



Mathematics Policy

Introduction

This policy outlines the teaching, organisation and management of the Mathematics taught and learnt at Christ the King Primary School. The school's policy for Mathematics is based on the National Curriculum for Mathematics, EYFS Framework and relevant research to ensure continuity and progression. The policy has been drawn up as a result of staff discussion, a team approach by the Mathematics Leader and Senior Leadership Team, and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all the teaching staff.

Aims

Each child should have strong foundations of number sense and be able to solve problems mathematically by using the appropriate skills, concepts and knowledge. They should be provided with rich and enjoyable experiences related both to their individual needs and to the wider requirements of society. Children should be able to recall basic facts, be fluent with calculations and apply their knowledge to support new learning.

1. Have a positive attitude towards Mathematics, showing increasing confidence and resilience.
2. Recognise the most efficient method to use.
2. Be able to cooperate with others, communicate their mathematical thinking and be flexible in their approaches.
3. Experience a sense of achievement regardless of ability.
4. Understand the appropriate underlying skills, concepts and knowledge of Number, Measurement, Geometry and Statistics (as appropriate).
5. Solve Mathematical problems using skills including: mental strategies, explanation, reasoning, generalisation, visualisation and representation.
6. Have equality of opportunity regardless of race, gender, or ability.
7. Be aware of the uses of mathematics beyond the classroom.

For parents to:

1. Be actively involved in their children's mathematical learning both in school and at home.
2. Understand and support the school's mathematics approach.

Teaching time

To ensure sufficient time for developing mathematical proficiency, each class teacher will provide a daily mathematics lesson. This will typically last for 20 minutes in EYFS, following the NCETM Mastering Number programme, and approximately one hour in Key Stages 1 and 2. In addition, short, focused daily arithmetic sessions (around 15 minutes) will reinforce fundamental mathematical skills and concepts. Our core teaching approach will be based on Maths Mastery principles (Ark Curriculum), ensuring a balance of introducing new concepts, revisiting prior learning, and fostering reasoning skills. Furthermore, teachers will actively seek opportunities to embed and apply mathematical skills across other curriculum areas, promoting a deeper and more connected understanding. Arithmetic sessions are based on NCETM's Mastering Number Programme: Mastering Number KS1 (EYFS, Year 1 and Year 2), Mastering Number Year 3, and Mastering Number KS2 (Year 4 and Year 5). Mastering Number KS2 enables pupils in Years 4 and 5 to develop fluency in multiplication and division facts, and a confidence and flexibility with number that exemplifies good number sense. Year 6 arithmetic sessions will be targeted based on needs from formative assessment and summative QLA.

Learning and Teaching styles

Years 1 -6

In Years 1 to 6, teachers will adhere to the structured approach of Ark Maths Mastery lessons. Throughout each lesson, pupils will have access to concrete resources to facilitate their understanding. Lessons will commence with a 'Do Now' activity, designed as a retrieval practice task to reinforce previously learned skills - often those foundational to the new learning. New learning will then be introduced to children followed by an opportunity to complete a practical task with partners focussing on talk and full sentences. Teachers will employ carefully scaffolded questioning techniques to encourage deeper thinking and mathematical reasoning. Pupils will then be provided with opportunities to represent their mathematical thinking pictorially within their Maths Journals. These journals serve as a vital communication tool, supporting the transition from concrete manipulation to pictorial representation and ultimately towards abstract understanding. While this structure provides a consistent framework, teachers retain the professional discretion to adapt the lesson's structure and pace to meet the specific needs of their learners.

EYFS

In EYFS, developing a strong foundation in number is paramount for all children to build the essential blocks for mathematical excellence. Children will learn to count confidently and gain a deep understanding of numbers up to 10, including their relationships and patterns. Through frequent and varied opportunities to explore and apply this understanding, using manipulatives such as Numicon, counters, small pebbles, and tens frames for organised counting, children will develop a secure base of knowledge and vocabulary upon which mathematical mastery is built. Furthermore, the curriculum will provide rich opportunities to develop spatial reasoning skills across all areas of mathematics, including shape, space, and measures. Cultivating positive attitudes and interest in mathematics is crucial; children will be encouraged to look for patterns and relationships, identify connections, be willing to try, discuss their observations with adults and peers, and view mistakes as learning opportunities. The NCETM's 'Mastering Number' programme will form the core of number lessons in EYFS, focusing on embedding key mathematical concepts and enhancing children's confidence and fluency to support their ongoing mathematical development. EYFS teaching and learning will be supplemented with NCETM and Ark Maths Mastery resources. Teachers retain the professional discretion to adapt the lesson's structure and pace to meet the specific needs of their learners.

