



Progression Documents

Mathematics

Curriculum Overview:

At Spalding St Paul's Primary School, we want all of our children to be **PROUD** of all their achievements and successes across all curriculum subjects.

Our curriculum enables children to achieve their own **PERSONAL EXCELLENCE** through a well-tailored programme designed for all to access.

Our curriculum is designed for children to show **RESPECT** for what they are learning, themselves, others, beliefs and the world around them.

Our curriculum gives children a range of **OPPORTUNITIES** to develop their knowledge, skills and understanding.

Our curriculum is **UNIQUELY** designed to incorporate our diverse school, our community and the world we live in.

Our curriculum enables children to **DISCOVER** key skills and knowledge to help them become lifelong learners.

Intent	Implementation	Impact
<p>Early years Foundation Stage: In EYFS the framework is organised across 7 areas of learning rather than subject areas. As part of this document we have planned how the skills taught across EYFS feed into the national curriculum and which statements from the 2020 Development Matters are prerequisite skills for mathematics within the National Curriculum.</p> <p>KS1 and KS2: In KS1 and KS2 the mathematics curriculum has been designed to cover all of the skills, knowledge and understanding as set out in the National Curriculum. The National Curriculum states that 'a high-quality mathematics education 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'.</p> <p>To ensure that pupils develop a secure knowledge that they can build on, our mathematics curriculum has been mapped out using the specific disciplines.</p> <p>When covering each of these strands, the content will be carefully organised by each year group through our subject overview.</p> <p>Content knowledge, vocabulary and skills will then be planned for at a greater level of detail in the Year group Frameworks.</p> <p>Mathematics is delivered through subject specific teaching organised into blocks under a theme. Meaningful links with other subjects are made to strengthen connections and understanding for pupils.</p>	<p>The Early years Foundation Stage (EYFS) follows the 'Development Matters' in the EYFS guidance. In EYFS mathematics is taught as part of 'mathematics' through 'Number' and 'Numerical Patterns' and will be seen as part of the continuous and adult lead provision across the classroom, not as a discrete subject.</p> <p>In KS1 and KS2, mathematics is taught as a discreet subject every day to allow time to embed skills in the subject.</p> <p>The core teaching of mathematics is through the 'DFE approved 'White Rose' mathematics scheme and adapted to meet the needs of the learners in our school.</p> <p>All learning will start by revisiting prior knowledge. This will be scaffolded to support children to recall previous learning and make connections. Staff will model explicitly the subject-specific vocabulary, knowledge and skills relevant to the learning to allow them to integrate new knowledge into larger concepts.</p> <p>Learning will be supported through the use of knowledge organisers that provide children with scaffolding that supports them to retain new facts and vocabulary in their long-term memory. Knowledge organisers are used for pre-teaching, to support home learning and also as a part of daily review.</p>	<p>Impact is measured through regular learning walks, lesson visits, work scrutiny and pupil voice.</p> <p>Work will show that a range of topics are being covered as well as progression across each unit of work in every year group and across year groups.</p> <p>Children will be able to talk about the skills and knowledge they have acquired, through pupil voice, and will be engaged in lessons and want to find out more.</p> <p>Teachers will use Assessment for Learning to ensure all lessons are relevant and will help to plan for next steps.</p> <p>Subject coordinators will be given regular time to ensure resources are kept up to date, to monitor their subject across the school, create action plans and impact reports and to provide subject feedback to SLT as appropriate.</p>

Breadth of study

Breadth of study Key Stage 1:

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency.

Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Breadth of study Lower KS2:

The principal focus of mathematics teaching in lower key stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.

At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number.

By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work.

Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.

Breadth of study Upper KS2

The principal focus of mathematics teaching in upper key stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them.

By the end of year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

Pupils should read, spell and pronounce mathematical vocabulary correctly.