

#### Maths Curriculum Vision, Knowledge and Skills

# Nuture

Create

Preparing children for the future through an inspirational curriculum that makes a difference to the world; outstanding character development; exceptional health and well-being.

# Inspire

# Discover



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Intent and De	esign – What are we trying to achieve?
Vision	<ul> <li>•As a school we aim to:</li> <li>• Preparing children for the future through an inspirational curriculum that makes a difference to the world; outstanding character development; exceptional health and well-being.</li> <li>• In Maths we aim to:</li> <li>• Equip all children with the mathematical thinking skills needed to spot patterns, form conjectures, generalise and connect ideas needed to be able to use this knowledge to solve a range of problems.</li> <li>• Equip all children with an understanding the logical rules that understa</li></ul>
	<ul> <li>quantity and arrangment and how they can be changed.</li> <li>To discover and use the logical rules that govern quantity, shape and position.</li> </ul>
Motto	<ul> <li>Nurture – We care for each other and celebrate our differences, achievements and contributions to the world. We support each other through challenges and difficulties, recognising that the mental health and well-being of both ourselves and those around us is one of the key factors in our happiness and success.</li> <li>Inspire – We inspire each other to greater heights through our communication, actions, support and achievements. We take inspiration from the people, places and events all around us. We recognise that whether a situation is good or bad, there is always learning and growth to be gained. These situations inspire us to make positive change a reality.</li> <li>Discover – We are excited to discover new knowledge, skills, people and places. We are open to alternative ideas beyond our own and enjoy exploring the thoughts, conversations and solutions that others bring to different situations and experiences.</li> <li>Create – We enjoy working together to create new and exciting solutions to make our world a better place. We believe we can make a difference no matter how large or small. Our school is a place where we can experiment and take risks in order that we might better ourselves and the world we live in.</li> </ul>
School Values	<ul> <li>We believe in</li> <li>Developing outstanding character and attitudes to learning in preparation for future challenges in a changing world.</li> <li>Promoting physical and mental health in a happy caring environment that is supportive and encouraging.</li> <li>Making a difference to the world we live in through creating enterprising solutions to local and global issues.</li> <li>Developing social skills and an appreciation of each person's unique strengths, respecting and embracing different cultures, races and religions.</li> <li>Fostering a deep sense of care and nurture for the world we live in and the people around us.</li> <li>Creating a broad range of inspiring experiences that allows children to develop skills and find their place in the world.</li> <li>Working in partnership with our school community and beyond to build brighter futures.</li> <li>High expectations alongside a culture of self-awareness, reflection and self-improvement.</li> </ul>
Aims of our Maths Curriculum	<ul> <li>Our inspirational Maths curriculum will enable:</li> <li>All of our children to see themselves as competent mathematicians . The 5 big ideas of mastery inform our everyday teaching. Consistent and progressive use of representations expose the mathematical structures of the underlying concepts being taught. Learning is nurtured through a series of small steps and mixed age teaching is delivered considering the needs of the child and the mathematical progression first and foremost. Depth is more important than speed. Taught fluency in key mathematical concepts is achieved through discrete fluency sessions, class teaching and homework activities and is key to achieving children's sense of confidence and ability to meet the challenges of the progressive curriculum. Reasoning, discussion and exploration opportunities are embedded within lessons and allow children to discover the joy of taking ownership over their own maths, spotting patterns, forming conjectures. A mixture of collaborative, individual and paired work require children to see that maths is not only knowing the answer, but being able to communicate this clearly to others. A mistake is often the start of some important learning and a question shows evidence of deep thinking. By approaching maths in this way, we embrace the individual strengths each child brings to the lesson and include all. Crucially, this allows all children to develop the self reliance, self-reflection, perseverance and resilience needed to prepare them for their future lives.</li> </ul>
Learning	<ul> <li>Our Maths curriculum at Stathern, is designed to cover ten core themes as set out in the national curriculum: place value, additi and subtraction, multiplication and division, fractions (including decimals), measurement, geometry (properties of shape) geometry (position and direction) statistics, ratio and proportion and algebra. These are broken into topics that are taught progressively across both key stages. Children are encouraged to make connections across areas of maths in order to encourage fluency, competence and problem solving. In addition, areas of maths are also applied through a variety of other subjects as appropriate.</li> </ul>

Learning Intentions

We aim to ensure our children are able to:
Be fluent in the fundamentals of mathematics, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

- Build understanding sequentially through varied and frequent practice to enable fluency and confidence to build.
- Reason mathematically, forming conjectures about relationships, generalisations and justifying ideas using appropriate mathematical language.
- Solve a wide variety of problems by applying their mathematical knowledge and persevering in seeking solutions.



Maths Curriculum Vision, Knowledge and Skills

## Implementation and Organisation – How will we arrange our learning?





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#### Key learning within EYFS (2021)

#### Numeracy

"Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically"

These areas feed directly into the following areas on the Year1 – 6 progression maps: <u>Number: Number and Place Value</u>: *Identifying, representing and estimating number, Counting, Comparing and understanding place value.* 

Number: Addition and Subtraction: Number bonds, Mental calculation.

<u>Number:</u>	Numerical Patterns:
<ul> <li>Have a deep understanding of number to 10, including the composition of each number; 14</li> <li>Subitise (recognise quantities without counting) up to 5;</li> <li>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</li> </ul>	<ul> <li>Verbally count beyond 20, recognising the pattern of the counting system;</li> <li>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;</li> <li>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</li> </ul>

For detailed progression of learning from year 1 to 6 in each of the above themes, please see appendix in line with the National Curriculum, aligned in areas of mathematics by the NCETM.



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## Impact – How well are we achieving our aims?

	Teacher Assessment	Pupil Voice	Moderation
Impact seen in:	Work scrutiny	Parental surveys and feedback	Observations and Blinks
	Data analysis	Progress of pupils across the curriculum	Staff Questionnaires
Our children will:	Making great progress and have high standards of achievement and attainment	Have a lifelong love of reading and learning and be able to communicate clearly	Be respectful of themselves and demonstrate excellent behaviour
	Be confident, positive and independent learners with high aspirations	Have mental wellbeing and make healthy lifestyle choices	Participate in the community and have excellent attendance

Work Sample Analysis:	What do our books show?
Lesson Observations:	How is the quality of teaching, learning and use of assessment in the lesson? How
	good is the questioning in the lesson?
Surveys:	What do parents and children say about this subject?
Interviews:	What do the children say about their learning in this subject?
	What do the staff say about their learning in this subject?
Coaching and Mentoring:	Is there a need for coaching and mentoring in this subject? What support do
	colleagues need in this subject?
Training:	What training has taken place? What is the impact of any training given?
Learning environment:	How does the learning environment support the learning in this subject area?