Inclusion and the Role of Other Adults

LSAs will take active roles within lessons to support and extend the children's learning. In addition, as directed by the teaching staff, they will run pre-teach or follow up- sessions for children who require additional support to meet the specific learning intention. (If this provision is unavailable, it is the class teacher's responsibility to ensure that the barriers to learning are addressed.) Additionally, LSAs will be involved in Intervention groups, to try to overcome identified (by the teacher) barriers to learning.

Equal opportunities

All pupils are provided with equal access to the Mathematics curriculum. We aim to provide suitable learning opportunities regardless of gender, ethnicity or home background. Quality first teaching provides adaptations and appropriate scaffolding as well as mixed ability learning partners to provide all children with the opportunities to succeed.

Planning

Ark Maths Mastery is a cumulative curriculum. Long term planning will identify when units will be taught in order to ensure coverage across the year. In addition, 'White Space' will be allocated throughout the year (varies in each year group) which enables teachers to spend sufficient time on a specific concept or to plan and deliver consolidation lessons. It is the responsibility of the teacher to plan accordingly for lessons ensuring there is appropriate support and challenge which allows for all children to access the lesson and make progress. When planning, teachers should ensure they consider the concrete resources that will be available during the lesson and the questions they will ask to deepen understanding.

Children will be paired in mixed ability partners- these children should be assessed as suitable learning partners in terms of their ability to communicate and support each other's learning. An exception may be made for learners if the teacher feels that they would access the tasks more successfully as a group (with additional support, when available).

Mathematics homework should be planned to support the learning in class (See Homework Policy).

Assessment and Recording

At Christ the King Primary School, we firmly believe that Assessment for Learning (AfL) is central to fostering progress and raising standards in mathematics. We actively involve pupils in the assessment process, particularly in arithmetic, where they are encouraged to self-assess and respond to feedback, including making corrections where appropriate. In line with our school's Feedback Policy, timely feedback is prioritised and should be provided to children during lessons as part of ongoing formative assessment. This immediate feedback allows for misconceptions to be addressed swiftly and learning to be adjusted in real-time. Approximately once per week, teachers will provide qualitative feedback in pupils' Maths books. These comments will focus on developing their journaling skills, encouraging them to articulate their mathematical thinking and represent their understanding pictorially (further details can be found in our Feedback Policy and Assessment Policy). Teachers will also note any significant absences or understandable gaps in pupils' maths books to inform their ongoing assessment.

Summative Assessment: From Year 1 to Year 6, we utilise termly summative assessments provided by Ark Maths Mastery. These assessments are carefully designed to evaluate pupils' understanding of the taught curriculum content. Teachers will mark these assessments and undertake question-level analysis to gain detailed insights into individual and class-wide learning needs and identify specific areas of difficulty. The information gleaned from these summative assessments, in conjunction with teachers' rich formative assessment data, will be used to make a holistic judgement about each child's attainment against year group expectations (working towards, working at, or working above). Throughout the year, Year 6 will use previous SATS tests in place of the Ark Maths Mastery assessment.

Role of SMT and Subject Leader

To be responsible for improving the standards of Learning and Teaching in mathematics through:

- Supporting and providing training to all staff (including Learning Walks)
- Sharing information and learning opportunities with the parents
- Working with the Assessment coordinator to monitor achievement and intervention in Maths
- Monitoring resources
- Provide opportunities for whole school Maths in Context days/ weeks.
- Develop an Action Plan for Maths, to be updated throughout the year
- Assist in the monitoring of the Teaching and Learning of Mathematics.

Conclusion

This policy should be used in conjunction with other school policies. An electronic copy can be found in the Staff File