St. Chad's Catholic Primary School
Mathematics Policy

2026-27

School Mission Statement:

"At St Chad's we grow in the light of Christ, to share his love and reflect the gospel values"

Introduction

Mathematics is both a *key* skill within school, and a *life skill* to be utilised throughout every person's day to day experiences.

Rationale

At St. Chad's school, we believe that mathematics is a gift from God that enables us to explore the order, beauty and logic of His creation. Every child is uniquely blessed with talents and through the study of maths, we nurture these gifts by developing problem-solving skills, reasoning and confidence. Maths helps children recognise patterns and relationships in the world around them, reflecting the harmony and structure of God's design. By fostering a love of learning and encouraging perseverance, we help pupils grow not only in knowledge but also in appreciation of the talents God has given them, preparing them to use these gifts in service of others.

Mathematics is important in everyday life. It is integral to all aspects of life and with this in mind we, at St. Chad's endeavour to ensure that children develop a positive and enthusiastic attitude towards Mathematics that will stay with them. Curriculum guidance for the Foundation Stage and the National Curriculum for mathematics (2014) describes in detail what pupils must learn in each year group. These combined with our Calculation Policy, Maths expectation policy and White Rose Maths overview ensures continuity, progression and high expectations for attainment in mathematics. We are committed to ensuring that all pupils achieve mastery in the key concepts of mathematics, appropriate for their age group, in order that they make genuine progress and avoid gaps in their understanding that provide barriers to learning as they move through education.

Aims of Mathematics

The National Curriculum for mathematics aims to ensure that all pupils:

- **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.**
- **reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language**
- **can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.**

At St Chad's Primary school, in conjunction with the National Curriculum we aim to:

- **To foster a positive attitude to Mathematics as an interesting and attractive part of the curriculum.**
- **To develop the ability to think clearly and logically, with confidence, flexibility and independence of thought.**
- **To develop a deeper understanding of Mathematics through a process of enquiry and investigation.**
- **To develop an understanding of the connectivity of patterns and relationships within Mathematics.**
- **To develop the ability to apply knowledge, skills and ideas in real life contexts outside the classroom, and become aware of the uses of Mathematics in the wider world.**
- **To develop the ability to use Mathematics as a means of communicating ideas.**
- **To develop an ability and inclination to work both alone and cooperatively to solve Mathematical problems.**
- **To develop personal qualities such as perseverance, independent thinking, cooperation and self-confidence through a sense of achievement and success.**
- **To develop an appreciation of the creative aspects of Mathematics and an awareness of its aesthetic appeal.**

Principles of Teaching and Learning

The school uses a mastery approach to teaching Mathematics so pupils develop a deep and secure knowledge and understanding of mathematics at each stage of learning. We follow the 5Is learning principals. In Years 1 – 6 the whole class is taught mathematics together, with no differentiation by acceleration to new content. The learning needs of individual pupils are addressed through careful scaffolding, skilful questioning and appropriate rapid intervention, to provide the necessary support and challenge.

The aim of our curriculum is to explore the big ideas in mathematics, encourage deeper thinking and independence as well as a secure understanding of key mathematical structures. It is not to produce a page of calculations, which is abstract to any real life situation. To support this approach we do not erase incorrect answers or approaches as they provide a valuable clue to the path a child is taking and is valuable assessment information.

Our teachers strive to:

- **Build children's confidence and self esteem**
- **Develop children's independence**
- **Allow all children to experience regular success**
- **Contextualise Mathematics**
- **Use practical approaches to Mathematics (CPA)**
- **Encourage children to select independently resources to help them**
- **Challenge children of all abilities, through enrichment rather than acceleration.**
- **Encourage children to enjoy Mathematics**
- **Develop a child's understanding of Mathematical language**
- **Learn from teachers, peers and their own mistakes**
- **Encourage children to ask as well as answer questions.**

Our pupils should:

- **Have a well-developed sense of the size of a number and where it fits into the number system (place value).**
- **Know by heart number facts such as number bonds, multiplication tables, doubles and halves.**
- **Use what they know with instant recall to work mentally.**

