



Saint Pierre School,
16 Leigh Road, Leigh-on-Sea, Essex SS9

Calculation Policy

Policy Owner (Position)	Last Updated By (Name)	Date of Last Review	Date Next Review Due
Deputy Head	Poppy Read	Dec 2024	Dec 2026
Read in Conjunction with: Assessment policy Curriculum policy Curriculum Guides			

Maths Calculation Policy

Introduction

At Saint Pierre School we see Maths as being an important focus of the curriculum due to it being embedded within other subjects and the cross-curricular links it has. At Saint Pierre School we use the 'White Rose Maths' scheme of work as the basis for our planning and teaching. We use this scheme alongside other resources and methods to ensure our children develop the core skills of Maths at the centre of their learning each year whilst developing and progressing their knowledge and understanding.

White Rose Maths follows three main stages to learning in their approach to teaching Maths: concrete, pictorial and abstract.

Concrete: This is where physical objects are used and manipulated by the pupils to help calculate answers and solve problems. The physical movement and manipulation of the objects ensure that children are playing an active role and support those kinaesthetic learners.

Pictorial: This is where the physical objects used in the first stage (concrete) have been represented in a picture form. By using pictorial representations, the children can make links to previous learning in which they were calculating the answers using a physical form and manipulating the objects. This step is the bridge between the concrete step and the step that follows; abstract.

Abstract: This is the final stage in which children's previous learning leads to. During this stage children will be exposed more to the written symbols of the four operations in Maths (+, -, \times , \div) and vocabulary for addition, subtraction, multiplication and division will be developed and extended further.

At the focus of the White Rose Maths scheme is that children learn the fluency skills in all areas of Maths whilst covering the three stages of learning before moving on and developing their reasoning and problem-solving skills to develop a higher level of thinking.

Aims:

- To teach all areas of maths and ensure children develop their fluency skills using the three stages of White Rose Maths.
- To apply Maths to other subjects including making cross-curricular links.
- To show children there are multiple methods and approaches they can use to help them solve calculations.
- For some children to develop a higher order of thinking and skills through reasoning and problem solving in which will help them to apply to life later on.

Objectives

To enable the children to: -

- Carry out calculations within
- To be able to understand and recognise vocabulary within the four operations and apply these.
- To be able to apply their mathematical skills across other subjects and cross-curricular.
- To be able to explain their thinking and methods used whilst delivering their answers.

Roles and Responsibilities

All teachers, who teach Maths, have the following responsibilities:

- To take part in a bi-annual review of the Maths Calculation policy.
- To ensure that resources used are relevant and appropriate to the needs of the children;
- To lead on the evaluation of the Maths policy and programme;
- To ensure that staff have the necessary skills, confidence, knowledge, and resources in order to deliver effective lessons.
- To ensure that they, or anyone working in their classroom to deliver/support Maths, is doing so in line with the school's Calculation policy, and other relevant school policies;
- To contribute to the evaluation of the programme;
- Assessing children's progress against the agreed learning outcomes;
- Communicating with parents when appropriate/necessary.

Working with Parents/Carers

- We recognise that parents/carers are key partners in supporting the children's development with their Maths when doing homework. Methods that we use may have changed over time and therefore the supporting documents will aid parents in understanding how their children are being taught.
- If parents/carers have concerns about any of the content to be covered, we ask that these are addressed to the Head Teacher and Deputy.

Provision

- Our framework will be delivered through a variety of teaching strategies and our Saint Pierre School values.
- In addition to this, Maths must also be taught through cross-curricular links and other activities or school events.
- A whole school approach will be used to implement the framework. This policy has clear links with other school policies aimed at promoting pupil's development.
- In following the framework our pupils will be taught key components of Maths knowledge, skills and understanding.
 1. Developing confidence and responsibility and making the most of their abilities (having high aspirations and being the best they can be).
 2. Developing their mathematical vocabulary.
 3. Applying their knowledge of the four operations to further areas in the mathematical curriculum.

4. Recognising and linking different resources, methods and pictorial representations and then applying their existing knowledge.
5. Being confident and able in their times tables knowledge.
6. Being able to use concrete objects and seeing the link between these, pictorial representations and abstract calculations.
7. Solving problems and explaining their reasoning.

Learning and Teaching

- During daily Maths lessons, an emphasis is placed on active learning through planned discussions, investigations, practical tasks and activities, group-work and problem-solving;
- All teachers will endeavour to provide a safe learning environment through the establishment of clear Ground Rules which are made explicit to the children and reinforced consistently;
- Beyond timetabled Maths lessons, children also will have times tables lessons which focus on this as a core skill that is fundamental to many areas of Mathematics.
- Children are encouraged to share their learning with others, explaining their methods and proving they understand the topics through discussions with the teacher and fellow pupils.
- House Points, Certificates and Postcards are used to celebrate personal achievements with regard to developing positive attitudes to learning and by demonstrating our core values, with parents and carers.
- Maths lessons will also be incorporated in a cross-curricular manner such as in topics, Science and Computing.

Special Needs

- We teach Maths to all our pupils, regardless of their ability;
- Learning opportunities are matched to the individual needs of children with learning difficulties;
- Activities and mastery level tasks challenge our most able pupils to solve problems, evidence their findings and explain their reasoning.

Resources

- Staff share good resources
- White Rose Maths
- Twinkl
- TES
- Classroom Secrets.

Assessment, Recording and Reporting

- Teachers assess the children's learning by making informal judgements as they observe them during lessons;
- Teachers can carry out 'cold tasks' prior to the unit beginning.
- Children undertake termly assessments and at some points end of unit assessments. Children who are in Year 5 will be taking 11+ practise examinations.
- Assessments are analysed through converting scores to standardised scores and the Hodder scale.
- We have clear expectations of what the pupils will know, understand and be able to do at the end of each key stage;
- Maths is included in the termly grade cards and the annual report to parents on pupils' progress.
- Children are sent to a member of the Senior Leadership Team to share outstanding pieces of work.

Monitoring and Review

- The Senior Leadership Team will be responsible for monitoring the standards of children's work and the quality of learning and teaching;
- Observations will be carried out by SLT to monitor the teaching of the subject.
- The Head Teacher and Deputy Head will support colleagues in the teaching of Maths by giving information about current developments in the subject and by providing a strategic lead and direction for the subject in school;
- All staff will be responsible for evaluating strengths and weaknesses in the subject and indicating areas for further improvement.
- SLT will monitor the progression of this subject through book looks and analysing assessment data at the end of each term and year.
- Any issues that arise from Maths lessons will be communicated with the appropriate member of staff by the teachers and this will then be discussed and reviewed by SLT and or SENCO.