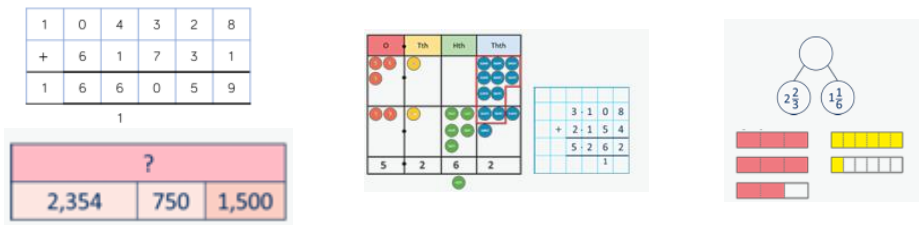
Maths in Years 1 to 6

At Sebert Wood, we have adapted the 'White Rose' approach and we follow the curriculum progression set out by 'White Rose'. The scheme provides teachers with exemplification for maths objectives and these are broken down into fluency, reasoning and problem solving, key aims of the National Curriculum. They support a mastery approach to teaching and learning and have number at heart. They ensure teachers stay in the required key stage and support the idea of depth before breadth. They advocate pupils working together as a whole group and provide plenty of time to build reasoning and problem solving elements into the curriculum. Teachers are encouraged to complement the scheme with other useful resources, such as Nrich.

Pupils' mental maths is fundamental to the application of skills in other areas of mathematics. This ranges from number bonds to times tables and division facts. Therefore, across Years 2 to 6, the pupils take part in Times Table Rockstars to encourage and maintain the knowledge of these mental maths areas. In addition, Years 3 and 4 take part in Maths Badges and Years 3 to 5 utilise the online programme, Mathletics.

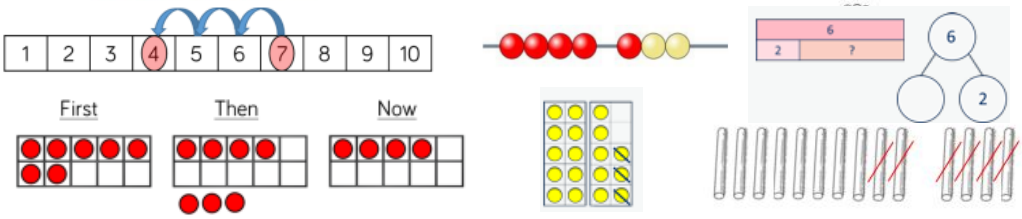
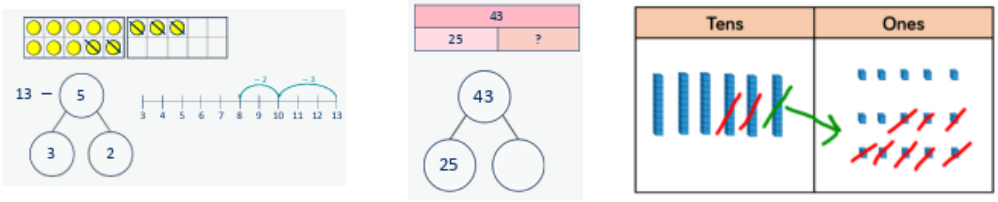
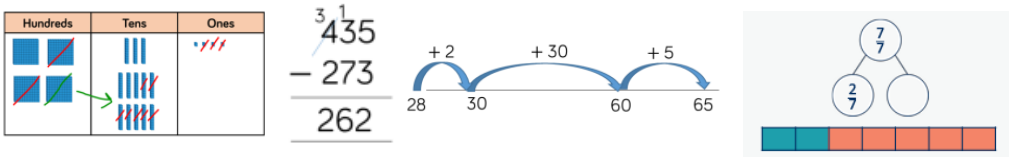
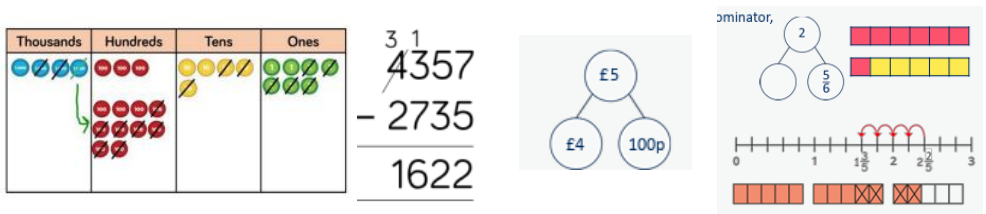
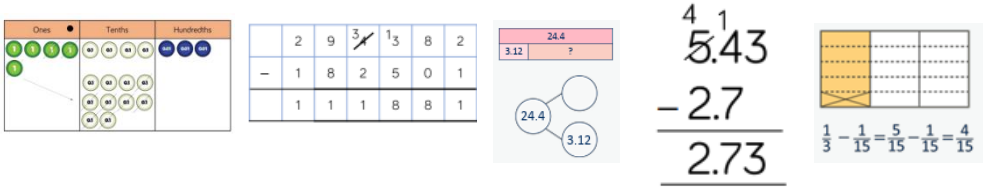
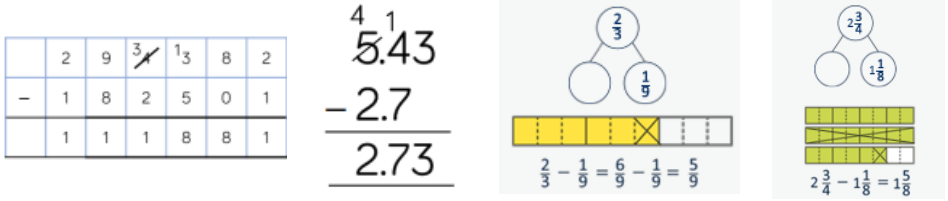
Below is an outline of the concrete manipulatives, pictorial representations and abstract calculation methods that each year group will teach for the four operations.

