



SACRED HEART
CATHOLIC PRIMARY
SCHOOL & NURSERY

Maths Policy

This is our school.

Together we worship; Together we learn; Together we belong.

With the love of God, our dreams and ambitions come true



September 2023

Policy Date: September 2023

Policy Status: Statutory Policy

Awaiting approval by Governing

Body October 2023

Review Cycle: 18months or as required

Next Review Date: January 2025



At Sacred Heart Catholic Primary School & Nursery we are proud to provide a safe, stimulating and inclusive learning environment where every member of our community is valued and respected.

Mission Statement

**‘Together we worship, Together we learn,
Together we belong – with the love of God...
our dreams and ambitions come true.’**

Our broad, balanced, creative curriculum and enrichment activities provide opportunities for everyone to achieve and succeed. Together we take pride in making a positive contribution to our school and the wider community.

This policy should be referred to in conjunction with the curriculum, assessment and teaching and learning policies.

SAFEGUARDING STATEMENT

“Sacred Heart Catholic Primary School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment”.



This policy outlines the teaching, organisation and management of the mathematics taught at Sacred Heart Catholic Primary School and Nursery. The school's policy is based on the New National Curriculum 2014 Framework. This policy sets out a framework within which all staff (teaching staff and support staff) should work. It aims to establish a positive learning environment for mathematics focusing on fluency, reasoning and problem solving in varied and exciting ways.

Maths is a central part of everyday life and is a skill that we use every day. Therefore, it is the school's vision to produce fluent mathematicians who have a love and enjoyment for maths; to empower them in their later lives. Unlocking mathematical fluency is an essential life skill and is key in being able to reason and problem solve mathematically. We believe in the importance of making connections between concrete materials, models and images, mathematical language, symbolic representation and prior knowledge. Through our teaching sequence, we ensure that children have the opportunity to practice key skills whilst developing their understanding and application to more complex questioning.

Mathematics Intent

The intent of our mathematics curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience so that they are fully prepared for the future. It is essential that these keystones of Mathematics are embedded throughout all strands of the National Curriculum. By adopting a Mastery approach, it is also intended that all children, regardless of their starting point, will maximise their academic achievement and leave Sacred Heart Catholic Primary School with an appreciation and enthusiasm for Maths, resulting in a lifelong positive relationship with number:

- We ensure that we deliver a high quality maths curriculum that is both challenging and enjoyable
- We want children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- We want our children to know that maths is essential to everyday life and that our children are confident mathematicians who are not afraid to take risks
- Fully develop independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.
- A positive attitude towards mathematics/numeracy. Maths is fun – and we want our pupils to enjoy it as much as we do as a staff!
- An appreciation of mathematical patterns and the ability to identify relationships between numbers, and using it in as many situations as possible.
- A structural approach to build up mathematical language all children, including those who speak English as an additional language, emphasising the key mathematical vocabulary.

- The application of mathematical knowledge, skills and understanding through practical tasks and real life problems.
- The ability to reason and explain mathematical procedures.
- The ability to think clearly and logically and to work with perseverance.
- Cooperation between children when working together to find a solution, rule or pattern.
- A wide range of mental and written strategies which can be explained orally to the teacher when discussing how a problem or a question has been tackled.
- The ability to select effective, efficient methods and match them to the task, and to know when it is appropriate to approach a problem mentally, written or with a calculator tool.

Implementation of Mathematics

Maths in EYFS

Our maths curriculum in EYFS has been developed using the following: EYFS (birth to 5), EYFS Framework and Development Matters. Whilst Development matters in a non-statutory guidance it supports our staff in implementing the EYFS Framework as well as breaking down each education programme into age bands so that they are aware of how to support children's learning at each stage of development.

We follow a spiral curriculum in EYFS so that children are having the opportunity to recall upon and build upon prior learning. Our Key areas of learning in EYFS are as follows:

- Cardinality and Counting
- Measures
- Spatial Reasoning
- Shape
- Sorting and Sequencing

Our EYFS practitioners ensure that they stimulate children's interests, responding to each child's emerging needs and guide their development through warm, positive interactions coupled with secure routines for play and learning. Our learning environments ensure high-quality play is facilitated and that learning takes place through play, adult modelling, observing each other and through guided learning and directed teaching.

