

Sacred Heart Catholic Primary School

'Working and worshipping together'

POLICY FOR MATHEMATICS

Mission Statement

'In Sacred Heart Catholic Primary School, we strive to ensure a happy and secure community with Christ at our centre working and worshipping together. Our mission is to send out confident and caring children ready to achieve their full potential'.

Our Policy reflects the principles identified in our whole school aims. These are to:

- Provide an education which enables all children to reach their full potential by enjoying a broad balanced and inclusive curriculum.
- Plan and deliver the curriculum and extra-curricular activities to ensure provision of a rich variety of learning opportunities.
- Provide work with challenge and differentiation to meet the needs of all individual pupils.
- Use assessment, marking and evaluation to inform and enrich future teaching and learning and to track individual pupil progress.
- Provide opportunities for all staff to develop professionally.
- · Promote high expectations of achievement and behaviour.

Mathematics is a tool for everyday life. It is a whole network of concepts and relationships which provide a way of making sense of the world. It is used to analyse and communicate information and ideas and to tackle a range of practical tasks and real life problems. It also provides the materials and means for creating new imaginative worlds to explore. All children are encouraged to enjoy Mathematics and become more enthusiastic mathematicians by developing their skills, qualities and knowledge through practical experiences, which have relevance and purpose in everyday situations.

National Curriculum Aims

- 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.
- Pupils reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Pupils can 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.

Our School Aims

- To promote a positive attitude towards the learning of mathematics.
- To develop an enjoyment of learning through practical activity, exploration and discussion.
- To develop confidence and competence with numbers and the number system through rapid recall.
- To develop a conceptual understanding in order to solve problems through decisionmaking and reasoning in a range of contexts.
- To develop a practical understanding of the ways in which information is gathered and presented.
- To help children understand the importance of mathematics in everyday life.

At Sacred Heart Primary School we are committed to:

Planning from the 2014 Mathematics Curriculum.

- · Teaching structured mathematics lessons daily.
- Using a variety of teaching methods to suit all children's needs
 Using effective questioning techniques.
- Introducing mathematical terminology throughout the school.
- Setting targets that will allow the children to grow in confidence whilst reaching for full potential.
- Involving parents in their child's mathematical education.

Cross-curricular

We give the children opportunities to use and apply their skills in a variety of relevant contexts.

Throughout the whole curriculum opportunities exist to extend and promote mathematics. It is important that children develop the skills of mathematics and are able to apply them in different situations across the curriculum and in daily living outside school.

Organisation

Each class organises a daily maths lesson.

The approach to the teaching of mathematics within the school is based on four key principles

- 1. A mathematics lesson every day
- 2. A clear focus on direct, instructional teaching and interactive oral work
- 3. A clear emphasis on mental calculations
- 4. Using and applying skills

The teaching of mathematics includes the use of a range of organisational strategies including whole class teaching, groups, working with the teacher or teaching assistant, groups working together and individual independent work.

Planning

The 2014 New Mathematics Curriculum is the first point of reference for planning the Mathematics Curriculum; this is supported by the White Rose Maths Hub Medium Term Planning, Power Maths Mastery text books and resources from the Lancashire planning support programme.

This comprehensive coverage ensures that we are addressing the requirements of the National Curriculum and at the same time providing a range of activities, which will ensure progression across the full range of mathematical skills and practices. Teachers in Early Years base their objectives on the 'Early Learning Goals' for mathematical development. Towards the end of Reception teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with the structure.

What a visitor might typically see in maths learning in our school

- Whole class direct teaching with clear and progressive modelling of concepts and procedures with sequences of varied examples.
- The consistent use of core manipulatives and representations to support ability to access learning and to deepen children's understanding.
- Rehearsal of core facts and strategies.
- Rich mathematical talk given high status and supported by the learning environment and teachers' questioning.
- Emphasis placed on 'learning' through reasoning, developing multiple strategies and concepts towards understanding.
- Pupils 'grappling' with learning mathematical concepts.
- Challenge for pupils grasping concepts quickly is provided through depth and breadth of experience.
- A few areas of learning covered more deeply in a half term.
- Daily opportunities for reasoning and problem solving.
- Differentiation achieved through adjustments to allow access to whole class learning and challenge for depth and breadth to whole class learning.

Calculations

It is important for teachers to introduce methods of calculations consistently across the school. The school's **calculation policy** has been created to provide continuity throughout the school with all four operations, which in turn will facilitate measured progress for children in school.

Resources

All classes have access to the appropriate resources for their varying topics of learning in Maths. When additional resources are required, further items are ordered via the Maths

subject leader. Each class has access to Power Maths text books and resources supporting a teaching for mastery approach.

Special Educational Needs

Children with SEN are taught within the daily maths lesson and are encouraged to take part when and where possible. Where applicable, children's IEPs incorporate suitable objectives from the National Curriculum. Teachers keep these objectives in mind when planning work.

Within the daily maths lesson teachers not only provide activities to support children who find maths difficult but also provide activities to children working at a deeper level of understanding, ensuring appropriate challenges are provided to enhance their learning. The school invests in early interventions for mathematics. These will be short-term and sharply focussed upon specific needs. Leaders will regularly assess the impact of these as part of the school monitoring cycle.

Equal Opportunities

We incorporate mathematics into a wide range of cross curricular subjects and seek to take advantage of multi-cultural aspects of mathematics. In the daily maths lesson we support children with English as an additional language in a variety of ways from individual support, maths games to computer programmes.

Marking

The marking of mathematics is completed in line with the school's **Marking Policy**.

Assessment and Record Keeping

Assessment is an ongoing process and is informative and useful. Teachers are expected to make regular assessment of each child's progress and to record these systematically. Progress of the children is recorded and tracked by class teachers using the Lancashire KLIPs document. Assessment takes place half termly to allow teachers to track children's progress and inform planning for the following half term. It is formally collected three times a year and reviewed and discussed at Pupil Progress Meetings termly.

Assessment materials from White Rose Maths Hub are used termly as regular 'low-stakes' quizzes to support teacher assessment and provide retrieval practice for pupils.

Statutory end of Key Stage 1 and Key Stage 2 tests are administered in Year 2 and Year 6.

Reporting to Parents

At Sacred Heart Catholic Primary School we realise it is important that parents feel involved in their children's learning. Parents are encouraged to help their child with mathematics. We do this by:

- Inviting parents into school on parents' evening to look at their child's work.
- Holding open maths afternoons where parents can come and work with their children solving puzzles in a mathematical way.
- Keeping parents informed of developments by providing leaflets and workshops for KS1 and KS2 so parents can help their children at home.
- Discussing pupils progress at Parents' Evening
- Producing an annual report of their child's progress
- Contacting parents whenever is needed if their child is experiencing significant difficulties in this subject

The Governing Body

The Governing Body have identified a Mathematics governor who meets with the Maths Coordinator to discuss progress and together they meet with the Governor's Curriculum Committee.

Homework

It is our school policy to provide parents and carers with the opportunities to work with their children at home. These activities may only be brief but are valuable in the promotion of children's learning in mathematics. Activities are sent home on a regular basis in the form of games or more formal tasks. Homework is also set on www.mymaths.co.uk where each child has their own log in.