

LONDON BOROUGH OF HAVERING



**ST. URSULA'S
CATHOLIC PRIMARY SCHOOL**

Mathematics Policy

“With God at the heart of our St Ursula’s family, we welcome all as we learn and grow together”

Spring 2023

Overview

At St Ursula's Catholic Primary School we aim to create enjoyment and enthusiasm for mathematics providing our children with a solid foundation to enable them to apply their knowledge to real life situations. Through our mastery teaching schemes, using White Rose Maths and Power Maths, we nurture and develop a growth mindset within the classroom. All mathematics lessons begin with a real life situation, bringing maths to life and linking it to the everyday lives of the children.

We promote linking mathematics across the curriculum to consolidate and deepen the children's understanding of problem solving. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics. The skills and concepts covered are revisited throughout their time at St Ursula's Catholic Primary School.

Aims

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.

Teaching and learning style

The school uses a variety of teaching and learning styles in mathematics. Our principal aim is to develop children's knowledge, skills and understanding. During our daily lessons, we discover, share, think together, practice and reflect on mathematical concepts. We encourage children to ask as well as answer mathematical questions to develop their mathematical vocabulary and understanding. They have the opportunity to use a wide range of pictorial and concrete resources, such as Base 10, number lines, number squares, digit cards, place value charts, counters, fraction walls and other apparatus to gain a deep understanding of mathematical concepts. ICT is used in mathematics lessons for modelling ideas and methods.

Within the Early Years Foundation Stage (EYFS), the programme of study is set out in the EYFS Framework 'Development Matters' 2014. Within our Nursery and Reception classes the children receive a daily Maths Teaching input, in order to ensure all pupils receive quality teaching. Within the Early Years Foundation Stage, the children are provided with opportunities to practice and consolidate their knowledge through our extensive enhanced provision and a range of planned, child focused activities.

Mathematics within EYFS involves providing children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shape, spaces and measures in all environments.

Within KS1, Maths is taught daily for approximately 45 minutes. The Teachers in KS1 follow

the scheme of work from White Rose Maths and are supported using Power Maths, but are not limited to it and therefore use their professional judgement during planning. During the lessons the children are taught the key principles of mathematics in various ways in order to ensure children acquire fluency of skills by introducing concepts in a practical/concrete way to progress to pictorial then abstract.

Within Year 2, the children revisit the strands as an emphasis on practice at this early stage will aid fluency.

Within KS2, children use the Power Maths Practice Books. Examples of representations and pictorial models are used to enable pupils to develop a deeper knowledge of mathematics. Use of precise mathematical language enables all pupils to communicate their reasoning and thinking effectively. Questions and visual aids are within these books together with challenging questions and opportunities to reflect on learning within every lesson.

Children also use a maths journal. This is used for additional maths tasks, guided maths work, scaffolding for those students who need more time to master a concept together with extension work and assessments. Teachers also use other materials to support children's learning.

Resources and Homework

Within KS1 homework is set on a Friday and for this purpose the school subscribe to Maths Shed, the children complete one session a week which is set by the class teacher.

Within KS2 homework is set on a Friday and for this purpose the school subscribe to Maths Shed and Times Table Rockstars. Children complete one session a week on each piece of software..

All children are asked to complete the homework at home. We ask parents to support us with this to help consolidate and build upon children's learning in school. However, teachers provide opportunities to support children with their online homework using school computing services in the event they are unable to do this.

The school places high importance on times table knowledge which is essential for mathematics. In order to support our children, we subscribe to Times Table Rockstars. This is a highly engaging online resource and all children have passwords to log on at home to improve their recall and speed of times tables. We encourage parents to work with their children to improve their times table knowledge every week.

To support this policy are 4 addendum policies which detail the calculation policies used across the school:

Appendix 1 - Power Maths LKS2 Calculation Policy

Appendix 2 - Power Maths UKS2 Calculation Policy

Special Educational Needs (SEND)

All children will have their specific needs met through differentiated work in conjunction with their identified targets. TA support time is planned for and provided in relation to identified needs for individuals and groups.