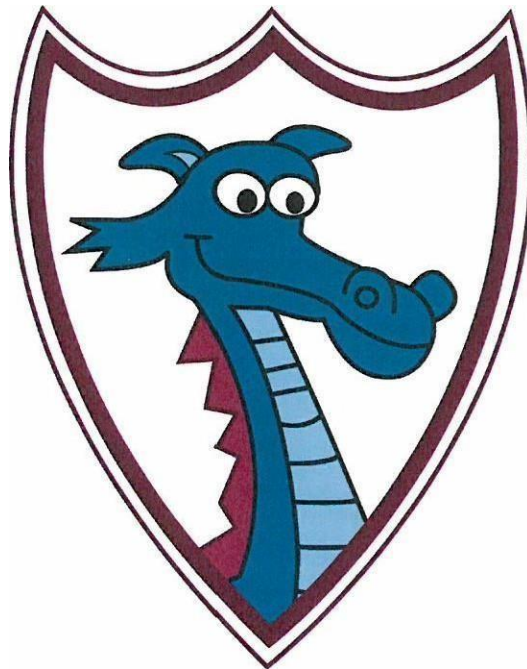


# CORSHAM PRIMARY SCHOOL

## Mathematician Policy



Reviewed: November 2022  
Ratified by the LGC: November 2022  
Next Review Date: November 2024

# CORSHAM PRIMARY SCHOOL

## Mathematicians Policy

### Rationale

At Corsham Primary School, we aim to provide a Mathematical curriculum that contributes to the acquisition of life-long skills and promotes enjoyment and enthusiasm for learning through practical activity, exploration and discussion.

### Aims

The 2014 national curriculum for Mathematics aims to ensure that all Mathematicians:

- Become **fluent** in the fundamentals of Mathematics so that learners have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems.
- **Reason mathematically** by following a line of enquiry and developing an argument, justification or proof using mathematical language.
- Can **solve problems** by applying their Mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

We aim and strive for each Mathematician to be able to:

- Become fluent in the fundamentals of Mathematics through varied and frequent practice with increasingly complex problems over time.
- Develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Follow a line of enquiry, making links and generalisations, and developing an argument, justification or proof using mathematical language.
- Become confident Mathematicians.

In order to meet these aims, we will:

- Provide opportunities for Mathematicians to develop oracy skills by answering in full sentences, leading to extended explanations and deeper thinking.
- Provide a stimulating environment that is conducive to quality learning and teaching, including a Mathematician learning wall.
- Provide the necessary concrete resources and manipulatives for Mathematics to be taught effectively.
- Ensure continuity and progression in Mathematics by using the objectives from the 2014 National Curriculum, supported by the White Rose schemes of learning.
- Have a clear understanding of the objectives being taught and make these clear to the learners so that they can articulate what they are learning, why they are learning it and how they are learning the new mathematical concept.
- Be familiar with the maths progression document and the mixed year group overviews (Broadwood only).
- Plan a range of teaching experiences that develop and extend pupils' learning.
- Provide a range of teaching strategies that will meet the needs of individuals and their learning styles.
- Engage children in practical activities and games using a variety of resources.
- Assess the short and long term needs of the learners through the use of Assessment for Learning, White Rose end of block assessments and summative assessments twice a year.

## **Teaching and Learning**

All teaching staff and those involved with pupils' learning of Mathematics, share the desire to achieve high standards through effective Teaching and Learning.

### **Planning**

- Corsham Primary School follows the 2014 National Curriculum objectives, and teachers use the White Rose schemes of learning to support the teaching of these objectives.
- White Rose planning gives details of the main objectives to be covered each term. They ensure an appropriate balance and distribution of all areas of Mathematics. At Broadwood, the mixed year group planning is followed alongside White Rose.
- Short term planning is based on identified Learning Objectives in the form of a title and is thoroughly planned to ensure differentiation and progression.
- The Mathematician objectives are recorded on the weekly planning to ensure that progression is evident and where appropriate, opportunities for revisiting previous learning (in the form of starters, interventions and focus groups), fluency, varied fluency and reasoning and problem solving are planned for.
- Weekly plans are evaluated daily and formative assessment is used to make adjustments to suit the needs of the learners.

## **Delivery**

Our approach to teaching Mathematics is a whole school philosophy:

- There is a daily dedicated Mathematician lesson in each class and where possible, this takes place in the morning.  
In order to allow maximum opportunities for interaction and development of Speaking and Listening skills, learning tables are arranged in horse shoe configurations from the Summer Term of Year 1. All children should be able to see the teacher, as well as each other.
- We use a range of learning and teaching strategies with interactive Speaking and Listening activities alongside whole class and group learning.
- We ensure that ICT is used as a tool to support, engage and extend the learning and teaching of Mathematics.
- The emphasis on pupil's learning begins with practical examples leading onto informal jottings and mental strategies, and finally to formal representations and methods as detailed in the calculation policy.
- We ensure that opportunities to develop reading skills across the curriculum are utilised. Please also refer to the Teaching and Learning policy for further guidance.

