



Maths Curriculum at Sywell Church of England Primary School

At Sywell Church of England Primary School, we recognise the importance of maths and our intent is to help children to fulfil their potential and become fluent mathematicians with an appreciation and enjoyment of the skill. With this being our intent, we engage all children in high quality learning experiences in order to foster a passion for maths. This document outlines all that is important to our school in the teaching and learning of our maths curriculum.

Our aim is that all staff teach maths in the most effective way possible through the implementation of the maths long term and medium term plans using the objectives taken from the National Curriculum 2014. This will allow our children to develop confidence, competence and understanding with regards to all fundamental maths skills regardless of gender, ethnicity, educational needs, ethnicity or social and economic background.

Curriculum Intent

- To promote enjoyment and curiosity of learning through practical activity, exploration, investigation, discussion and mastery of skills.
- To understand the importance of mathematics in everyday life.
- Develop children's ability to move between concrete and symbolic representations fluently and confidently.
 - To promote confidence and competence with understanding and using numbers and the number system.
 - To develop the ability to solve problems through decision making and reasoning in a range of contexts and across other curriculum areas.
 - To develop a practical understanding of ways in which information is gathered and presented.
 - To explore features of shape and space and develop measuring skills in a range of contexts.
 - To enable children to select and use a range of mathematical tools effectively.
 - To equip children with the mathematical language needed to understand problems and explain their methods and reasoning.
 - To promote and provide opportunities for children to develop the core learning skills of confidence, determination, curiosity, aspiration, teamwork, independence, communication and focus.

Curriculum Implementation

Teaching Time and organisation

To provide adequate time for developing a range of mathematical concepts, skills and processes, each class teacher teaches a daily lesson. This may vary in length but will usually last between an hour and an hour and 15 minutes. Maths is taught to the whole class unless specific targeted arrangements have been made to meet the needs of an individual or group of individuals. Every lesson will include teaching time, focus guided group work, fluid and differentiated independent work and mastery opportunities. Through careful assessment, planning and preparation, we aim to give a range of opportunities including (and not limited to):

- Practical activities and mathematical games
- Problem solving
- Individual, small group and whole class discussions
- Open and closed tasks
- A range of recording work and calculations
 - Working with technology
 - Outdoor learning

Children's targets will be displayed in their books. Throughout the week children will 'prove their target' and show mastery of a skill as part of a range of activities. Cross curricular links to maths will be made explicit to the children through topic work.

All maths lessons will be planned for following a sequence of skills. They will be appropriately differentiated through a range of different techniques. Children will be able to choose their own level of support and work through a challenge, super challenge and ocean deep statement. Using these challenges, children will be able to aid their understanding of the learning outcome, take ownership of their learning and master the taught skill at a level appropriate to them.

All children in Year 1 and 2 have maths challenges to complete as part of their continuous provision in addition to a structured daily lesson.

Morning work in the form of calculation mastery activities form part of a child's morning challenges done during registration once per week.

Curriculum content, planning and resources

The school follows the National Curriculum 2014 Maths Programme of Study. The School's Medium Term Planning follows the mastery approach and teachers use resources available from Kangaroo Maths, White Rose, NCETM and Mathletics.

Teachers will use the school's calculation policy in order to ensure that there is natural progression and a uniform approach across the classes and key stages. Where appropriate, and especially due to mixed ability classes, some skills and processes may be taught earlier or later than set out in the policy.

Multiplication tables are set as weekly homework as well as being taught discretely during Maths Mania sessions twice a week for 20 minutes. Children take part in a weekly maths calculations quiz.

- By the end of Key Stage 1 it is expected that children will be able to recall and use multiplication and division facts for the 2,5 and 10 multiplication tables.
- By the end of Year 4 it is expected that children will be able to recall multiplication and division facts for multiplication tables up to 12 x 12.

Maths work will be carried out in books with squared paper in order to aid consistent setting out of work a reduction in calculation errors. Work will be carried out in pencil and equipment such as rulers, protractors, compasses, calculators and measuring equipment will be used appropriately.

Early Years Foundation Stage

EYFS practitioners support children in developing their understanding of mathematics in a broad range of contexts in which they can explore, enjoy, learn, practise and talk about their developing understanding. The area of development includes seeking patterns, making connections, recognising relationships, working with numbers, shapes and measures and counting, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other areas of learning and development.