Mathematics Statement of Intent for The Acorns Primary and Nursery School

Working together to create a love and understanding of mathematics, for children and the adults that work with them.

The leader for mathematics in our school is: Steven Thompson

Our journey for mathematics starts in the Early Years. We follow a Curriculum Progress Model that covers the six areas of mathematics and ensures progression from Nursery to Reception with clear links into the Year 1 Mathematics Curriculum. Teachers identify children who need further support and challenge and address these needs through adult-led activities and carefully thought-out enhancements in the continuous provision.

The journey continues in Years 1 – 6 through the implementation of the 2014 National Curriculum.
We ensure that our children:

- Become fluent in the fundamentals of mathematics.
- Are able to reason mathematically.
- Apply their mathematical understanding to routine and non-routine problems.

We have outlined the order in which we will teach our units of work to enable us to plan coverage of the entire National Curriculum whilst allowing us to prioritise the DfE Ready to Progress statements. Teachers consider the needs of their cohort before determining how many weeks they will spend on each topic. The NCETM Teaching for Mastery Assessment questions are built into units of work to enable teachers to effectively assess children's understanding at a Mastery and Greater Depth level within a unit of work.

Fluency, reasoning and problem-solving skills are embedded within mathematics lessons and are developed consistently over time. By ensuring that children secure their fluency skills before moving on to more complex mathematics we develop children's confidence to tackle a variety of problems either independently or in collaboration with their peers. All children are given the opportunity to reason at their own level using the 5 stages of reasoning, describe, explain, convince, justify and prove.

How does this look in our school?

Fluency Sessions – There are 4 fluency sessions per week throughout the school. Teachers use 3 of these sessions to address any gaps in learning that have been identified from children's arithmetic tests. Children in Key Stage 2 complete a fortnightly arithmetic test from TestBase which is analysed and informs the objectives taught in fluency sessions. 1 session per week is used to consolidate Geometry objectives from the previous year group or used to consolidate Measures objectives from the previous year group. These sessions can also revisit and consolidate DfE Ready to Progress Statements to ensure that children are retaining the core skills identified to prepare children for their next year group.

Daily Mathematics Lessons – Objectives may be covered over more than one lesson to ensure that children have had sufficient time to secure their understanding and work at a deeper level within the objective. We use a 'Strive for 5' approach to fluency and ensure that children can confidently and independently tackle 5 fluency questions before moving on to the next stage in their learning. Depending on the which stage of the objective is being taught, there will be a

range of modelling, whole class work, group work, independent practice and challenge activities evident within the lessons. Teachers and teaching assistants are skilled in knowing which resources best model mathematical concepts and how to move children onto pictorial representations and then onto more abstract understanding. Teachers model effective use of vocabulary through all stages of the lesson and this is reinforced through the use of working walls which link vocabulary to the concrete, pictorial and abstract representations of the concepts being taught.

We ensure that children with Special Educational Needs and Disabilities (SEND) have access to a broad and balanced curriculum. Teachers set high expectations for every pupil, whatever their prior attainment. Teachers are clear on the pre-requisite learning for each unit of work and the progression to mastery and greater depth for each objective. This allows maximum progress to be planned for and then children are challenged and supported through this journey at a pace appropriate to their needs. Lessons are planned to address potential areas of difficulty and to remove barriers to pupil achievement. Such planning will mean that pupils with SEN and disabilities will be able to study the full national curriculum. Teachers are fully supported with CPD available for every small step that they teach via First4Maths Academy. The training videos outline the resources and images to use to support children's conceptual understanding and the questions that will challenge at mastery and greater depth. Teachers are provided with a journey of activities to select from for each small step. These include additional fluency, challenges and games to allow teachers to plan for the adaptations and adjustments that all children may need within their classrooms.

Pupils' attainment is assessed through the use of Testbase termly assessments and teacher assessment. Teachers complete Assessment Tags at the end of each unit to identify children working towards age-related, expected and greater depth. This enables teachers to analyse progress through the unit of work and to make judgements about whether to revisit any areas of the unit before moving on. Progress is measured by assessment checks each term. All teachers from EYFS to Year 6 moderate their assessments internally with the support of the subject leader, prior to attending moderation sessions with a mathematics consultant. The subject leader monitors the progress of mathematics through work scrutiny of mathematics books, listening to pupil voice, visiting lessons and discussions with staff.

We are committed to ensuring that children are able to recognise the importance of mathematics in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We build in regular opportunities for our children to reflect and evaluate on the skills that they have used in order for them to take ownership and pride in their work. Cross-curricular mathematics, outdoor mathematics and active mathematics are encouraged where it enhances and enriches learning. Children enjoy mathematics and experience success in the subject, with the ability to reason mathematically. We develop children's curiosity about the subject, as well as an appreciation of the beauty and power of mathematics.