CANON BARNETT PRIMARY SCHOOL MATHEMATICS POLICY

Our policy outlines the aims, organisation and management for the teaching and learning of mathematics at Canon Barnett Primary School.

Aims

Mathematics is a life skill. It is an essential element of communication, widely used in society, both in everyday situations and in the world of work. Our aims in teaching mathematics are:

- To equip pupils with mathematical skills and knowledge to work within Mastery.
- To develop their ability to apply mathematical skills and reasoning with confidence and understanding when solving problems.
- To enable pupils to talk about mathematics and their ideas using the language of mathematics.
- To develop positive attitudes to mathematics, recognising that mathematics can be both useful and enjoyable.
- To nurture a fascination and excitement of mathematics.
- To be able to use and apply mathematical skills in other curricular areas.
- High expectations for every child.
- Mastery for all children.
- Objects and pictures before numbers and letters.

Teaching Mathematics

Here at Canon Barnett Primary School we teach a maths mastery curriculum. Maths Mastery allows children to master maths which means acquiring a deep, long-term, secure and adaptable understanding of the subject. It embeds a deeper understanding of maths by using a concrete, pictorial and abstract approach so that pupils understand what they are doing rather than just learning to repeat routines without grasping what is happening. Children are provided with various opportunities (variance) to apply fluency skills to a broad range of problem solving and reasoning tasks. Talk for Maths is an important approach which allows children to explain their mathematical learning at every opportunity and therefore gain a deeper understanding.

As with other areas of the curriculum, assessment is continuous. From the beginning of every lesson, teachers will be assessing what pupils are, or are not understanding, and next steps for learning. Interventions are planned, meaning that misconceptions are dealt with immediately and higher attaining pupils are given many opportunities to deepen their understanding.

Teaching Strategies

- Children will explore learning objectives using a range of approaches to gain a deeper understanding (Concrete, Pictorial – bar method and abstract.)
- Children will explore learning objectives in a range of contexts to gain a deeper understanding (fluency, reasoning and problem solving).

- The learning environment will support the needs of all the children.
- Activities will show variance to develop deepening understanding.
- A variety of vocabulary and sentence starters will be taught, modelled and displayed.
- Children will explain their reasoning in written or verbal form.
- Children will be self-assess their depth of understanding throughout the lesson.

Curriculum Planning Medium Term Planning

We use the National Curriculum and end of Key Stage Standards to plan teaching sequences. The yearly curriculum is structured on the White Rose scheme which follows blocks with constant revision and curriculum linkage.

Short term planning

The school follows the White Rose Scheme to help plan the daily lessons and ensure that the relevant objectives are taught at the appropriate level. We use a weekly planning document- this weekly plan includes learning objectives, success criteria outline activities showing variation, highlight key vocabulary, key questions and assessment opportunities. The medium and short term planning is to be monitored by the maths subject leader/SLT.

Teaching methods and approaches

In order to provide the children with active and stimulating learning experiences, a variety of teaching and learning opportunities are planned. Children may work individually on a task, in pairs or in a small group, depending on the nature of the activity. A Progression in Calculations Policy has been agreed by all staff. The school has adopted the Shirley Clark model, where mixed ability children's learning partners are changed on a regular basis.

Assessment, recording and reporting

Assessment is rigorous and includes: short-term, medium-term and long-term. These assessments are used to inform teaching in a continuous cycle of planning, teaching and assessment. Teachers will record the children's progress on OTrack on a regular basis. As part of the ongoing teaching and learning process, teachers will assess children's understanding, achievement and progress in mathematics. Assessment may be based upon observation, questioning, informal testing, on the spot, incisive feedback and the marking and evaluation of work. This will inform day to day teaching and learning and provide feedback to children. Learners will also be taught to assess and evaluate their own achievements by recognising successes, learning from their own mistakes and identifying areas for improvement. Children will self-assess their maths work by completing a learning line before and after the lesson as well as completing an end of teaching sequence challenge in KS2.

Formal assessment

Formal assessments take place twice a year. These assessments allow staff to analyse gaps in learning and to analyse attainment- are the children at national expectations, above national expectations or below. Year 2 and Year 6 also assess against the end of key stage standards. This data is fed back to the senior leaders at pupil progress meetings where the steps are put into the school intervention programme and target groups are set.

Marking

We ensure that our marking provides positive feedback about the achievements and progress made. Children are encouraged to reflect on the feedback using a green pen. The level of support given to the children during the lesson is indicated.

Learning environment

It is important to us that the classroom environment supports both the teaching and learning of mathematics and that it needs the needs of all learners. We strive to provide a mathematically stimulating environment through the use of working walls to support teaching and learning, interactive displays that promote thinking, explaining and discussion, children's work that celebrate achievement and providing a range of resources for teaching and learning. In every classroom resources such as learning walls, number lines, 100 squares, place value charts, multiplication tables and XChallenge table are displayed for whole class.

Equal opportunities

All our pupils have equal opportunity to reach their full potential across the mathematics curriculum regardless of their race, gender, cultural background, ability or physical disability.

Homework

We recognise the importance of making links between home and school and encourage parental involvement with the learning of mathematics. Homework will provide opportunities for the children to consolidate their knowledge and skills, as well as develop their understanding. It also gives the children opportunities to share their mathematical learning with their family as well as to prepare for future learning. Ocean Maths is provided for KS1 and Year 3 as a means of involving our school community

Role of the mathematics coordinator

The mathematics coordinator is responsible for keeping up to date with whole school data, new initiatives, monitor planning, progression, books, assessment and classroom practice, lead staff meetings, oversee resources, lead parent workshops and finally to update policies when necessary.