Mathematics Policy

Member of staff responsible: Mrs Selby
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Mission Statement

In Jesus, we learn, grow and pray together.

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, Early Learning Goals 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.

We aim for each child to:

1. Have a positive attitude towards Mathematics, showing increasing confidence and resilience.
2. Be able to co-operate 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 Mathematics

Teaching time

To provide adequate time for developing mathematical skills each class teacher will usually provide a daily mathematics lesson. This will usually last for 20 minutes in EYFS and 50 minutes in Key Stages 1 and 2 (in line with the five part lesson of Singapore Maths). In addition, Oral Mental sessions (approximately 20 minutes) will further promote 'basic' mathematical skills and concepts. 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 (Years 1-6)

(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.

EYFS

Mathematics in the early years involves providing children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measures.

By the end of the Foundation stage it is expected that children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

In Shape, Space and measure Children are expected to use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Inclusion and the Role of Other Adults

Learning Support Assistants are appropriately involved in the planning and delivery of the mathematics curriculum. Their knowledge, skills and understanding is constantly updated through involvement in school-based training and support.
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 follow up- sessions for children who have underachieved during the lesson, in line with the responsive learning nature of Singapore Maths. (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, for example, by leading Maths Recovery sessions, to try to overcome identified (by the teacher) barriers to learning. Any follow up session should be indicated in the child's book using 'FS.'

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.
Weekly planning will indicated the learning objectives, Textbook and Workbook pages to be used and associated maths skills to be practised in the Basic Skills sessions. There is also an assessment section, where annotations can be made with regards to progress and a record of children attending follow-up sessions can be made.
It is the reasonability of the teacher to indicate three or more levels of learning outcome within their planning that will lead to differentiation within the lesson, to suit the needs of all learners, i.e. How will the more able be challenged and the less able be supported?
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 Low Ability learner, 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 for 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 using the learning aims of the chapter. The aims should be shared with the children at the start of a new chapter and stuck into the Maths Journals for self-assessment.

As far as possible, feedback should be given to the children during the lesson, as part of formative assessment. The Singapore Maths workbook can be partly marked within the lesson, as the children receive further support or are encouraged that they are progressing as hoped. In light of the outcome of the achievement during the lesson, children will be identified to attend a follow up session/ pre-teaching. 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): Areas of success should be highlighted using a yellow highlighter Comments should be made to guide the journaling skills of the children, as appropriate. (See 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.

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 e.g. My Money Week
- 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 under 'Policies 2016-2017.'