

Mathematics Policy

South Ascot Village School

Aims and Objectives

Mathematics teaches us to make sense of the world around us, through developing a child's ability to calculate, 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 how mathematics is applied to many different skill sets and professional environments and, more simply, that Mathematics is everywhere.

The aims of mathematics are:

- to promote confidence and competence with the use of number and calculation and their application within all other strands of Mathematics;
- to promote enjoyment and enthusiasm for learning through practical activity, exploration and discussion;
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts;
- to develop a practical understanding of the ways in which information is gathered and presented;
- to make sense of Mathematics in the real-world.

Planning, learning and teaching

All year groups in KS1 and KS2 follow the teaching programme designed by the National Centre for Excellence in the Teaching of Mathematics (NCETM). The learning sequence provides teachers with an overarching curriculum framework, ensuring that coherence is at the core of our curriculum. Sequencing is defined as "the efficient ordering of the content in order to improve the learner's understanding and help them achieve the objectives." Every strand of the NCETM maths curriculum is carefully sequenced so that the children have a greater understanding throughout the years.

Mathematics is taught discreetly every day. Each lesson will begin with 10 minutes of working on times tables. This underpins our maths system like counting, number bonds and place value. If children can get a firm grasp of their times tables then they have a solid arithmetical foundation for future problem-solving. The lesson will then progress into using the learning objectives from the NCETM, along with a meaningful use of manipulatives to aid understanding, differentiation of the objectives for those children who need greater support and scaffolding and mastery learning to challenge all children.

In all Mathematics lessons, highly experienced teaching assistants work alongside the class teachers to ensure that every child succeeds.

Assessment

Assessment is regarded as an integral part of teaching and learning and is a continuous process. At the end of each strand in the NCETM, teachers will use the assessment tool to gauge understanding. In addition, every year group from 1-6 will take summative assessments three times a year using Rising Stars NTS papers. The data collected enables teachers to see strengths as well as gaps in learning. Data collected is used internally to set targets, understand gaps in learning and misconceptions and enable interventions to take place, where necessary.

The Foundation Stage

The children in the foundation class follow the sequenced curriculum from White Rose Maths. The resources are designed to develop mathematical skills following a clear developmental progression. As the children learn about numbers, counting, problem solving, pattern, shape and spatial reasoning through fun games and activities, they develop positive attitudes towards maths and an enthusiasm for learning.

Teaching Mathematics to children with special educational needs

All the teachers at South Ascot Village School are “teachers of SEN.” The use of a sequenced maths curriculum along with regular formative assessments and summative NTS tests, enables all teachers to understand the changing needs of every child. Where additional support is needed, we use the manipulative-led Number Stacks programme, which is designed to further imbed key number strategies.

Contribution of Mathematics to teaching in other curriculum areas

Literacy

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; they also become more adept at explaining and presenting their work to others. 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.

Information and communication technology (ICT)

Children use and apply mathematics in a variety of ways when solving problems using ICT. Younger children use ICT to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results or when creating repeating patterns, such as tessellations. When working on

control, children use standard and non-standard measures for distance and angle. They use simulations to identify patterns and relationships.

Monitoring and review

The subject leader is responsible for improving the standards of teaching and learning in Mathematics through:

- Monitoring and evaluating Mathematics: Pupil progress, marking and planning, curriculum coverage, provision and the quality of the learning environment
- Taking the lead in policy development
- Supporting colleagues in their CPD
- Purchasing and organising resources

Signed:

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