Addition

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	

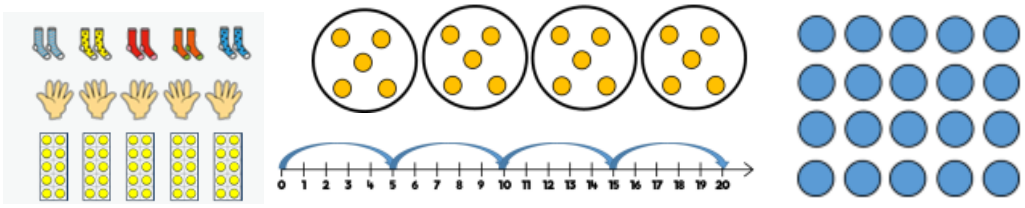
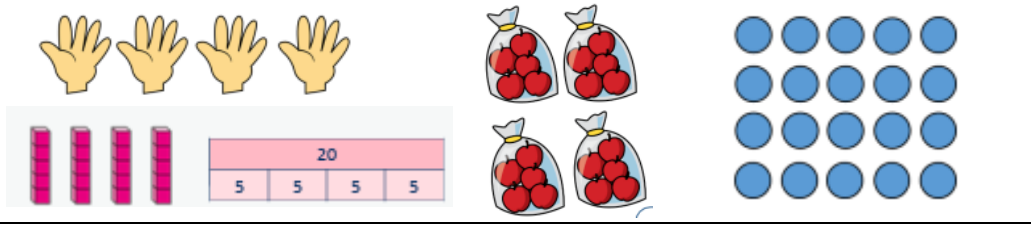
Throughout all teaching of written methods for addition, children need to be given time to practise and consolidate skills. They must be given opportunities to apply these written methods, at whatever stage they may be at to solving real-life problems, in the context of measures and money, and within the other strands of mathematics.

Subtraction

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	

Throughout all teaching of written methods for subtraction, children need to be given time to practise and consolidate skills. They must be given opportunities to apply these written methods, at whatever stage they may be at to solving real-life problems, in the context of measures and money, and within the other strands of mathematics.

