Cragside Church of England Primary School

Maths Policy

Revised: January 2026

Date of next Review: January 2027

Related Policies/Documents:

- Calculations Policy
- Assessment Policy
- Homework Policy
- School Value Statement

Vision Statement

Rooted in our Christian values, our vision is to nurture every child to become a confident, fluent, and resilient mathematician. We aim to develop mastery through curiosity, creativity, and a deep understanding of number and pattern, empowering pupils to reason, problem-solve, and make meaningful connections across their learning. We are committed to ensuring that all children are included, valued and supported from their own individual learning points, enabling every learner to experience success and joy in mathematics. We encourage our pupils to recognise the importance and relevance of mathematics in the world around them and to use their skills with confidence and joy.

Introduction

At Cragside Church of England Primary School, we seek to live out the Christian and British values which are at the heart of our school and expressed in our mission statement, our school value statement and the set of SHINE BRIGHT code of conduct we have at school. Our constant and relentless drive is that there should be **high achievement for all** at Cragside.

This policy describes our values and philosophy in relation to meeting the needs of all mathematical learners at Cragside. It outlines the framework within which all staff work and gives guidance on planning, teaching and assessment. It is designed to describe how the school intends to meet the needs of mathematics learners of all ages, groups and abilities.

Why teach Maths?

It is enjoyable & valuable subject:

- It is used to analyse and communicate information
- It teaches children important skills for life
- It is used in a variety of ways in cross curricular subjects

"Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject" (national curriculum).

The Aims of Maths at Cragside CE Primary School

The national curriculum states that children need to be fluent in the fundamentals of mathematics; reason mathematically and solve problems applying their mathematics.

At Cragside we hope to:

- Develop deep and lasting understanding of mathematical procedures and concepts
- Develop a positive attitude to Maths by presenting it as an enjoyable, interesting and attractive subject
- Develop children's confidence in their own ability to understand and tackle mathematical questions
- Develop and scaffold children's use of mathematical vocabulary and their ability to talk about their learning.

- Develop their ability to think clearly and logically with independence of thought and flexibility of mind
- Develop an understanding of mathematics through a process of enquiry and experiment
- Make children aware of the uses of Maths in everyday learning and in the world beyond the classroom including the maths needed for life skills and where this might be applied.
- Encourage persistence through sustained work in mathematics, that requires perseverance over a period of time
- Encourage children to express their mathematical ideas fluently and use its language
- Use the five big ideas to teach for mastery of the subject (see below for further details)

Objectives

To provide a wide range of experiences and tasks appropriate to the needs of the children, so allowing them to develop:

- Mathematical Concepts
- Knowledge and understanding
- Recall of basic facts
- Relevant skills
- Understanding of the world around them
- Pattern and relationships
- A feel for number, calculation & logic
- Problem solving skills
- Vocabulary to talk confidently about learning.
- mastery across the mathematical curriculum

Teaching for Mastery- The Five Big Ideas:

Coherence

Lessons are broken down into small connected steps that gradually unfold the concept, providing access for all children and leading to a generalisation of the concept and the ability to apply the concept to a range of contexts.

Representation and Structure

Representations used in lessons expose the mathematical structure being taught, the aim being that students can do the maths without recourse to the representation

Mathematical Thinking

If taught ideas are to be understood deeply, they must not merely be passively received but must be worked on by the student: thought about, reasoned with and discussed with others

Fluency

Quick and efficient recall of facts and procedures and the flexibility to move between different contexts and representations of mathematics

Variation

Variation is twofold. It is firstly about how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and to develop deep and holistic understanding. It is also about the sequencing of the episodes, activities and exercises used within a lesson and follow up practice, paying attention to what is kept the same and what changes, to connect the mathematics and draw attention to mathematical relationships and structure.

Entitlement

- All children in key stage one and two are taught using the National Curriculum.

