

St Swithun's Church of England VC Primary School



Maths Policy

Issue 6

February 2020

Author / Amended by	Date agreed by governing body	Next review date
James Greenwood	February 2018	February 2019
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At St Swithun's Church of England VC Primary School we aim to provide a happy, secure, stimulating and Christian Values based

environment in which children may develop positive attitudes to both living and learning.

Introduction

Mathematics helps children to make sense of the world around them through developing their ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

Mathematics contributes to the teaching of personal, social and health education, and citizenship. The work that children do outside their normal lessons encourages independent study and helps them to become increasingly responsible for their own learning. The planned activities that children do within the classroom encourage them to work together and respect each other's views. We develop their awareness of money in the real world through using real-life situations.

At St Swithun's VC Primary School we aim to:

1. Deliver stimulating and enjoyable learning experiences that allow all children to achieve their potential;
2. Develop a positive attitude to maths where all children feel successful;
3. Develop mathematical understanding through systematic direct teaching of appropriate learning objectives;
4. Encourage the effective use of maths as a tool in a wide range of activities within school and, subsequently, adult life;
5. Develop an ability in the children to express themselves fluently, to talk about the subject, using correct mathematical language and vocabulary;
6. Encourage ability to think clearly and logically with independence of thought and flexibility of mind;
7. Develop and master mathematical skills and knowledge and quick recall of basic facts in line with the new curriculum recommendations.
8. Help children to develop the key mathematical skills to enable them, at a later point, to achieve economic well-being.

Teaching and Learning

The school uses a range of teaching styles to cater for the variety of learning styles of pupils in mathematics lessons. Our principle aim is to develop children's knowledge, skills and understanding in mathematics. We do this through a daily lesson that addresses a range of learning styles, including whole class teaching, group work and self directed learning through investigation. During these lessons, we encourage children to ask as well as answer mathematical questions. They

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have the opportunity to use a wide range of resources such as Numicon, number lines, bar modelling, number squares, digit cards, small apparatus to support their work and ICT resources.

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. Through our mathematics teaching we provide learning opportunities that enable all pupils to make progress. We achieve this through a range of strategies – in some lessons through differentiated group work and carefully differentiated questioning and in other lessons by organising the children to work in pairs on open-ended problems or games. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels.

When progress falls significantly outside the expected range, the child may have special educational needs. Teachers will work in accordance with the school SEND policy. Intervention strategies will be used for appropriate groups of children. This includes the use of intervention groups in key stage 2 and the use of individual targets on a child's Provision Map following their Structured Conversation with parents or carers.

Challenging our more able and talented (MAAT) children to exceed their age related expectations is important to us. We do this by open ended investigations, challenging targets for the children and high expectations in the content of work given.

We use teaching assistants, where possible, to provide appropriate support to individuals or to groups of pupils. Teaching assistants within St Swithun's C of E Primary School are viewed as an important 'asset' to the school and, as such, are appropriately involved in the delivery of the mathematics curriculum.

Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, we encourage children to read and interpret problems in order to identify the mathematics involved. The children explain and present their work to others during plenary sessions. Younger children enjoy stories and rhyme that rely on counting and sequencing. Older children encounter mathematical vocabulary, graphs and charts when using non-fiction texts.

Mathematics Curriculum Planning

Mathematics is a core subject in the National Curriculum, and we use Numicon as the basis for implementing the statutory requirements of the programme of study for mathematics.

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We carry out curriculum planning in mathematics in line with the structures and recommendations outlined in the new national curriculum for Mathematics. Our weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught. This includes learning outcomes, differentiation and the use of teaching assistants and is shared with the Chestnut class to insure inclusion.

Calculation

Since March 2018 a new calculation policy has been introduced and is attached, Appendix 1 and 2.

Priorities for this academic year

Objective / Action – To provide greater opportunities for pupils to be challenged, ensuring more pupils reach age expectation and above.

