St. Andrew's C of E (VA) Primary School

Maths Curriculum Statement

"I have come that they may have life, and have it to the full. John 10:10"

Maths Intent:

"Maths is not the answer to a question, it is the journey you have taken to get to the answer."

At St. Andrew's Primary School, we believe mathematics is an integral part of children's development throughout school, right from an early age. We intend on delivering a curriculum which:

- Allows children to be a part of creative and engaging lessons that will give them a range of opportunities to explore maths following a mastery curriculum approach.
- Gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges.
- Recognises that mathematics underpins much of our daily lives and therefore is of paramount importance in order that children aspire and become successful in the next stages of their learning.
- Engages all children and entitles them to the same quality of teaching and learning opportunities, striving to achieve their potential, as they belong to our school community and family.
- Makes rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Recognises the EYFS framework and the early learning goals for maths, including the importance of subitising.
- Provides equal opportunities for children to apply their mathematical knowledge to other subjects (cross-curricular links).
- Builds curiosity and a sense of adventure and wonder.
- Allows the children to see the relevance of maths and where it relates to the real world.
- Makes maths accessible to all children at St. Andrew's and provides a stimulating, challenging and fun learning experience in every lesson.
- Engages parents with maths and keeps them informed of their children's learning and development and the strategies they use.
- Engages and informs the Governors of maths teaching and learning and development within St. Andrew's, through classroom visits, reports and discussions.
- Promotes maths at St. Andrew's through the use of the school website and class and whole school displays.
- Keeps all staff informed of the latest developments in maths through CPD.

- Enables and provides regular teacher development through in class observations and feedback by the subject lead and SLT

- Is in line with the expectations in the National Curriculum 2014.

Maths Implementation:

Our mastery approach to the curriculum at St. Andrew's is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6.

Teaching and Learning, Content and Sequence

- In school, we follow the National Curriculum and use the White Rose Schemes of Work across both Key Stages.

- The calculation policy (Appendix 1) is used within school to ensure a consistent approach to teaching the four operations over time.

- At the start of each new topic, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses.

- End of unit assessment tasks are taken giving a clear indication of progress and areas for development.

- The children are given a reason and a purpose as to why the unit and subsequent lessons are being taught. Real life examples of employment and use of maths in the world are given to provide a strong basis for learning.

- Lessons begin with a short task to support retrieval practice and develop long-term memory.

- Children are taught through clear modelling and have the opportunity to develop their knowledge and understanding of mathematical concepts.

- A mastery approach incorporates using objects, pictures, words and numbers (Concrete / Pictorial / Abstract) to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.

- Effective use of resources and hands on equipment helps understanding across both Key Stages (cubes / Numicon, Base 10, place value counters etc)

- The use of online learning platforms: Mathletics, and TTRockstars embed the children's understanding.

- Children who have shown their understanding at a deep level within the unit, will have opportunities to apply these skills in a greater depth/mastery activity. This should be challenging and ensure that children are using more than just one skill to be able to answer the mathematical problems. (Extension Reasoning cards or problem solving activities)

- Reasoning and problem solving are integral to the activities children are given to develop their mathematical thinking.

- Resources are readily available to assist the demonstration of securing a conceptual understanding of the different skills, appropriate for each year group.

- Pre-teaching opportunities are utilised where possible by teachers and TA's

- Children are encouraged to explore, apply and evaluate their mathematical approach during investigations to develop a deeper understanding when solving different problems / puzzles.

- Effective use of questions and children being asked 'Why?' digs deeper into their understanding of a problem. 'What's the story?' 'Draw the problem?' 'What's the number sentence?' all deepen a children's understanding of how they have arrived at the answer.

- Mathematical talk uses sentence stems 'I know that…' ' I know how…' 'I know why…' relating to fluency and reasoning.

- A love of maths is encouraged throughout school via links with others subjects, applying an ever growing range of skills with growing independence.

- Maths parent open mornings promote maths in the school

- Children with additional needs are included in whole class lessons and teachers provide scaffolding and relevant adaptations as necessary. For those children who are working outside of the year group curriculum, individual learning activities are provided to ensure their progress but the children still remain in the classroom environment as much as possible.

- Maths surveys give the children a voice and opportunity to provide feedback to their learning.

Leadership, Assessment and Feedback

- Assessment informs the teaching and learning sequence, and children work on the objectives they are assessed as being at, with fluid boosting available within a 'keep up no catch up' culture.

- Feedback is given on children's learning in line with our feedback policy.

- Formative assessment within a lesson helps teachers to identify the children who need more support to achieve the intended outcome and who are ready for greater stretch and challenge through planned questioning or additional activities.

- In order to support teacher judgments, children are assessed using current and reliable White Rose end of unit and end of term assessments, in line with the National Curriculum for maths.

- Gap analysis of any assessments that the children complete is undertaken and fed into future planning.

- Summative assessments are completed at the end of each main term and reported to parents in the end of year report.

- The maths leader has a clear role and overall responsibility for the progress of all children in maths throughout school. Working with SLT, key data is analysed and regular feedback is provided, to inform on progress and future actions.

Maths Impact:

- Children demonstrate a quick recall of facts and procedures.
- Children show confidence in believing that they will achieve.
- We strive for every child to meet the expected standard for the year group.
- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- Children will show a high level of pride in the presentation and understanding of the work.
- Children can articulate their mathematical understanding through the use of oracy and explain the journey they have taken to arrive at an answer or conclusion.