Multiplication

Year 1	
Year 2	
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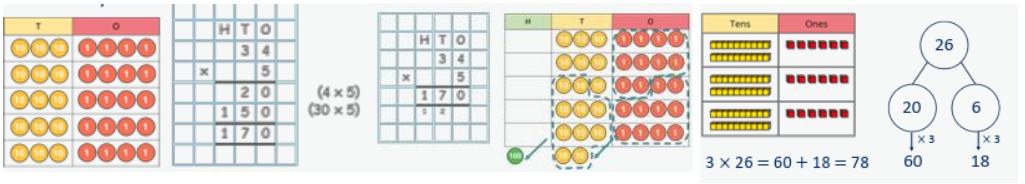
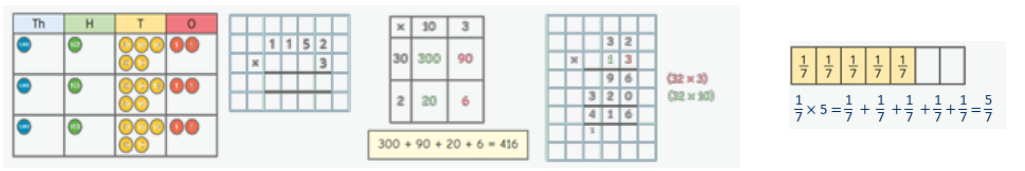
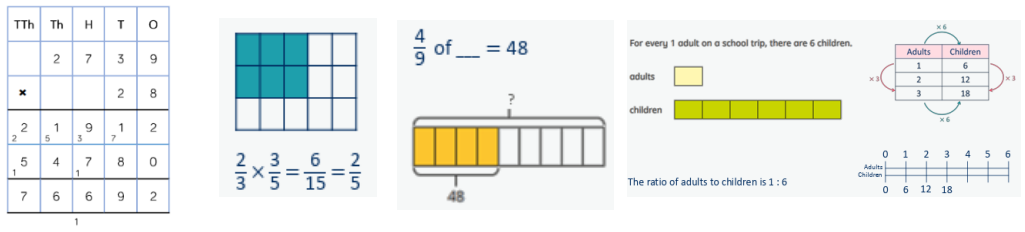
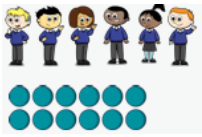
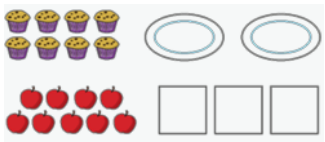
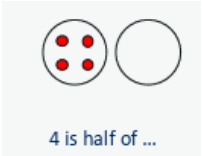
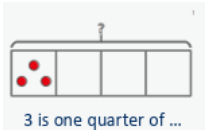
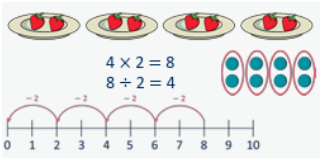
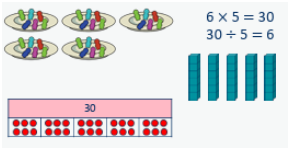
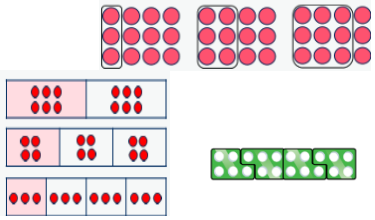
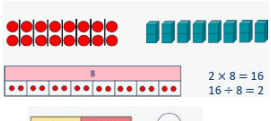
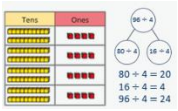
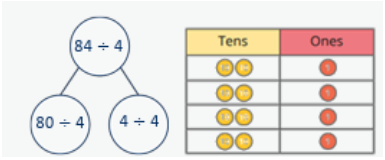
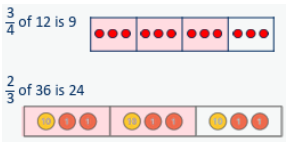
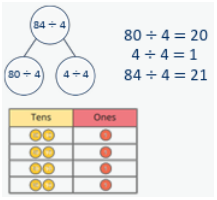
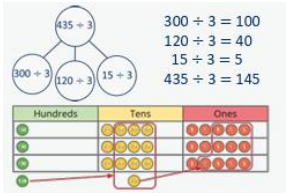
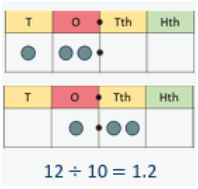
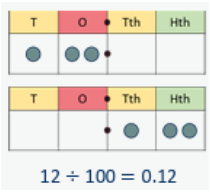
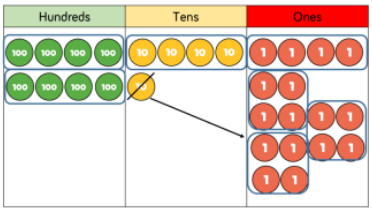
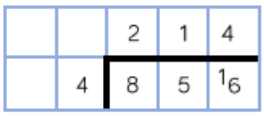
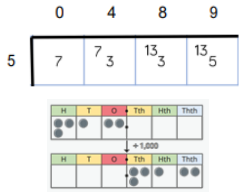
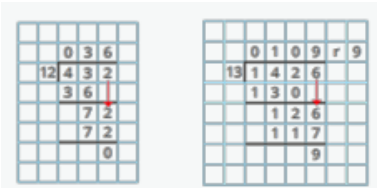
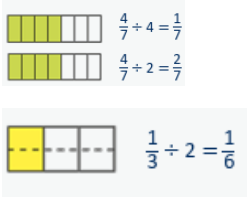
Year 4	
Year 5	
Year 6	

