



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 other resources, to ensure continuity and progression. The policy has been drawn up as a result of staff discussion, a team approach by the English and Mathematics Leaders 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 be able to think and 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 and be fluent with calculations.

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 provide adequate time for developing mathematical skills each class teacher will usually provide a daily mathematics lesson. This will last for 20 minutes in EYFS (using NCETM Mastering Number) and approximately one hour in Key Stages 1 and 2. In addition, daily arithmetic sessions (approximately 10 minutes) will further promote 'basic' mathematical skills and concepts. Opportunities for problem solving are presented daily - teachers in Key Stage 2 will present children with a problem which they then discuss and determine what skill is required to approach and solve such a problem. Maths No Problem will be the basis for lessons where children are taught new concepts as well as revisiting old and developing reasoning skills. Where appropriate, links will be made to mathematics within other subjects so that pupils can develop and apply their mathematical skills more widely.

Learning and Teaching styles

(See Learning and Teaching Policy)

Teachers will follow the structure of the Singapore Maths lessons. Throughout the lesson, children should have access to concrete resources to support their learning. Each lesson will start with an 'Exploration' in which mathematical problems can be explored with a learning partner. Teachers will scaffold their questions to promote further thinking and elicit mathematical reasoning. Following this, responses will be gathered and a variety of methods explored. The children should then be given the opportunity to represent their methods pictorially in their Journal. Their Journal should be used as a form of communication and help the children move through the stages of concrete, to pictorial and then abstract representation. The learner will then be given the opportunity to practise the styles of questions that they will meet in the workbook to follow. Teachers can however use their discretion to vary the structure and pace of their lesson.

EYFS

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently; develop a deep understanding of the numbers to 10 - the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including rekenreks, small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes. 'Mastering Number' programme by NCETM will form the basis of number lessons in EYFS. This focuses on embedding key mathematical concepts and increasing children's confidence and fluency to support them on their mathematical journey.

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.

Planning

Long term planning will identify when named chapters will be taught in order to ensure coverage across the year. In addition, 'White Space' will be allocated (as available) for teachers 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 physical 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 recognise that Assessment for learning lies at the heart of promoting learning and in raising standards of attainment. Where possible pupils should be involved in assessing their own work in arithmetic and their workbook and including feedback (such as corrections) as appropriate. As far as possible, feedback should be given to the children during the lesson, as part of formative assessment (following school feedback policy). It is expected that not all children will complete all of the workbook pages. It is for the teacher to decide which children have achieved at the expected level. Journal entries can be used as evidence of the depth in which the child has been able to access the lesson. If a child has completed pages whilst relying on adult support, this should be indicated.

Quality mark (Approximately once per week): Comments should be made to guide the journaling skills of the children, as appropriate. (See Feedback Policy and Assessment Policy)

Child absence or reasons for reasonable gaps in the Workbook should be identified.

The 'Review' parts of the Workbook should be used for Summative Assessment. Here, achievement of the National Curriculum objectives can be tracked for individuals in order to identify whole- class areas for revision and children who may need Mathematics intervention.

The use of Maths no Problem tests at the end of each text book (twice yearly) will provide a summative assessment. The class teacher will mark these via the online portal which will then provide key information including success rates and a question level analysis

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