

Crockerton Church of England Primary School

Potters Hill, Crockerton, Warminster, Wiltshire, BA12 8AB

Web: www.crockerton.wilts.sch.uk Tel: 01985 212168

Headteacher: Mrs Nic Ilic

VISION STATEMENT

Together we learn and grow, beyond expectations, guided by our faith and values.

Be joyful. Grow to maturity. Encourage each other. Live in peace and harmony.

2 Corinthians 13:11

Maths Policy

This is a single policy which has been written on behalf of the Governing Body for Crockerton Church of England VA Primary School.

Written	April 2019
Reviewed	January 2023
Author	Mathematics Subject Leader
Next Review	January 2025

We are committed to safeguarding and promoting the welfare of children and young people

Introduction

This policy outlines the teaching and learning of Mathematics at Crockerton Church of England Primary School. Adopting a **teaching for mastery** approach supports the idea that everyone can do maths. All pupils are encouraged by the belief that by working systematically and deepening their mathematical knowledge, they can be successful. At Crockerton C of E Primary School, the use of Can Do Maths as a model for planning, teaching and assessment of mathematics is used in each class from EYFS to Y6.

The mathematics curriculum aims to enable all children to develop a positive attitude toward mathematics and to appreciate its practical applications in life and develop problem solving skills and the ability to use mathematical language effectively and accurately. The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics
- reason mathematically
- solve problems by applying their mathematics.

Intent

Through systematically planned lessons, all pupils develop their reasoning and problem-solving skills. They develop **fluency** and **arithmetical proficiency** by working through small steps of learning in each lesson. Maths lessons provide a focus for a skill or concept to be developed, allowing pupils to **deepen their understanding** and build on **prior knowledge**.

Pupils develop their understanding, vocabulary and application of:

- Number and Place Value
- Calculation
- Geometry
- Measures
- Algebra
- Fractions, Decimals and Percentages
- Ratio and Proportion
- Statistics.

We aim for all children to be:

- able to recall quickly and accurately basic number facts
- fluent in applying quick, efficient written and mental methods of calculation.

Implementation

Through daily maths lessons and Maths-On-Track sessions, as well as daily times table or number bond practice, pupils develop **mathematical mind-sets and habits**.

- Daily maths lessons are taught through systematic units of learning that introduce and revisit previous learning. Pupils work through a process to deepen learning in every lesson, starting with 'What is it? What is it also?' 'What is it not?' and 'What problems can I solve?'
- All teachers use concrete and pictorial representations- to teach conceptual understanding of mental and written calculation methods.
- The Mathematics Curriculum prioritises time for developing conceptual understanding of calculation methods and learning facts (Maths Lessons) and time for **deliberate practice** of calculation methods and recalling facts.
- Maths on Track (MOT) provides daily opportunities to consolidate and/or revisit previous learning, ensuring that skills and concepts remain fresh.

Impact

- All teachers are confident and skilled to teach mental methods (in your head or with jottings) and written calculation methods.
- All children have a secure understanding of mental and written methods of calculation suitable for their stage of learning.
- All children choose appropriate calculation methods depending on the numbers.
- All children can recall, understand and make connections using facts suitable for their stage of learning.

Planning, Teaching and Learning

All units and lessons follow the 'Can Do' Maths programme. Planning is accessed online, however, teachers annotate and adapt where necessary to meet the needs of pupils within their year groups. In mixed age classes, pupils are taught in their Year group to allow for focussed and targeted teaching and learning. This allows teaching staff to deliver bespoke and age appropriate learning. The learning objectives are linked directly to National Curriculum for Mathematics, and the skills progression throughout units and Year groups are carefully matched to age expected outcomes.

EYFS lessons follow the same process through lessons and units. Pupils in the EYFS develop their mathematical learning through daily maths lessons and deepen their mathematical skills through continuous provision in the EYFS learning environment.

