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| **badge 4ST ANTHONY'S CATHOLIC PRIMARY SCHOOL**  **Mathematics Overview** | | | | | |
| **Our intent is to:**  At St. Anthony’s, our intent is to provide children with a foundation for understanding number, reasoning, problem solving and logical thinking and to develop resilience, independence and enthusiasm in the subject, resulting in an ongoing positive relationship with number. Children will develop a secure and deep understanding of mathematical concepts and procedures and acquire automaticity and fluency, applying these skills across the curriculum and in everyday life. Our aim is for children to feel valued as part of a collaborative learning community with excellence and enjoyment at the heart of every lesson. Every child is provided with an opportunity to shine and be successful, building self-esteem and a positive sense of wellbeing.  It is essential that the fundamental skills in Mathematics are secure and embedded and that all children, regardless of their starting point, maximise their academic achievement leaving St. Anthony’s Primary School with an appreciation and enthusiasm for Mathematics.  • To deliver an enjoyable, stimulating, high quality Mathematics curriculum.  • To develop fully independent learners with Growth Mindset and a positive attitude towards Mathematics.  • To become confident and proficient with number, including fluency with mental calculation and look for connections between numbers.  • To become problem solvers, who can reason, think logically, work systematically and apply their knowledge of Mathematics across the curriculum and in everyday contexts.  • To develop their use of mathematical language.  • To become independent learners and to work co-operatively with others. | | **We will:**  At St Anthony’s Catholic Primary School, we adopt a mastery approach to the teaching and learning of Mathematics. The rationale behind this approach lies within the NCETM Maths Hub Programme as well as the 2014 National Curriculum, which states:  • The expectation is that most pupils will move through the programmes of study at broadly the same pace.  •Pupils who grasp concepts rapidly are challenged by being offered rich and sophisticated problems before any acceleration through new content.  •Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.    **Curriculum design and planning**  Staff use White Rose Maths Schemes of Learning as a starting point in order to develop a coherent and comprehensive conceptual pathway through the Mathematics. The focus is on the whole class progressing together, although differentiated activities are provided. Collaborative planning with year group colleagues ensures consistency.  Learning is broken down into small, connected steps, building on what pupils already know. The lesson journey should be detailed and evident on PowerPoint as there is no requirement for teachers to produce detailed paper plans.  Potential misconceptions are identified in advance and strategies to address them are planned.  Key questions are planned, to challenge thinking and develop learning for all pupils.  Contexts and representations are carefully chosen to develop reasoning skills and to help pupils link concrete ideas to abstract mathematical concepts.  The use of high-quality materials and tasks to support learning and provide access to the Mathematics, which is integrated into lessons. These resources may include White Rose Maths Schemes of Learning and Assessment Materials, Power Maths textbook activities, NCETM Mastery Assessment materials, NRICH, visual images and concrete resources. | | | **Our pupils will:**  As a result of our Mathematics teaching at St. Anthony’s Catholic Primary School, you will see:  • Well planned, engaging lessons that support all children to make excellent progress.  • Use of concrete, pictorial and abstract representations developing varied fluency, reasoning, problem solving and logical thinking.  • Children mastering mathematical concepts and skills, using mathematical language to explain their ideas, showing their calculations in different ways and independently applying concepts to various situations.  • Children talking enthusiastically about Mathematics, celebrating achievements and mistakes and applying the concepts of Growth Mindset to their learning.  • Enthusiastic, engaged, and challenged children, on task, working both independently and collaboratively in a supportive, positive learning environment.  In addition to the formative assessment undertaken in lessons, teachers will use termly NFER summative assessments to reinforce their judgements and provide further opportunities to identify gaps in pupil learning and tailor future lessons. Teacher judgements are then entered onto our school trackers at the end of each term. Children in years 2 and 6 take the SATs examinations and children in year 4 the Multiplication Tables Check. See our school Assessment Policy for further details. |
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| Using the White Rose Scheme of Work as a basis for our curriculum, children in EYFS explore mathematical concepts through active exploration and their everyday play-based learning. Children are taught key concepts and develop number sense using a hands-on practical approach. EYFS practitioners provide opportunities for children to manipulate a variety of objects, which supports their understanding of quantity and number with a focus on conceptual variation. Pupils explore the ‘story’ of numbers to twenty and the development of models and images for numbers as a solid foundation for further progress. Teachers allow children time for exploration and the use of concrete objects helps to support children's mathematical understanding. Mathematics in the early years provides children with a solid foundation that will enable them to develop skills as they progress through their schooling and ensures children are ready for the National Curriculum. | | | | | |
| EYFS | Getting to know you  Just like me!  It’s me 1,2, 3!  Light and Dark | | Alive in 5!  Growing 6, 7, 8  Building 9 and 10  Consolidation | To 20 and beyond  First, then, now  Find my pattern  On the move | |
| <https://whiterosemaths.com/resources?year=early-years> | | | | |
| In Key Stage 1 and 2, we broadly follow the White Rose mixed Age Scheme of Work over a one year cycle. The schemes start with blocks on Place Value, followed by the essential calculation skills children need to succeed in maths. This firm grounding in number gives children confidence and helps them to access the rest of the maths curriculum. We use a concrete-pictorial-abstract approach to support children to understand the maths they are learning and to be able to use it elsewhere. The “small step” approach means nothing is left to chance – all curriculum objectives are broken down into accessible parts that build on each other so the learning journey is complete. The mastery learning approach aims to ensure that all pupils have mastered key concepts before moving on to the next topic. Consequently, the duration of units may vary from the following long-term plans. The following provides an overview of coverage in each term. | | | | | |
| Year 1/2 | Number: Place Value  Y1: Numbers to 20  Y2: Numbers to 100  Number: Addition and Subtraction  Year 1: Numbers within 10 (including recognising money)  Year 2: Numbers within 100 (including money)  Number: Place Value to 50  Multiplication Year 2: Multiplication | | Number: Year 1: Division and consolidation  Year 2: Division  Year 1: Place value to 100  Year 2: Statistics  Measurement: Length and Height  Geometry: Year 1: Shape and consolidation  Year 2: Properties of Shape  Number: Year 1: Fractions and consolidation  Year 2: Fractions | Geometry: Position and Direction  Measurement: Time  Problem solving and efficient methods  Measurement: Year 1: Weight and Volume  Year 2: Mass, Capacity and Temperature  Consolidation and Investigations | |
| <https://whiterosemaths.com/resources?year=mixed-1-2-new> | | | | |
| Year 3/4 | Number: Place Value  Number: Addition and Subtraction  Number: Multiplication and Division | | Number: Multiplication and Division  Measurement: Length, Perimeter and Area  Number: Fractions  Year 3: Measurement: Mass and Capacity  Year 4: Number: Decimals | Number: Decimals (including Money)  Measurement: Time  Statistics  Geometry: Properties of Shape (including year 4 Position and Direction) | |
| <https://whiterosemaths.com/resources?year=mixed-3-4-new> | | | | |
| Year 5/6 | Number: Place Value  Number: Four Operations  Number: Fractions | | Year 5: Number: Fractions  Year 6: Number: Ratio  Number: Decimals and Percentages  Year 5: Number: Decimals  Year 6: Number: Algebra  Measurement: Converting Units  Measurement: Perimeter, Area and Volume  Statistics | Geometry: Properties of Shape  Geometry: Position and Direction  Year 6 SATS  Investigations and Consolidation | |
| [**https://whiterosemaths.com/resources?year=mixed-5-6-new**](https://whiterosemaths.com/resources?year=mixed-5-6-new) | | | | |