Rushton CE (VC) Primary School

Happy Learning Together

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Committee	Curriculum
Approved by Governors	Feb 18
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Cycle	Biennial

Mathematics Policy

Rationale

'Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.'
National Curriculum 2013

Purpose

This policy aims to show how our school intends to fulfil its legal obligation to deliver the 2013 National Curriculum and how and where we can go beyond that to create a stimulating and exciting curriculum which will meet the future needs of all the children.

Aims for the teaching of Mathematics

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking

In addition Rushton School aims to:

- provide experiences appropriate to the age and particular stage of development of the child.
- develop the knowledge and correct use of the language of mathematics.
- ensure that children will enjoy all aspects of numeracy.

The Process of Mathematics

'Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and

competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.' (National Curriculum)

Mathematics provides:

- a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real-life problems
- a means of preparing children to understand the world around them

Planning

Maths planning for KS1 is taken from the National Curriculum and is supported by the White Rose Maths Scheme. See assessment for use of Assertive Mentoring in Numeracy. The school subscribes to an online resource called 123 Maths as an intervention programme. Sandwell Standardised tests are used to assess children working below ARE (Age Related Expectation). Maths planning is supported by the attached Calculation Policy from the EYFS to Year 4.

Special Educational Needs

Teachers ensure that all pupils make progress and gain positively from the lesson. Lessons are planned so that all pupils can be included with differentiated tasks to suit pupils' varying abilities. Pupils who are very able will be challenged with extended activities. Children in need of support have individual targets in an IEP.

EYFS

In EYFS, Maths is taught within the EYFS Development Matters Profile as part of Number and Shape, Space and Measure areas of learning. Maths is taught through adult led, continuous provision and child led activities. Children learn through practical maths linked with the topics followed in the EYFS. This will provide opportunities for the children to develop their understanding of number, measurement, pattern, shape and space by providing a broad range of contexts in which they can explore, enjoy, learn, practise and talk about them. Children are tracked through Development Matters Profile and converted into LEP scores. Reception data is reported at the end of the year through GLD (Good Level Development).

Cross-curricular themes and links with curriculum areas

Mathematics contributes to other areas of the curriculum, often in practical ways therefore, when planning work, teachers will link mathematics to other appropriate curriculum areas.

Health and Safety Issues

When engaging in practical tasks children will be expected to behave in a considerate and responsible manner and to show respect for other people and equipment. Children will be encouraged to think about and discuss the safety aspects of their activities. (All accidents, however slight, are reported in the school's accident record books).

Learning at Home

All children have home access to Education City to consolidate key skills. Children in KS2 have access to 'Rockstar' a website which consolidates the recall of multiplication facts.

Encouraging parents to take an active part in the education of their children is probably one of the most important ways of improving this learning. To this end we involve parents by:-

- encouraging children to go home and talk about their work
- asking parents to help children with any weekly homework tasks for KS1 and KS2.
- Parent workshops to be delivered to support teaching of maths.

Mathematical Resources

Resources are important for practical work and modelling problems and each class has a range of resources which are continually updated/refurbished whenever necessary.

Assessment, Recording and Reporting

Assessment of children's work is a continuous ongoing process, to inform future teaching plans and records of their attainment.

In the EYFS children are tracked using ages and stages in the Development Matters Profile. Reception children are tracked half termly and the nursery children are tracked termly. The children's progress is then converted into a score on the LEP assessment system. Reception data is reported at the end of the year according the Good Level of Development (GLD).

Statutory end of Key Stage Tests are taken by the Year 2 children. KS1 and KS2 children are monitored half termly through the use of Assertive Mentoring (Big Maths) and the LEP assessment grids. Big Maths is use flexibly in both KS1 and KS2 to support on-going formative assessment.

Children are tracked weekly in Big Maths (based on assertive mentoring) sessions and their scores recorded. Big Maths/ assertive mentoring is used flexibly to support on-going formative assessment. Half termly tests are used alongside LEP assessment grids for tracking attainment.

Parents are formally informed about their child/children's progress in an annual written report and there are two Consultation evenings during the year.

Parents are encouraged to come into the classroom to look at their child's work and to informally discuss their child's progress at any time during the year.

Marking

Marking should reflect the purpose of the task set and the reason for giving feedback. This should be done in line with the school's assessment policy. Feedback should be tracked to ensure children are responding to it and have understood the message in the marking. Green and orange highlighters are used as per the marking policy. Marking in the EYFS is mostly verbal and is recorded through a variety of observations gathered in children's 'Big Books'.

Display
Mathematics prompts and resources are displayed and made available to children in all classes.

Rushton is a dyslexia friendly school
As a dyslexia friendly school, we will provide quality teaching, differentiated as needed. We will identify and respond to unexpected difficulties, actively working to include all pupils so they can achieve in all areas of learning.
We feel that more children are successful when taught using dyslexia friendly teaching methods. By teaching in this way, we aim to make our teaching and learning fully accessible to all children. We will try to discover how the child learns best and use a variety of multi-sensory activities including practical activities and ICT, using eyes, ears, speech, fingers, to stimulate learning.
We aim to enable children to use their strengths for learning while developing the areas they find more difficult.

Conclusion
This policy should have a positive effect on the teaching and learning of Mathematics in the school by encouraging a consistent approach throughout the school.

Monitoring
This policy and the guidelines will be reviewed when necessary at least every two years. The subject leader undertakes monitoring activities throughout the year such as book scrutiny, lesson observations, pupil voice and data analysis.