Use of Mathematical vocabulary is a key component of mathematical learning. As pupils engage in each unit of learning, corresponding vocabulary is explicitly taught and used by pupils. By ensuring that correct vocabulary is used by pupils in explaining their learning, we can ensure that pupils are effective in demonstrating their mathematical understanding. Pupils follow a language model of 'What will I hear? What will I say?' as well as generated and stem sentences used in all lessons.

Times tables are taught and learnt from term 3 in Year 2. Daily practice sessions allow additional time for pupils to embed tables and for younger pupils, number bonds. During tables sessions pupils learn multiplication and division facts for each table taught. These are taught and tested daily from the Summer term of Year 2 through to end of Year 4. Times Table passports are used in Key Stage 1 and 2. In Years 5 and 6 passports are also used to consolidate learning, and are tested once a week in small groups.

Assessment, Recording and Reporting

During maths lessons, teachers assess learning through the deepening, sequential process of the lesson. As children work through the guided aspects of learning, teachers and any classroom assistants work alongside pupils to identify secure application and support where appropriate. Observations of pupils' learning, application of skills and areas to develop are identified on conferencing sheets, which scaffold on-going assessment. Conference sheets are consistently monitored by teaching staff and the Maths Subject Leader to ensure all pupils' needs are identified and addressed.

A range of assessment papers are used at the end of units, and as pupils move into the next year group, Ready to Progress assessments indicate pupils' performance at the end of the academic year (or the start of the new one). Data from these assessments provides Question Level Analysis, which further inform any gaps in learning, thus informing future teaching. Specific unit quizzes are also used to assess pupil's understanding and skill application. PUMA maths assessments are used as an additional tool to identify attainment and progress. The Schools' pupil data tracking system, Target Tracker, is updated with summative assessments at fixed periods during each academic year. Pupils information that is entered into the tracking system is directly linked to the range of assessments used, as well as the class teacher's direct knowledge of pupils.

Statutory assessments are completed in Mathematics at the end of EYFS, Year 2 and Year 6. Pupils in Year 4 complete the Multiplication Tables Check. Baseline assessments in Mathematics are also statutory for pupils starting school in EYFS within the first 6 weeks of their start date.

The Head Teacher and Mathematics Subject Leader are responsible for monitoring the Mathematics planning within our school.

Monitoring and review will be carried out by the Head Teacher, Mathematics Subject Leader and shared with the Mathematics Governor.

This process includes:

- Monitoring of medium and weekly planning and feedback (conference marking sheets)
- Classroom drop-ins and feedback
- Book looks, and pupil voice
- Analysis and interpretation of data
- Pupil Progress meetings.

Reporting to parents will happen in the Autumn and Spring Term through Parent-Teacher meetings, with an annual report in the Spring term and a summary of the year's attainment and progress, plus any formal assessment results, in the Summer term.

Management of Mathematics

The Governing Body will:

- monitor to ensure subject policies are up to date
- monitor information available through the school website.

The Head Teacher will:

- ensure there is an up-to-date policy in place
- ensure statutory obligations are met for the subject.

Subject leader will:

- ensure that all teaching staff are familiar with the most up-to-date curriculum knowledge of the subject
- monitor that the skills are being taught across each year group and that progression is planned for
- liaise with school budget holder(s) to ensure Mathematics is well resourced and relevant
- monitor the work completed in books
- lead Professional Development Meetings with a focus on Mathematics
- ensure that they have the most up-to-date understanding of their subject
- monitor assessment data within the subject, providing support and input to classes, where deemed necessary.

Class Teachers will:

- ensure that all skills are being taught within the subject and that they are progressive
- ensure they have the most up-to-date knowledge of the curriculum or seek advice to find the relevant information
- accommodate a range of learning styles
- differentiate tasks to suit the individual learners ensuring that challenge is appropriate for each child.

Support staff will:

- adapt tasks to allow access for all children
- report any needs of children to the class teacher.

Pupils will:

- share their views on the subject when asked
- engage in activities in a manner that keeps themselves and others safe
- engage in activities in a respectful and tolerant manner.