Christ Church, Church of England, Junior School

"Working together to build a strong foundation through faith and learning"



MATHS POLICY

Christian Vision: Grow and Learn together with God by our side.

Policy Approved: November 2022

Review: November 2024

This policy sets out Christ Church (Church of England) School's approach to the mathematics curriculum.

"Sometimes the questions are complicated, and the answers are simple." – **Dr. Seuss**

"Mathematics is not about numbers, equations, computations, or algorithms: it is about understanding." – William Paul Thurston

"Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers." - Shakuntala Devi

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Introduction

This is a policy, which outlines the programmes of study, which is used at Christ Church (Church of England) Schools to teach Mathematics. We aim to create a culture of high standards, achievements and expectations that develops the full potential of every individual. Every child brings valuable experiences and strengths to our school. We build on these by offering a curriculum that is stimulating, accessible, challenging and differentiated to meet the needs of all children, particularly disadvantaged and SEND, ensuring that all children can reach their full potential.



Shared Vision

Our distinctively Christian ethos contributes to Christ Church as a centre of learning excellence inclusive to all. Through living out our core Christian values – respect, kindness, honesty, love, friendship, and perseverance – we are a community in which all our members are respected and valued and can flourish as human beings equally created in the image of God. As a school we provide an engaging, well balanced, and inspirational curriculum through which every child's potential may be fulfilled. Through positive encouragement and nurturing, each child can develop to the full – socially, emotionally, spiritually, and academically – so as to be equipped with the life skills needed to live as a valued and valuable member of society.

Intent

When teaching mathematics at Christ Church, we intend to provide a curriculum which caters for the needs of all individuals and provides children with the necessary skills and knowledge for them to become confident and resilient when using maths in the future. We aim to prepare them for a successful working life. We incorporate sustained levels of challenge through varied and high-quality activities with a focus on fluency, reasoning and problem solving. Mathematics is a creative discipline that can stimulate moments of pleasure and wonder when a pupil solves a problem for the first time, discovers a more elegant solution to that problem, or suddenly sees hidden connections. We aim to create a sense of 'wonder' in our lessons and a thirst for taking mathematical learning beyond the classroom.

We actively encourage our parents to become involved in their children's Mathematics learning in a variety of ways e.g., the implementation of weekly, meaningful, maths homework; maths parent newsletter and through use of TT Rockstars.

Implementation

The National Curriculum

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of viewing and making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks across the curriculum and real-life problems through enquiry and investigation. It also provides the material and means for creating new imaginative worlds to explore.



Our Design provides detailed information for the implementation of the orders to ensure continuity and progression in the teaching of mathematics.



Medium Term Plan

The White Rose Maths scheme of learning, used by Christ Church, provides a mastery programme of

learning designed to spark curiosity and excitement whilst nurturing confidence in maths. However, this is adapted to the children at Christ Church to ensure that content is secure before progressing to the next objective. With our child- centred lesson model, it allows a growth mind-set to be embedded that provides an approach which focuses on helping all children to build a deep understanding of maths concepts. Creating a positive attitude in this way, helps build: competence and confidence in mathematical knowledge; concept and skills that enable children to



solve problems; reason and think logically allowing them to work systematically and accurately. The outcomes should be numerate pupils, who are confident enough to tackle mathematical problems using their prior knowledge and number skills without immediately going to teachers or friends for help. Through the daily Tough Ten and Flash Back questions, all topics are revisited throughout the year to support children in retention of skills.

Calculation Policy

The ability to calculate mentally is an important part of mathematics and for preparing children to cope with society's demands by aiding manage everyday events. At Christ Church we recognise the importance of establishing a secure foundation in mental calculation and recall of number facts



before standard written methods are introduced. Similarly, we also recognise the importance of using the appropriate vocabulary in our teaching that children are expected to use in their verbal and written explanations.

In order to understand and successfully use written strategies to carry out and record calculations that cannot be performed mentally we use a step-by-step approach in order to provide effective and efficient methods of more formal written calculations that provide full understanding.

Full details of methods used by teachers can be found in our Calculation Policy.



Cross Curricular Links

Mathematics is taught mainly as a separate subject, but every effort is made to link maths with other areas of the curriculum. At Christ Church we draw children's attention to the links between mathematics and other curricular work, so they see maths is not an isolated subject.

We encourage resilience and acceptance that struggle is often a necessary step in leaning and we are there to support pupils in every step of their journey to be the best they can be. Mistakes are fine and even celebrated for the learning opportunity they offer! Children who leave Christ Church will leave with the confidence and ability to tackle mathematical problems and continue their Mathematical learning in the next stage of their education.

Impact

Assessment, Reporting and Recording

At Christ Church teachers are continually assessing our pupils' achievement through observation and marking of work. Feedback is given verbally and also recorded in books. We see assessment as an integral part of the teaching process, children will sit a maths assessment at the end of each term. We endeavour to make our assessment purposeful, to ensure future planning matches the needs of pupils. This information is also shared across the different year groups, including the transition from Christ Church Infant School, to support planning at each stage.

It is also used by the subject leader, alongside other monitoring information e.g., book trawls, lesson observations and pupil conversations, to identify effective teaching and learning and any next steps. The subject leader is responsible for writing an action plan which states the overall objective and targets for their subject alongside actions to achieve this. They maintain an overview of practice that takes place in school and supports staff with planning and delivery of mathematics in order to provide a supportive collaborative approach. The designated governor for maths, works in collaboration with the senior leaders and maths lead to monitor maths at Christ Church.

We expect most children to have achieved Age Related Expectations (ARE) for their year group. However, some children will have progressed further and achieved greater depth (GD). Whilst others may have gaps in their knowledge and require further support. Interventions are given throughout the year, to help this group of children achieve age related expectations.

Intervention

When planning and teaching the curriculum, Christ Church have due regard to the principle of setting suitable learning challenges. Every child is given the opportunity to achieve the highest standard possible. Whilst the National Curriculum Programmes of Study set out what each child should be taught at each key stage this is tailored to the needs of



each individual and may mean teaching knowledge, skills and understanding from earlier key stages/phases.

Gifted and Talented Children

At Christ Church we are aware that we have children who can achieve beyond the standards for their age. Their learning will be extended through adapted work, extra mastery challenges and opportunities for independent learning, that allow and enable children to be stretched to their full capability to achieve high levels by the end of Year 6.



Homework

Mathematics homework, is given each week as at Christ Church we recognise the importance of making links between home and school that encourages parental involvement with the learning of mathematics. The effect of children sharing their mathematical work with their family allows children to practise and consolidate their skills and knowledge and provides an important platform for future learning.

Not all homework will be written work which needs marking. Children are also encouraged to practise number bonds and multiplication facts at home. Times Table Rock Stars is used to increase children's fluency and recall, with regular competitions and tournament. Every week, each class will reward a pupil with a TT Rockstars certificate.

It is considered extremely important for children to be able to develop and extend their techniques and strategies in order to achieve the success they deserve.