## **Assessment**

The transfer of Mathematics records and information between class teachers and schools is essential to ensure continuity and progression throughout a pupil's school career. Assessment for Learning provides opportunities to enable the teacher to facilitate learning to best meet the needs of the Mathematicians.

At Corsham Primary School, the following assessment procedures for Mathematics occur:

### **Daily Assessments**

- Daily evaluations of learning are recorded on lesson plans and these evaluations are used to plan subsequent steps and lessons.
- Formative assessments are made during lesson activities to make instant assessments of where the learners are and these assessments are recorded on Insights Tracker.
- Feedback (either written or verbal) reinforces and extends children's understanding and responds to pupils' learning. It also highlights how the child can move their learning forwards.
- Pupils self - evaluate their learning against the learning objective and success criteria, using the school's traffic light system.

## **Termly Assessments**

- Ongoing Formative assessments are recorded on Insights tracker once a term based on teacher assessments and our formal assessment procedure.
  - Those Learners not making expected progress are identified by the teacher and given appropriate support.
  - Coverage of mathematical topics is highlighted on insights tracker and follows the White Rose scheme of learning.
  - Summative assessments are carried out twice a year, alongside end of block assessments throughout the year.
- Termly (x3) progress reports to Parents.

## **Yearly Assessments**

- Year 2 and 6 SATs
- End of year reports to Parents
- Baseline assessment in the Foundation Stage
- Summative assessments twice a year
- Year 4 times table check

All of the above is monitored by the Lead Mathematicians and other members of the Senior Leadership team to assist in identifying areas for development as well as maintaining an overview of pupil progress across the school.

Evidence of mathematicians learning can be found in books and on display in classrooms. Insights tracker records the attainment of all pupils. The lead Mathematicians monitor the delivery of the curriculum, the progress being made and the engagement levels of the learners.

Vulnerable groups are monitored and interventions are used if progress or attainment is not at the expected rate.

## **Resources**

- Essential resources for daily activities are kept within each classroom and are easily accessible to the children.
- Interactive displays are in all classrooms which enable children to practise concepts taught in mathematics lessons and key mathematical vocabulary is displayed.
- The majority of larger mathematical equipment is stored centrally on both sites.
- Each class has an interactive whiteboard which is used as a teaching tool to teach new mathematical concepts, consolidate learning and to solve problems.

- In the central resources there are Mathematic Dictionaries available to aid understanding of key concepts.
- Each classroom has a learning wall showing current mathematical methods to support Mathematicians in their learning.

## **Monitoring**

The lead Mathematician will:

- Inspire an exciting and creative approach to mathematician teaching.
- Monitor the standards of children's learning and the quality of teaching in mathematics, through scrutiny of pupil books, observations of lessons and pupil conferencing. Support colleagues in the teaching of mathematics, by being informed about current developments in the subject and by providing a strategic lead and direction for the subject in the school.
- Report regularly, to Governors and senior leaders, on the achievements and standards and the quality of the provision in mathematics across the school.
- Review, order and maintain resources required for the teaching of mathematics.
- Regularly evaluate the maths scheme of work and amend as necessary.

## **Success Criteria**

- Through learning walks and pupil conferencing, it is evident that children enjoy Mathematics and are developing the necessary strategies and skills to become confident in Maths.
- Through monitoring of planning, it is evident that a range of mathematical skills are being planned for and taught throughout the school with emphasis placed upon Speaking and Listening, fluency, reasoning and problem solving activities.
- Through monitoring planning and flipcharts, it is evident that teachers' timetables reflect that appropriate time and priority is being placed on Mathematics in the curriculum.
- Through monitoring of planning, it is evident that planning reflects a variety of learning and teaching styles as well as opportunities for using and applying mathematical skills during discrete Mathematics lessons and across the curriculum.
- ICT is used as a learning and teaching tool.
- When visiting classrooms, it is evident that teachers provide a stimulating environment (including a learning wall) that promotes all aspects of learning in Mathematics.
- During formal and informal discussions, it is clear that teachers are confident with their planning and delivery of Mathematics and receive necessary training.

- That pupil achievement in Mathematics is at least, in line with the National Average, with children making outstanding progress, demonstrated through SATs and ongoing teacher assessments.

## **Equal Opportunities**

At Corsham Primary School, we are committed to equal opportunities for all learners. We will ensure equal access to the Mathematics curriculum by providing learning opportunities for every child regardless of their ability level, gender, race, cultural background or EAL status.

When writing and reviewing this policy staff have completed an Equality and Diversity Impact Assessment in order to ensure it complies with equality obligations outlined in anti-discrimination legislation. We believe the policy positively reflects the aims and ambitions identified in Corsham Primary's Single Equality Scheme.