- In Nursery and Reception the 'Early Years Foundation Curriculum' is used to support the teaching of Maths

Equal Opportunities

As a staff we need to maintain awareness of and to provide equal opportunities for all our children Including children with SEN, children who are higher attainers and children in receipt of the Pupil Premium. We need to take into account cultural backgrounds, gender and special educational needs both in our teaching, attitudes and the published materials we use with our children. We must ensure:

- All children have the same access to the Maths curriculum regardless of gender, race, cultural and social background and special educational needs

- Our attitudes are always positive and that we treat children equally and encourage an atmosphere of mutual respect

- We use published schemes effectively and where relevant to meet the children's needs

How we support children with SEND in Maths

- Teaching must meet the needs of all children

- Children with special educational needs need to have differentiated activities which allow them to access the curriculum fully and make progress

- The planning should clearly indicate the objectives these children are working on

- Planning should be sufficiently differentiated to cover their needs

- Practical resources may need to be available to secure links between the concrete, the pictorial and the abstract

- Children will be given opportunities to address misconceptions using rapid response feedback either as part of the lesson or soon afterwards. This should be planned and overseen by the class teacher but could be delivered by LSAs.

- Teachers could use Pre- teaching of concepts to give children confidence in a subject before the main teaching session

- Pre teaching of key mathematical vocabulary and stem sentences to support children with SEND in talking about their mathematical thinking

- Scaffolds can be used in the lesson to enable children to access the learning e.g. a times table mat could be used to support children solving times table problems or a mat with the key vocabulary could be used as a reminder on children's desks.

- Where gaps are evident in the children's learning these children should be given immediate intervention to overcome this barrie

- Maths Mentors could be used to meet the needs of Year 6 learners ensuring they reach their potential this could be targeted if appropriate at children with SEND.

Interventions available in this subject are:

- Number stacks
- Rapid response interventions
- Individual interventions planned by the class teacher
- Mastering Number materials (in R-2 as a whole class intervention and 3-6 as individual and group interventions

Additional resources to support children include:

- Practical resources e.g. cubes, counters, numicon, base 10 materials etc

- A variety of representations of calculations e.g. part whole models, bar models etc to support children's understanding of abstract maths

- Word mats & fact mats

- Times table rockstars

- Mathletics

- My Maths

Planning

All staff follow the National Curriculum. For medium and short term planning teachers use the Power Maths (WRM) planning and resources. This is supported by any other resources which give the best possible outcomes for children and which is appropriate for their class. We use teacher assessment, supported by Sonar to inform next steps and identify any gaps in learning. Teachers plan making effective use of assessment based on their observations of the children and their work to ensure individual needs of all children are met fully.

Across the school the teacher directly plans the curriculum to specifically suit the needs of the cohort while taking into account age related expectations.

Weekly planning is done by all staff and can be shared and adapted within year group teams.

Planning is a document which should be used to inform teaching and support learning and progress therefore teachers plan using whichever format is most useful for them. Teachers who are ECTs need to email their weekly planning to the subject leader.

Planning should only include the information which teachers need to deliver their lessons effectively. On the planning staff could include:

- Activities that are differentiated , as needed, using knowledge of the children's current attainment and matched to the children's needs

- Guided sessions (which should be a mini teaching session)
- The key questions that will be used
- Opportunities for assessment for learning
- Key vocabulary and stem sentences which children will need to scaffold talking about their learning.
- A range of opportunities to use mental maths skills across the week. (this may include a mental maths test where appropriate)
- A description of the main teaching.
- Success criteria which should be process related. (this may need to be differentiated)
- Links to resources
- Details of LSA deployment
- Planning should be available as a guide for supply teachers.

Teaching Styles

Maths is approached through a process of investigation, problem solving and enquiry. A variety of teaching styles can and should be used:

- Modelling by the teacher
- Repeated questioning to dig deeper into children's understanding and attainment
- The use of stem sentences
- Problem solving and investigation
- Practical work
- Consolidation and practice
- Mathematical discussion
- Paired/group work
- Mixed ability groups
- Ability groups
- Independent work
- Whole class teaching
- Written work
- LSA led group work
- Use LSAs to 'fill gaps' in children's learning.

Organisation

Maths is taught to all children on a daily basis.

Each day should begin with a 'Morning Maths' session where the children complete an extra maths activity during registration.

Children are taught in mixed ability classes across the school.

