

ST CHRISTOPHER'S CHURCH OF ENGLAND PRIMARY SCHOOL

Part of the Diocese of Ely Multi Academy Trust



At St Christopher's Primary School, we are committed to providing our children with a curriculum that has a clear intention and impacts positively upon their needs.

Curriculum statement for the teaching and learning of Mathematics

INTENT	When teaching Mathematics at St Christopher's, we intend to provide a curriculum which caters for the needs of all individuals and sets them up with the necessary skills and knowledge for them to become successful in their future adventures and working life. We incorporate sustained levels of challenge through varied and high quality activities with a focus on fluency, reasoning and problem solving. Pupils are required to explore maths in depth, using mathematical vocabulary to reason and explain their workings. A wide range of mathematical resources are used and pupils are taught to show their workings in a concrete, pictorial and abstract form wherever suitable. They are taught to explain their choice of methods and develop their mathematical reasoning skills. We encourage resilience, adaptability and acceptance that struggle is often a necessary step in learning. Our curriculum allows children to better make sense of the world around them relating the pattern between mathematics and everyday life.			
Underpinned By	High Expectations	Modelling	A Vocabulary Rich Environment	Pattern and Connection
	All children are expected to succeed and make progress from their starting points.	Teachers teach the skills needed to succeed in Mathematics, providing examples of good practice and having high expectations.	We intend to create a vocabulary rich environment, where discussion is a key learning tool for all pupils. Pre-teaching key vocabulary is a driver for pupil understanding and develops the confidence of pupils to explain mathematically.	All children will have opportunities to identify patterns or connections in their maths; they can use this to predict and reason and to also develop their own patterns or links in Mathematics and other subjects.
	The Teaching of Fluency	The Teaching of Reasoning	The Teaching of Problem Solving	Mastery
	We intend for all pupils to become fluent in the fundamentals of Mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.	We intend for all pupils to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.	We intend for all pupils to solve problems by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.	All children secure a long-term, deep and adaptable understanding of Mathematics which they can apply in different contexts.

White Rose Maths

Every class from EYFS to Y6 follows the White Rose 'scheme of learning' which is based on the National Curriculum. Lessons may be personalised to address the individual needs and requirements of a class but coverage is maintained. We also use a range of planning resources including those provided by the NCETM and NRICH to enrich our children's Mathematics diet.

Assessment

Through our teaching we continuously monitor pupils' progress against expected attainment for their age, making formative assessment notes where appropriate and using these to inform our teaching. Summative assessments are completed at the end of each half term; their results form discussions in termly 'Pupil Progress Meetings' and update our summative school tracker. The main purpose of all assessment is to always ensure that we are providing excellent provision for every child.

Concrete Pictorial Abstract (CPA)

We implement our approach through high quality teaching delivering appropriately challenging work for all individuals. To support us, we have a range of mathematical resources in our classrooms including Numicon, dienes and counters (concrete equipment). When children have grasped a concept using concrete equipment, images and diagrams are used (pictorial) prior to moving to abstract questions. Abstract Mathematics relies on the children understanding a concept thoroughly and being able to use their knowledge and understanding to answer and solve questions without equipment or images.

Online Maths Tools

In order to advance individual children's skills in school and at home, we utilise Numbots in Key Stage 1 to help improve number bond knowledge and Times Tables Rock Stars in Key Stage 2 for times table recall practise, application and consolidation.

Continuing Professional Development (CPD)

We continuously strive to better ourselves and frequently share ideas and things that have been particularly effective. We are part of the Cambridge Maths Hub who help us in developing and delivering the Maths curriculum across our school effectively.

Cross-Curricular Links

Maths is taught across the curriculum ensuring that skills taught in these lessons are applied in other subjects where applicable.

Whole School Events

We celebrate National Maths Day each year by hosting a 'Robot Rockstars' day to highlight our use of online platforms and the importance of both number bonds and times table recall knowledge.

Pupil Voice

Through discussion and feedback, children talk enthusiastically about their Maths lessons and speak about how they love learning about Maths. They can articulate the context in which Maths is being taught and relate this to real life purposes. Children show confidence and believe they can learn about a new area of Maths and apply the knowledge and skills they already have.

Evidence in Knowledge

Pupils know how and why Maths is used in the outside world and in the workplace. They know about different ways that it can be used to support their future potential. 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 demonstrate a quick recall of facts and procedures. This includes the recollection of the times tables.

Evidence in Skills

Pupils use acquired vocabulary in Maths lessons. They have the skills to use methods independently and show resilience when tackling problems. The flexibility and fluidity to move between different contexts and representations of Maths. Children show a high level of pride in the presentation and understanding of the work. The chance to develop the ability to recognise relationships and make connections in Maths lessons. Teachers plan a range of opportunities to use Maths inside and outside school.

Outcomes

At the end of each year, we expect the children to have achieved Age Related Expectations (ARE) for their year group. Some children will have progressed further and achieved greater depth (GD). Children who have gaps in their knowledge receive appropriate support and intervention.

Mastery

All children secure long-term, deep and adaptable understanding of Maths which they can apply in different contexts.