- **Calculate accurately and efficiently, both mentally and in writing and paper.**
- **Draw on a range of calculation strategies.**
- **Recognise when it is appropriate to use a calculator and be able to do so effectively.**
- **Make sense of number problems, including non-routine/'real' problems and identify the operations needed to solve them.**
- **Explain their methods and reasoning, using correct Mathematical terms.**
- **Judge whether their answers are reasonable and have strategies for checking them where necessary.**
- **Suggest suitable units for measuring and making sensible estimates of measurements.**
- **Explain and make predictions from the numbers in graphs, diagrams, charts and tables.**
- **Develop spatial awareness and an understanding of the properties of 2D and 3D shapes.**

To provide adequate time for developing Mathematics, Maths is taught daily and discretely. Although maths is taught as a discrete subject, staff are encouraged to exploit any cross-curricular links and provide opportunities for children to demonstrate their mastery of concepts or skills in other subjects (e.g.: science, ICT, PE, topic).

Maths Curriculum Planning

Mathematics is a core subject in the National Curriculum, and we use the objectives from this, resources from White Rose Maths (Y1-6) and the National Council for Excellence in the Teaching of Mathematics (NCETM) to support planning and to assess children's progress.

Objectives are taken from the relevant year band overview and medium-term plans. Class teachers create weekly power point plans for the teaching of Mathematics. These weekly plans list the specific learning objectives for each lesson and give details of how the lessons are to be taught.

Programs of study and lesson content are carefully sequenced, to develop a coherent and comprehensive conceptual pathway through mathematics.

● Learning is broken down into small, connected steps, building from what pupils already know.

● Children are allowed time to reflect on new concepts through discussion, use of whiteboards and recording in math books.

● Difficult points and potential misconceptions are identified in advance and strategies to address them 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, is integrated into lessons. These may include concrete materials, visual representations and textbooks.

Lesson Structure

Lessons are structured around the 5I's learning principals and the concrete – pictorial –abstract approach, providing opportunities throughout for modelling, discussion using mathematical vocabulary and sentence stems, developing mathematical thinking, using multiple representations and making improvements to work. There should be opportunities to record independently in every lesson and challenge should be evident for all pupils.

Fact Fluency

We encourage daily practice through games, songs, and interactive activities to make learning fun and memorable. Fact fluency is built into every lesson through flashbacks of previous learning & a recap of foundational knowledge. Year 1 and Year 2 use The NCETM Mastering number program to support this. Year 3 and Year 4 focus on learning and recalling the multiplication facts to 12 x 12 in preparation for the Multiplication check in Summer Term, Year 4. Pupils have access to Timetables Rockstars, Maths Wizz and Numbots program in school and at home to support learning of number facts.

By mastering number facts, pupils build a solid foundation for more complex maths topics like fractions, algebra and problem-solving. Our aim is to ensure every child feels successful and enjoys working with numbers.

Homework

Homework is set focusing on fact fluency. Pupils use Numbots, White Rose 1 minute maths (https://whiteroseeducation.com/1-minute-maths to use it in a web browser or a Mobile app: Search for "1-Minute Maths" by White Rose Education in the Apple App Store (iPhone/iPad) or Google Play Store (Android)) and Numbots to support online learning. Paper copies of facts are sent home too.

Classroom Environment

The classroom environment should be mathematically rich and support current learning. Maths working walls should be interactive, clearly visible and provide the children with key vocabulary, number lines and charts, 100 squares, number facts, prompts and challenges appropriate to the age/stage

and linked to current learning. A range of concrete materials should be available for every child.

Assessment

This section details the various assessment methods and practices used at St Chad's through which we ensure that children are making appropriate progress.

Formative Assessment (AfL) - (monitoring children's learning)

Assessment is an integral and continuous part of the teaching and learning process in the check it phase of a lesson at St Chad's and it is done informally as part of each teacher's day to day work. Teachers integrate the use of formative assessment strategies such as effective questioning, clear teacher learning objectives, effective verbal feedback and response in their teaching, live marking and observing children's discussion and participation in activities. Findings from assessment are used to inform responsive teaching & future planning. Misconceptions and support needed are highlighted and recorded. Termly, teachers use the formative assessments gained through day to day teaching to assess each child against the National Expectations for their year group in Mathematics.