The learning objectives for the lesson (or series of lessons) are shared with the children.

The vocabulary that the children will be using is shared with the class and explained

Learning Support Assistants

Time should be set aside prior to the lesson to discuss with the LSA the learning objectives, the activities and their role in the children's learning; this could be done via email or between 8.30 - 8.40.

LSAs should be used to support the learning of children throughout the whole of the maths session

During whole class activities they can: support a group of children, support one child or observe and make notes on children during the session using an A4L grid, or take a group of children out for a differentiated session.

In the main teaching activity they should work with either a group or individual child or take a guided group for differentiated teaching.

LSAs need time at the end of the session to discuss the work of the children they have supported with the teacher this could be written or verbal feedback.

Classrooms and Display

To reinforce and support the children's learning, all classrooms should have a Maths learning wall as well as a number line and number square (which could be on the IWB) appropriate for the age and ability of the pupils. High quality maths learning walls need to be evident in each classroom and children should be made explicitly aware of their usefulness. They could include key vocabulary and reminders for children to support them in their maths sessions. A range of practical resources should be available for the children to use freely to support them with learning.

Resources

The Power Maths (White Rose) materials are used to support planning, teaching and assessment. The NCETM curriculum materials, White rose problem solving and reasoning and Mastering Number materials are also used to support teaching and learning.

Larger practical resources are shared. They are stored in the corridor outside the Year 6 classroom.

Other resources such as Numicon & place value counters, are shared throughout the school in classrooms

Requests for new and additional resources should be made to the subject leader.

Information Technology

ICT is used throughout the school to support teaching and learning in Maths Children are given the opportunity to use a number of suitable programmes to support their work. High quality software stimulates discussion, generates work away from the computer and helps children to explore ideas for themselves. At school we encourage the use of: Times Tables Rock Stars, Twinkl Abacus, My Maths, Mathletics, Sumdog, and Testbase. These can also be useful tools for homework.

Although the teaching of calculator skills is not required by the national curriculum until the end of Key Stage 2 when children are confident with formal written methods, the appropriate use of calculators is

encouraged across school. Children could be taught to use calculators to check their written and mental methods.

Assessment and evaluation

All children undertake formal assessment tasks throughout the year. These will happen at the end of each term and taken from previous SATs in Year 2 and 6 and NFER assessments for Year 1,3,4 and 5. Teacher assessment is used in EYFS.

Children are given targets through the use of Target Tracker and through marking on a daily basis.

When giving feedback, teachers and LSAs are encouraged where possible, to do this verbally and immediately during the session. This will enable children to immediately correct misconceptions. Teachers should use green to highlight the learning objective when children have achieved it. They should use pink to indicate an incorrect answer. Where appropriate, children then respond using 'perfect purple'. This enables the impact of marking and feedback to be seen.

Children at the end of key stage two complete a national SATs assessment.

Children in Year 4 complete the national Multiplication Tables Check in Summer term. 'The purpose of the check is to determine whether your child can fluently recall their times tables up to 12, which is essential for future success in mathematics.' (https://www.gov.uk/government/publications/multiplication-tables-check-information-for-parents/multiplication-tables-check-information-for-parents-text-version--2)

Children in Reception are monitored throughout the year against the ELG and using Development Matters.

During every Maths session teachers should complete some form of formative assessment which is recorded on Target Tracker in an ongoing way.

Tracking Attainment and Progress in Maths

The following terminology is used for consistency and clarity across our school in all subjects. The National Curriculum for Maths has been arranged into a series of age related bands within each phase.

There are three broad sections within these age bands:

Beginning

Pupil learning is chiefly focussed on the criteria for the band. There may be minimal elements of the previous band still to gain complete confidence in

Working Within

Pupil learning is fully focussed on the criteria for the band. This is a teacher best fit decision but could be informed by statement assessments between around 40% and 70% achieved.

Secure

Confidence in all of the criteria for the band. There may be pupil learning still focussed on gaining thorough confidence in some minimal elements but the broad expectations for the band have been met

Each year band has been broken down into six steps:

beginning (b)

beginning + (b+)

working within (w)

working within + (w+)

secure (s)

secure + (s+)

The expectation for all children is that 6 points progress will be made by each child during the academic year.(5 in Year 1)

Parents will be updated about their child's progress and achievement in this subject via the written end of year summative support.

