

Cam Everlands Primary School Mathematics Policy



1. Purpose of the Policy

The purpose of this Mathematics Policy is to outline the vision, principles, and strategies for teaching and learning mathematics at Cam Everlands Primary School. This policy aims to ensure a high-quality mathematics education that enables all pupils to achieve their full potential, develop a love for mathematics, and apply their skills in real-life contexts.

2. Vision and Values

At Cam Everlands Primary School, we believe that mathematics is a vital skill that empowers pupils to think critically, solve problems, and understand the world around them. Our values of respect, trust, honesty, and empathy underpin our approach to teaching mathematics, fostering a positive learning environment where pupils feel valued and supported.

We consider every child's ability when planning and will adapt, scaffold and use manipulatives to support their learning and understanding. This helps us to meet our aim of meeting the needs of each pupil in the school. By doing this, the children will be able to feel that they have achieved which will then lead to more belief and all successes will be

3. Roles and Responsibilities

3.1. Leadership Team

- Ensure that the mathematics curriculum is challenging and meets the needs of all pupils, including those with SEND and EAL.
- Provide ongoing professional development for staff to enhance their subject knowledge and teaching strategies.

3.2. Mathematics Subject Leader

- Oversee the implementation of the mathematics curriculum and monitor its effectiveness.
- Support teachers in planning and delivering high-quality mathematics lessons.

3.3. Teachers

- Deliver engaging and adapted mathematics lessons that cater to the diverse needs of our pupils.
- Provide bespoke, differentiated mathematics activities for those pupils who need additional support beyond scaffolding.
- Assess pupils' progress regularly and provide feedback to support their learning.

3.4. Pupils

- Engage actively in mathematics lessons and take responsibility for their own learning.
- Seek help when needed and participate in opportunities to extend their mathematical understanding.

3.5. Parents and Carers

- Support their children's learning in mathematics at home.



- Engage with the school's mathematics initiatives and attend workshops when offered.

4. Curriculum Implementation

4.1. Curriculum Design

- The mathematics curriculum is designed to cover the National Curriculum objectives, ensuring a balance of fluency, reasoning, and problem-solving.
- We choose to use the White Rose Maths scheme as a basis for our mathematics curriculum.
- Sequences of lessons will be coherent and progressive, enabling pupils to build on their prior knowledge.

Further information regarding specific elements of our maths curriculum can be found in the appendices at the end of this policy.

4.2. Teaching and Learning Strategies

- Use a variety of teaching methods, including direct instruction, collaborative learning, and hands-on activities.
- Incorporate technology and resources to enhance the learning experience.

4.3. Assessment and Feedback

- Implement regular formative assessments to monitor pupil progress and inform future teaching.
- Provide timely and constructive feedback to pupils, helping them to understand their strengths and areas for improvement.

5. Support for Pupils

As part of their teaching, our staff will assess pupils both formatively and summatively. These assessments indicate whether or not a pupil is attaining in line with their chronological curriculum objectives.

5.1. Adaptation and differentiation

- Provide targeted support for pupils who require additional help, including those eligible for Pupil Premium and those with SEND.
- Offer extension activities for more able pupils to challenge their thinking.

5.2. Interventions

- Establish effective intervention programmes for pupils who are at risk of falling behind, ensuring that these are regularly reviewed and adjusted as needed.

6. Monitoring and Review

6.1. Monitoring

- Implement a system for regular monitoring of mathematics teaching and learning through lesson observations, work scrutinies, and pupil voice activities.
- Collect and analyse data on pupil performance to identify trends and areas for improvement.

6.2. Review



- This policy will be reviewed annually to ensure it remains relevant and effective.
- Feedback from staff, pupils, and parents will be considered during the review process.

Conclusion

This Mathematics Policy aims to provide a clear framework for teaching and learning mathematics at Cam Everlands Primary School. By adhering to this policy, we will ensure that all pupils receive a high-quality mathematics education that prepares them for future success.



Appendix A - Arithmetic

We believe that the mastery of arithmetic is the main building block and foundation of Mathematics. Without these fundamental skills, problem solving is impossible. In light of this, all Key Stage 2 classes have arithmetic sessions daily. In KS1, teachers will build to daily arithmetic in the summer term of Year 2, when appropriate.

