

Curriculum Review Subject Mathematics

Intent: what we want to achieve

We aim to encourage all children to have a positive attitude towards mathematics and to develop their self-confidence in their ability to deal with mathematics. Through our curriculum, we intend to support children to work systematically, co-operatively and with perseverance and to be able to think logically and independently. We aim for all children to experience a sense of achievement regardless of age or ability and to understand the appropriate underlying skills, concepts and knowledge of number, shape and space, handling data and problem solving. Children will be able to use and apply previously acquired concepts, skills and knowledge to 'real life' and problem solving situations. We aim to encourage children to be aware of mathematics beyond the classroom and be able to explore problems using the appropriate strategies, predictions and deductions.

Implementation; how we will achieve this

- We will use medium term plans to inform our daily planning of mathematics. These are directly linked to the national curriculum and Early Years foundation stage curriculum and are regularly reviewed and developed to ensure they motivate pupils, builds on experience and previous study and expands a pupil's knowledge and understanding of mathematical fluency, reasoning and problem solving.
- We will ensure that children have regular access to a range of high quality resources that are tactile, IT based, written, graphic, and photographic.
- We will provide multisensory activities and a wide variety of learning experiences to motivate deep learning, curiosity and investigation.
- We will provide opportunities for pupils to work independently, in pairs, in small groups and as a whole class inside and outside the classroom.
- We will teach Mathematics daily and ensure that these lessons are well structured to include an oral/mental starter, a main teaching input and learning opportunity and a plenary.
- Pupils will be able to respond to oral feedback in the lesson, in line with our marking policy, and make appropriate changes or corrections to their work.
- Our curriculum is structured in such a way that it aims to ensure that children have regular access to the different national curriculum objectives and continue to build on these as the year unfolds.
- We ensure that pupils are regularly using mathematical concepts to support their fluency and encourage pupils to recall and use these fundamentals when solving problems.
- We encourage children to use appropriate mathematical language in all year groups in order to support their reasoning and justification skills.
- We provide plenty of opportunities for children to use justification and reasoning in a line of enquiry or investigation.

- We provide a vast range of opportunities for pupils to practise mathematical thinking and problem solving skills, in order to apply their fluency and reasoning to find a solution.
- Pupils will develop their capacity to evaluate their own and their peers work.
- We will promote excellent outcomes through positive values based growth mindset modelling and reinforcement.
- We will use values based approaches to challenge prejudice, preconceptions and to promote tolerance and respect.
- We will use precise tracking and assessment to move pupils' learning forward.
- Information Technology will be used throughout the school to extend each child's understanding of Mathematics. We will use a range of software available to support the curriculum in the classroom. We will use the internet via laptops, desktop computers and Ipads to enable the children to access further information and resources.
- We will ensure that staff training is carried out through school based whole staff training, attending appropriate courses and encouraging teachers to reflect on their own practice and share with their colleagues.

Impact: the intended outcomes of the Mathematics curriculum

- Pupils will develop a love of learning, will become curious and will want to complete extra work and personal investigation.
- Pupils will work hard, strive to meet challenges and will become resilient learners.
- Pupils will learn to work independently or will contribute effectively to partner or group work.
- Pupils will learn to work logically to solve problems using available information and prior learning.
- Pupils will develop as problem solvers and enjoy challenges, when they are presented.
- Pupils will develop as effective communicators in being able to reason and discuss their findings.
- Pupils will make connections between Mathematics, other subjects and wider life experiences.
- Pupils will be confident to apply their knowledge of Mathematics to a wider range of situations.
- Pupils will experience success and feel positive about Mathematics, enabling them to build upon these secure foundations.