Summative Assessment – (evaluating children's learning)
Summative assessment in mathematics provides a snapshot of pupils' understanding and attainment at key points throughout the year. It helps teachers evaluate progress against national curriculum objectives and informs future planning. Assessments include end-of-unit tests, termly standardised assessments, and teacher judgements based on classwork. The outcomes are used to identify gaps in learning, support pupil progress and communicate achievement to parents and carers. We ensure that summative assessments are age-appropriate, accessible and reflect the breadth of mathematical learning. Results of termly assessments are inputted using smart grade and analysed using Insight. Teacher assessments are recorded and updated termly on Insight.

End of Key Stage 2 maths assessments consist of three papers taken in May by Year 6 pupils: one arithmetic and two reasoning papers. These tests assess pupils' understanding of the national curriculum and help determine readiness for secondary school.

Parents will be informed of an overall judgement for Mathematics on their child's end of year report.

Early Years Foundation Stage (EYFS)

We follow EYFS curriculum guidance for Mathematics. We are committed to ensuring the confident development of number sense and through

implementing NCETM Mastering Number program. Pupils develop models and images for numbers as a solid strong foundation for further progress and Year 1 readiness.

Resources

Some essential Mathematics resources are kept in each classroom. Further resources relating to key whole school topics are kept in the resources room located between the Year 3 and Year 4 classroom. Other online resources are made available to staff through the maths expectations document.

Computing Technology

Teachers should use their judgement about when digital tools should be used, including the use of calculators. White Rose recommends a range of tools teachers can use to support teaching and learning. Interventions may utilise computing technology e.g Maths Wizz.

Role of the Subject Leader

- **Ensures teachers understand the requirements of the National Curriculum and helps them to plan lessons. Leads by example by setting ambitious standards in their own teaching.**
- **Prepares, organizes and leads CPD and joint professional development.**
- **Works with the SENCO and SLT.**
- **Observes colleagues with a view to identifying the support they need.**
- **Discusses regularly with the Headteacher and the Curriculum governor the progress of implementing National Curriculum for Mathematics in school.**
- **Monitors and evaluates Mathematics provision in the school by conducting regular work scrutiny, learning walks and assessment data analysis.**

Moderating and review

Moderating of the standards of children's work and of the quality teaching in Mathematics is the responsibility of the Mathematics subject leader alongside members of the senior leadership team. The work of the Mathematics subject leader also involves supporting colleagues in the teaching of Mathematics, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. The Mathematics subject leader gives the Headteacher a termly report in which she evaluates strengths and weaknesses in the subject and indicates areas for further improvement.

Mrs M.Vanstockem is the nominated maths governor and is briefed to oversee the teaching of Mathematics. The governor meets at least yearly with the subject leader to review progress.

Equal Opportunities

The provision of maths teaching is regardless of protected characteristics and should allow all children to reach their full potential. Adaptive teaching should be responsive to pupil's needs within lessons, following the 5 I's teaching principals.

Special Educational Needs

We aim to provide a rich mathematical education, which will develop the potential of all pupils. In line with NCETM guidance on the teaching of mathematics, we recognise that mathematics and the key ideas and building blocks are important for everyone. A child who is assessed to have special education needs in mathematics will have targets on a ITP and can be supported through a range of learning activities, whole class teaching and intervention as appropriate.

Greater Depth and Challenge

Greater Depth is part of the mastery approach, where pupils not only meet expected standards but show *advanced reasoning, problem-solving, and conceptual fluency*.

It's not about moving ahead in the curriculum, but about exploring topics more richly and deeply.

Various approaches are used:

- **Use rich tasks and open-ended questions. Encourage discussion and reasoning.**
- **Provide low threshold, high ceiling activities—accessible to all but with scope for deep exploration.**
- **Avoid rushing ahead; instead, deepen understanding through variation and challenge**

Challenge should be planned for, using the school's planning document. However, teacher's assessment for learning during the check it phase of learning, should also inform challenge within lessons, so learning is adapted.

Enrichment Activities

Various enrichment activities are organised throughout the year for pupils. For example:

- **Visits from HSBC – money matters theme**
- **National Numeracy live sessions – Maths in real life links**
- **TTRS competitions**
- **Maths competitions and challenge days with other schools**
- **Maths Days**
- **Parent workshops**

Policy review: October 2027