These sessions should:

- Enable the children to practise age-appropriate methods of all 4 operations.
- Aim to incorporate direct teaching for strengthening specific misconceptions highlighted through the teaching of the main maths curriculum e.g. missing number equations.
- Allow teachers to teach specific key skills to small focus groups to ensure all children have additional opportunities to access the curriculum when needed.
- Consist of 20 minutes a day.

The rest of KS1 will follow the GLOW Maths Mastering Number scheme with 4 sessions weekly.

Appendix B – GLOW Maths

GLOW Maths Mastering Number is a scheme produced by the Glow Maths Hub in partnership with the National Centre for Excellence in the Teaching of Mathematics (NCETM) to support children's secure development of good number sense and number concepts, such as number composition.

The scheme is followed from Reception to Year 2, comprising of 4 sessions a week of around 15-20 minutes a day. In Reception this forms the core Number strand of learning.

Children are exposed to a variety of resources and pictorial representations such as rekenreks, Hungarian number frames and part-part whole models to increase fluency of number recognition, number composition and subitising to allow for manipulation across contexts.

The aim over time is that children will leave KS1 with fluency in number composition, growing their confidence with calculation and a flexibility with number that is effectively applied in a variety of contexts.

Appendix C - Multiplication (times tables)

Maths guidance from the DfE in collaboration with the NCETM (National Centre of Excellence in the Teaching of Mathematics) emphasises the importance of children being able to recognise and apply the structures of multiplication and division in a variety of contexts.

From Year 3, children take part in daily multiplication practise, aiming to strengthen the speed and accuracy of recall of facts in a variety of contexts.

Daily activities include:

- Oral chanting
- Board games
- Pattern spotting
- Online 'speed tests'
- Online activities such as matching multiplication facts

Appendix D - Mastery of the Mathematics Curriculum

We believe that in order to master the curriculum, we need to develop pupil's confidence and to secure their understanding by spending quality time on specific topics.

This will be achieved by all teachers planning in hand with White Rose Maths documents:

- Specific to their year group.



- Ensuring that we develop depth before breadth, adjusting pace when necessary to suit.
- Providing opportunities for all children to work through the schemes as a whole.
- Giving ample time to build reasoning and problem-solving elements.

Appendix E – Expectations of all teachers and HLTAs

- Maths is taught every day: KS2 50 minutes plus 20 minutes Arithmetic and 10 minutes multiplication practise.
- KS1 children will have direct teaching in small groups and given opportunities for independent Maths activities through continuous provision where appropriate.
- Planning covers all Mathematics objectives throughout the year, using the White Maths overview.
- White Rose Maths Hub used for termly medium-term plan (Schemes of Learning) and yearly overview which teachers adapt to suit the needs of their class.
- Within Year 1 and Year 2, Primary Stars Education resources are used when appropriate, which follow the Small Steps, key questions and learning sequences prescribed by White Rose Maths Hub.
- Skills taught in Mathematics are reinforced and embedded throughout other areas of learning, when suitable and appropriate.
- Teachers should ensure that children are exposed to varied fluency, reasoning and problem-solving elements throughout each unit but not necessarily every day.
- Teachers should enable all children to have the opportunity to use concrete objects and manipulatives to help show their understanding and method of calculation.
- Teach children how to build on the concrete approach by using pictorial representations (bar modelling, part-part whole, own drawings).
- Teachers should follow the Teaching and Learning Framework lesson structure which includes progressive modelling – I do, we do, you do.
- Manga High is available for teachers to set Maths based tasks as home learning or for children to explore in-school when appropriate.
- Times Tables are available for practise on Manga High and will either be set by teachers to suit individual needs or explored freely for children in Y2-6.
- Children are encouraged to use timestables.com to practise their tables at home.
- A4 blue squared books are used to record all Maths work.
- A high level of presentation is expected (e.g. 1 digit / operation per square). See Feedback and Marking policy for more details.
- Teachers follow the school's Feedback and Marking Policy for Mathematics marking.
- Assessment for Learning is utilised within all classrooms.
- TA's are used effectively to the benefit of all children across all abilities.
- All staff use the White Rose guidance, including key questions, and annotate as they go, ensuring they are shared with TA's in advance.

Appendix F – Learning Environment

Our classrooms and displays are used as learning tools.

- In the classroom there should be, either on display or easily accessible to children, appropriate resources, particularly concrete and pictorial apparatus to support children to grasp concepts (across the whole school).
- Mathematical vocabulary should be displayed so that children use this in the communication of their understanding.
- Working walls are used to support children's learning of a specific topic and changed regularly.