Success Criteria

- **SC1:** Teaching and Learning to be at least good across the school.
- **SC2:** To increase the percentage of children making expected progress in maths

Assessment, Recording and Reporting

The following strategies are in place:

- Baseline assessments for the new curriculum are entered October with new objectives on Classroom Monitor. This is through teacher assessment and the use of a short number and place value test for years 1 – 6.
- Progress in Maths will be reported as a separate subject verbally and in writing at parent consultation evenings and in a written report once every term.
- Each teacher will have a set of live data on classroom monitor, showing progress of individual children and groups of learners in their class.
- Analysis of class data will be completed once a term by the subject co-ordinator and the head teacher. This analysis will be shared with governors.

The assessment procedures within our school encompass:

- Making ongoing assessments and responding appropriately to pupils during 'day-to-day' teaching. These 'immediate' responses are mainly verbal and are not normally recorded;
- Adjusting planning and teaching within units in response to pupils' performance;
- Use the 'assessment for learning' questions to form appropriate questions for the children. If necessary, future planning is adapted in response to assessment outcomes;
- Detailed marking at least once a week using a pink highlighter for 'Even Better If' (EBI).
- Use of information gained from statutory assessment in years 2 - 6. Information gained is used to set focused curricular targets and also to

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determine which strategies or methods are particularly effective in respect of specific areas of mathematics.

The Foundation Stage

In Early Years maths is taught daily in reception and there is a designated maths area with resources in the classroom as well as being experienced during Busy Bodies. Maths is continually modelled by all adults in the environment e.g. counting when lining up, discussions on shape at the play dough table, talking about who has more/less of something, talking about the days of the week, month, date each morning etc. the drive is learning through play and so all taught activities tend to be practical using many different resources, such as Numicon.

Resources

There are a range of resources to support the teaching of mathematics across the school. A range of resources are available from the central storage area, including equipment for outdoor learning in maths. Children have access to a range of equipment, such as number lines and 100 square grids in their individual classrooms.

Numicon is a central part of our children's mathematics sessions, and has been purchased to support not only the development of basic skills in lessons, but to promote problem solving.

Children in years 1 – 4 will use 1cm squared maths books, with the exception of individual children who use plain books as part of their SEN requirements. Year 5 and Year 6 children will use 0.5cm squared maths books.

St Swithun's is well resourced in terms of ICT facilities. All teachers have the Numicon software to model Numicon ideas on the interactive whiteboards. Children use and apply mathematics in a variety of ways when solving problems using ICT, including the use of games. Software is being evaluated continuously in order to purchase the most suitable and appropriate materials.

Revised and adopted by the Governing Body:

SignedHeadteacher

St Swithun's Church of England VC Primary School

SignedChair of Governors

St Swithun's Church of England VC Primary School

Initial Equality Impact Assessment

Please complete an initial equality impact assessment once this policy has been customised to suit your purposes.

Policy Title	The aim(s) of this policy	Existing policy (✓)	New/Proposed Policy (✓)	Updated Policy (✓)
				✓

This policy affects or is likely to affect the following members of the school community (✓)	Pupils	School Personnel	Parents/carers	Governors	School Volunteers	School Visitors	Wider School Community
	✓	✓	✓	✓			

Question	Equality Groups															Conclusion															
	Age			Disability			Gender			Gender identity			Pregnancy or maternity			Race			Religion or belief			Sexual orientation			Yes	No					
Does or could this policy have a negative impact on any of the following?	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS			Y	N	NS		
		✓			✓			✓			✓			✓			✓			✓			✓					✓			
Does or could this policy help promote equality for any of the following?	Age			Disability			Gender			Gender identity			Pregnancy or maternity			Race			Religion or belief			Sexual orientation			Undertake a full EIA if the answer is 'no' or 'not sure'						
	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Yes
	✓			✓			✓			✓			✓			✓			✓			✓			✓						✓
Does data collected from the equality groups have a positive impact on this policy?	Age			Disability			Gender			Gender identity			Pregnancy or maternity			Race			Religion or belief			Sexual orientation			Undertake a full EIA if the answer is 'no' or 'not sure'						
	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Y	N	NS	Yes
	✓			✓			✓			✓			✓			✓			✓			✓			✓						✓

Conclusion	We have come to the conclusion that after undertaking an initial equality impact assessment that a full assessment is not required.
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Preliminary EIA completed by	Date	Preliminary EIA approved by	Date
E Kirk	16.2.20	Policy Working Group	26.2.20