Maths In Years 1- Year 6

The National curriculum organises Mathematics under the following domains

- Place value and number
- Addition and subtraction
- Multiplication and division
- Fractions
- Measurement
- Geometry
- Statistics

Here at Sacred Heart, we follow the National Curriculum and use NCETM small steps to ensure that there is excellent sequencing in lessons and progression over time. Activities provided for the children are supported by White Rose, NRICH and Gareth Metcalfe materials. This ensures that our children are exposed to a range of different question types when completing fluency, reasoning and problem solving tasks and that our lessons are bespoke and meet the specific needs of the children in our class

Within each of the aforementioned topics, children will develop their skills in each of the three focuses:

- ♦ Fluency and calculation – mental and written. Written calculation has become embedded with a calculation policy that adopts the CPA approach. Mental methods are developed and embedded through starters, tasks and plenaries.
- ♦ Reasoning and problem solving – In order to equip pupils with the skills required, reasoning activities will be incorporated into various starters, plenaries and challenge activities thus enabling all children to access a level of apply in each lesson. Reasoning and problem solving should be evident in most lessons.

All children are catered for within the maths lessons ensuring that the teacher offers the necessary support and challenge for each individual to make progress. We ensure that maths is taught in creative and engaging lessons using a wide array of maths manipulatives to aid and support our children in their learning.

We aim to encourage the deepest of learning for our children so that their knowledge can be transferred and applied in many contexts including other subjects e.g. science and art and their everyday lives.

Maths is widely promoted across the school and our classrooms have working walls and resource areas that the children can utilise to support their learning and provide extra challenge.

Mathematical vocabulary is an essential part of each lesson and the children need to understand this within the area they are studying and be able to make rich connections across other areas within this subject. Each lesson provides children with the opportunity to reason and problem solving using the vocabulary they have learnt during their lessons.

We hope to build problem-solvers of the future and build resilience in our children; we want to provide the children with essential skills they can use in all aspects of their learning. Through regular problem-solving and reasoning, the children are able to practice, apply and embed the mathematics skills they have developed throughout the year.

Special Educational Needs

Children with additional needs are supported by using practical resources and adapted activities where needed. They are also further supported by additional support staff whenever possible. Where applicable, children's provision maps will incorporate suitable objectives from the National Curriculum or the EYFS curriculum and teachers keep these objectives in mind when planning work.

Impact

A mathematical concept or skill has been 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 quick recall of facts and procedures. This includes the recollection of the times tables
- The flexibility and fluidity to move between different contexts and representations of mathematics
- The ability to recognise relationships and make connections in mathematics
- Children show confidence in Believing that they will achieve
- Children show a high level of pride in the presentation and understanding of the work

The impact of our mathematics curriculum is that children understand the relevance and importance of what they are learning in relation to real world concepts. Children know that maths is a vital life skill that they will rely on in many areas of their daily life. Children have a positive view of maths due to learning in an environment where maths is promoted as being an exciting and enjoyable subject in which they can investigate and ask questions; they know that it is reasonable to make mistakes because this can strengthen their learning through the journey to finding an answer.

Assessment

Assessment is an integral part of our maths curriculum and not an addition to it. Children's work in mathematics is assessed in the following ways:

1) Informal, formative assessments are made continually by questioning the children, observing and monitoring their work. These short term assessments are closely related to the learning objectives for the lesson and help inform next steps.

2) Summative assessment - this is the use of tests or more formal assessments to find out what children have learnt. We use NFER maths papers at the end of each academic term. Question Level Analysis are completed to identify gaps within each class and are shared with Class Teachers.

3) Statutory Assessment Tests (SATs) are used for children in Year 2 and 6, plus children in Year 4 are also required to take a multiplication tables check (MTC) in the Summer Term. The purpose of the check is to determine whether pupils can fluently recall their times tables up to 12, which is essential for future success in mathematics.

Monitoring

The Mathematics subject leader (Miss A Kayayan) has the overall responsibility of monitoring the standard of pupils work, the quality of the teaching and evaluating impact.

The work of the subject leader involves supporting colleagues in the teaching of mathematics, being aware of current developments in the subject, and providing a strategic lead and direction for the subject in the school so that it remains high profile.

The school leadership team (& subject leader) will observe mathematics lessons and give feedback, staff will be directed to relevant CPD to develop their skills and support and improve their practice. Work scrutinies take place termly to monitor progress and standards and for the purpose of moderation. The school participates in external moderation.