For more information please refer to the assessment policy

Teacher's judgements are moderated throughout the year in moderation meetings.

Teachers will have pupil progress meetings with a member of the leadership team throughout the year to discuss progress and attainment.

Progression and continuity

By following the national curriculum and using Target Tracker and White Rose & NCETM class teachers are aware of the work children have covered previously and will be able to develop work further at the appropriate level. Time should be put aside at the end of the academic year for teachers to handover assessment information to the class's next teacher.

Recording of work

All children record all of their work in A4 squared books. These books are suitable for the age and ability of the child. If it is necessary to use worksheets, they should be trimmed to size and stuck into books without folding them.

All work is dated with the numerical date (e.g. 08/12/2025)

The date and title could be stuck into books where appropriate.

Each piece of work has a title; this should be the learning objective.

Children are encouraged to show all their jottings and working out in their books.

Children should record one digit per square.

If they make an error children should put a line through the error or rub it out and the correct answer written by the side.

Methods of recording can be differentiated to meet the needs of all the children. All children should have the opportunity to present their work in a range of different ways throughout the year.

Feedback

Good feedback should:

- Be given verbally and during the lesson where possible, to facilitate rapid progress.
- Praise the child
- Explain what the child has done well and what they have achieved/learned
- Give clear targets and next steps
- Extend the learning that has already taken place
- Clarify any misconceptions
- Provide a commentary
- Be a dialogue between the teacher and the child
- Provide and opportunity to assess a child progress and inform assessment and planning

To provide the children with continuous and relevant feedback and targets work is marked before the start of the next lesson

Teachers mark using green ink.

A colour coding system is used to mark throughout the school to show children what they have done well. Green highlights strengths in the child's work and should relate specifically to the child's achievement. Pink highlights targets and next steps. 'Perfect Purple' can that the children have acted on feedback. Rapid Response could be done in pencil if this is more appropriate to the child's age or ability.

An incorrect answer should be indicated with pink – children should then be encouraged to correct this beside the incorrect answer using purple

Every piece of work must be marked.

Children should be given time to respond to marking comments if needed

Record Keeping/Reporting,

Copies of formative assessments are kept online on Target Tracker and updated by the class teachers regularly.

Copies of the termly assessments are stored by the class teacher.

Children are set verbal targets in an ongoing way and long term targets are shared on parents evening.

Parents receive a verbal report of their child's progress each term and are given long term targets

At the end of the year parents receive a written report and, in Year 6, a SATs result for their child

Parents and Maths

Parents have a valuable role to play in assisting the children's mathematical learning. The school enjoys and welcomes parents into classrooms throughout the school. Parents are encouraged to

support their child with homework and ensure that it is completed and returned to school on time. Parents receive a half termly curriculum map covering the objectives that will be taught that half term. The calculation policy is available to parents on the school website & parents are given information to help them to support their child in this important subject. Parents are informed of any new developments in Maths. Where relevant, the school offers parents meetings about the calculations policy and other aspects of Maths across the year.

Key Instant Recall Facts (KIRF) documents are given to parents each year so they are aware of key facts that their children will be learning in each half term. Parents are given a picture of what it looks like and advice on how they can help support their children with learning the key information.

Governors

SAT's results are shared with the governing body

Governors are encouraged, where appropriate, to come into lessons and meet with the coordinator to discuss teaching and learning, attainment and progress and any relevant developments in Maths. There are two designated Maths governors who report back to the rest of the governing body to ensure all governors are kept up to date on any developments in Maths

Homework

Homework in Maths is set weekly.

Homework has many purposes it could be used to:

Support the work in class

Revise a concept

Fill a gap in the child's learning

Prepare children for assessments

Encourage enthusiasm and passion for maths

Consolidate existing knowledge and skills

All homework needs to be suitable to the child's ability.

Children have also got access to Times Tables Rockstars (TTRS) and have monthly competitions to help improve their fluency with their times tables.