Throughout all teaching of written methods for multiplication, children need to be given time to practise and consolidate skills. They must be given opportunities to apply these written methods, at whatever stage they be at to solving real-life problems, in the context of measures and money.

Division

Year 1	   
Year 2	  
Year 3	   
Year 4	   
Year 5	  
Year 6	  

Throughout all teaching of written methods for division, children need to be given time to practise and consolidate skills. They must be given opportunities to apply these written methods, at whatever stage they be at to solving real-life problems, in the context of measures and money.

Vocabulary

Addition:
sum, add, altogether, increase, more than, total
We say 'sum' as well as 'answer'.

Subtraction:
difference, subtract, take away, minus, less than, decrease, reduce
We say 'difference' as well as 'answer'.

Multiplication:
times, multiplied by, groups of, factor
We say 'product' (the result of multiplying one number by another) as well as 'answer'.

Factor – a number that multiplies with another to make a product
3 X 4 = 12
3 and 4 are factors
12 is the product

5 X 4 = 20
5 is the group size
4 times is what I am doing
I have 5 four times
5 multiplied by 4
4 lots of 5
4 groups of 5

Division:
divided by,
We say 'quotient' (the result of a division) as well as 'answer'.

Other Vocabulary:
Zero

Negative numbers (we only say 'minus' when learning about temperature)

Numerator
Denominator
We say 'improper fraction' (not top heavy)

We say 'exchange' – we do not say 'regroup' or 'borrow'.
Exchange – change a number or expression for another of the same value

Calculation/number sentence/expression (2 + 4 = 6)

We say 'equal', 'the same as', 'is equal to'
20 = 9 + 11

Assessment

Assessment opportunities are embedded into every lesson and the teacher monitors and adapts lessons accordingly. Such opportunities include:

- Verbal feedback given by the teacher during activities
- Differentiated questioning by the teacher where listening to responses indicates level of understanding
- Self-assessment e.g. through evaluation of a piece of work, marking own work, setting own targets
- Peer assessment

At the end of each term (excluding Year 1 Autumn and Year 6 Summer), children will complete formative assessments covering arithmetic and reasoning. The results will be used by teachers to revisit areas needed and to help plan going forward. Teachers will upload individual performance results onto the NFER Hub for the Maths Lead to gain question-level analysis data from. The Maths Lead will then meet with year groups to discuss gaps and interventions that may need to take place.

Impact

The intended impact of this maths policy on our school is:

- Consistency in teaching is gained through a clear and progressive framework
- Pupils will enjoy maths, using a variety of manipulatives and representations
- Pupils, of all abilities, will be able to succeed in all maths lessons because work will be appropriately scaffolded
- Pupils will develop a wide range of mathematical language
- Pupils will have a good knowledge of how to work out calculations using the most efficient method for them
- The % of pupils working at age-related expectations within each year group, will be at least in line with national averages
- The % of pupils working at Greater Depth within each year group, will be at least in line with national averages
- There will be no significant gaps in the progress of different groups of pupils (e.g. Pupil Premium vs non-Pupil Premium)

Roles and Responsibilities

The subject leader is responsible for improving standards of teaching and learning in mathematics through:

- Providing leadership and direction in CPD
- Analysis of outcomes and monitoring pupil progress
- Evaluating planning and work scrutiny
- Conducting pupil perception surveys/interviews
- Purchasing and organising resources

Monitoring

- Monitoring takes place regularly by the Maths Lead, through sampling children's work, talking to children about maths, lesson observations and assessment data. Feedback will be given to the members of staff, SLT and link governor.
- Link governors will carry out monitoring visits and activities, and speak to the Maths Lead. Information gathered will be reported to the Maths Lead, SLT and the governing body.