Mathematics at Chilham

At Chilham St Mary's, mathematics is an integral part of our everyday lives, helping us to foster a caring, Christ-centred environment where children can grow in confidence, motivation, and independence. Through the study of mathematics, we aim to equip students not only with the skills to succeed academically but also with the mindset to engage with the world around them in a thoughtful and respectful way.

We believe that mathematics teaches resilience and perseverance, encouraging pupils to take intellectual risks, learn from mistakes, and approach challenges with determination—values that underpin our vision of developing lifelong learners who contribute positively to their community.

Our intent is that all children:

- Become fluent in the fundamentals of mathematics, ensuring that they have the skills and confidence to apply mathematical knowledge in various contexts, both inside and outside of the classroom.
- Reason mathematically by following a line of enquiry, using mathematical language to develop arguments, justifications, and proofs, thus deepening their critical thinking and moral reasoning.
- Solve problems with increasing sophistication, learning to break down complex problems into simpler steps and demonstrating perseverance, which fosters a sense of independence and personal responsibility.

This approach aligns with our school's goal of developing well-rounded individuals who understand their role in society and are motivated to contribute positively, applying mathematical skills in real-world situations with integrity and respect.

Implementation

At Chilham St Mary's, all teachers use the White Rose Mixed Age Resources as a basis for our curriculum, we also place emphasis on the core concepts that children need to be secure in to allow them to progress in Mathematics (identified in the Ready To Progress Criteria and non-statutory guidance, DFE, 2021). We recognise the importance of pupils' deeper understanding within these objectives but also that they are not inclusive of all objectives within the National Curriculum (DFE, 2014). Therefore, we ensure that all objectives are covered but priority is placed on the key steps identified. The White Rose Curriculum document outlines the small steps that focus on the Ready To Progress Criteria, to which more time and emphasis will be given (White Rose: National Curriculum and Ready To Progress Mapping, 2024).

The use of Concrete-Pictorial-Abstract (CPA) learning ensures that all children can access mathematical concepts in a way that resonates with their individual learning needs. This helps foster independence as children gain the confidence to tackle challenges on their own.

We believe that mathematics also plays a key role in developing key social, moral, spiritual, and cultural (SMSC) values:

- Social: Collaborative problem-solving activities allow children to work together, share ideas, and learn the value of teamwork.
- Moral: Mathematics challenges children to think logically, make reasoned decisions, and appreciate the importance of accuracy and honesty in their work.
- Spiritual: The process of discovery in mathematics encourages reflection, personal growth, and the joy of learning, helping children develop a sense of awe and wonder in their work.
- Cultural: We aim to provide students with a global perspective of mathematics, recognizing that it is a universal language that connects people across cultures and communities.

Equal Opportunities

- Vulnerable groups are identified within each class and appropriate support is provided with the support of the SENCo, where appropriate. Progress of vulnerable groups will be monitored during pupil progress meetings.
- Differentiated activities across the school will take account of the children's differing needs and abilities ensuring all children have access to the mathematics curriculum at the appropriate standard.
- Children with special educational needs in mathematics are supported to enable them to achieve and make progress in maths.
- Additional provision is made for children who are working significantly below their age-related expectations within the national curriculum objectives.

Impact

By the end of their time at Chilham St Mary's, we aim for all pupils to leave with a solid foundation in mathematics, having developed not only academic fluency but also the personal qualities of confidence, resilience, and respect for others. These qualities are integral to our vision of developing well-rounded individuals who are ready to contribute positively to society.

Through our curriculum, students will:

- Be confident in their ability to apply mathematical skills in real-life situations, having developed a strong sense of independence and self-belief.
- Be motivated to approach new challenges with curiosity and perseverance, equipped with the resilience to overcome obstacles.
- Demonstrate respect for others' ideas and approaches to problem-solving, valuing collaboration and diverse perspectives.

- Contribute positively to their community by using their mathematical reasoning to solve problems and make informed decisions, guided by moral and ethical considerations.

In this way, we aim to nurture lifelong learners who understand their social, moral, spiritual, and cultural responsibilities and are equipped with the skills and mindset to contribute positively to their communities and the world.

References

- White Rose Curriculum: https://whiteroseeducation.com/resources?subject=primary+maths&year=year+1+%28v3%29
- White Rose Calculation Policy: https://whiteroseeducation.com/_next/image?url=https%3A%2F%2Fassets.whiteroseeducation.com%2FContent%2Fnew-schemes%2FCalc-policy.png&w=640&q=75
- White Rose: National Curriculum and Ready To Progress Mapping, 2024: Https://assets.whiteroseeducation.com/resource-pages/mixed-age/Mixed%20age%20NC%20RTP%20document.pdf
- DFE Non-statutory guidance for mathematics: https://assets.publishing.service.gov.uk/media/6140b7008fa8f503ba3dc8d1/Maths_guidance_KS_1_and_2.pdf