Our Lady's Catholic Primary School Mathematics Policy



Loving, Learning and Reaching Out to All September 2022

This policy outlines the Maths Vision, Curriculum intent, teaching, organisation and management of Mathematics taught at Our Lady's Catholic Primary School. The policy is based on the 2014 expectations of the 'National Curriculum' for mathematics and the EYFS 2021 framework. It provides information and guidance for teachers, governors and other interested persons. It outlines what we are aiming to achieve in respect of pupils' mathematical education. It also describes our agreed approach to the planning, delivery and assessment of the mathematics' curriculum. It also takes in to consideration the effect of the Covid 19 Pandemic.

Why?

At Our Lady's, we want our mathematicians to develop an appreciation of the beauty and power of mathematics. They will be curious mathematicians who think deeply about the world, approaching problems creatively and flexibly, including breaking problems down into a series of simpler steps and persevering in seeking solutions. They will have an understanding of the concepts which underpin procedures, the ability to reason mathematically and to make rich connections between the different mathematical domains. They will 'know' numbers; develop a number sense and be able to recall and apply knowledge rapidly, accurately and efficiently. They will be able to move fluently between different representations of mathematical ideas and will be able to use manipulatives to model their mathematical thinking.

How?

We follow a Mastery approach to mathematics. Topics are blocked to allow time to delve deeper and enables our children to understand and retain more learning. The lesson objective will likely be the same objective for a number of lessons as children develop their learning in depth and with variation. The children will progress through each objective in a series of small steps. There will be opportunities to recap learning from the previous lesson and previous years before moving forward. Children will work on objectives at roughly the same pace, with the expectation that all children can do Maths. Swift intervention is given to children who are finding the topics difficult. Lessons include 'challenge' tasks, where children work together and support each other, as well as guided and independent work, where children demonstrate their individual learning. Teachers use their discretion and differentiate mainly through support, resources and scaffolding if required. For those SEND children, there is more intervention on offer in each class as well as before school boosters in Y6 and towards the end of Y5.

Children's learning constantly demonstrates the aims of the Maths curriculum: Fluency, Reasoning and Problem Solving. This is visible each day in lessons, in tasks prepared by staff, and in the work produced in children's books. There are opportunities each day for children to work on

their fluency and basic skills. Skills are based around subitising, number bonds and addition and subtraction in KS1. Reception, Y1 and Y2 teachers have been trained in the Mastering Number Programme and classes have a daily session. In KS2 children have a short fluency session daily to build upon and extend KS1 knowledge of the four operations.

What?

We currently follow the long-term overviews produced by White Rose Maths to ensure all curriculum objectives are covered. We weave in the DFE Guidance 2020 to ensure our children are ready to progress to the next steps. This also builds in daily revision through Flashback 4 and retrieval tasks of topics that may or may not have been covered in as much detail in the last few years due to COVID-19.

Teachers select suitable resources, tasks, investigations and worksheets using a range of resources. This enables us to tailor our lessons to the needs of our children. Differentiation is often by product through the use of manipulatives or scaffolds to support children and give advanced learners the opportunity in developing more explanation of their answers. Teachers proactively plan varied approaches to support when and if required and these resources are available to all children.

Early Years Foundation Stage (EYFS Framework 2021)

From entry at nursery, children are given the opportunity to develop their Maths skills and knowledge through independent activities, adults led activities and whole class input. Further opportunities are available through indoor and outdoor continuous provision. Teachers support children to build up and develop a deep understanding of numbers to 10 including the composition of each number, subtising up to 5 and having the ability to automatically recall number bonds to 5 including subtraction facts and double facts. They will be provided with opportunities to develop numerical patterns by verbally counting beyond 20 and recognising the pattern of the counting system. They will compare quantities up to 10 in many different contexts using the vocabulary greater than, less than and the same as. They will explore odds, evens, double facts and how quantities can be distributed equally. Having a deep understanding of numbers to 10 will support them in having a smooth transition to Yr1 and beyond.

Assessment and Record Keeping

- Assessment is continuous and ongoing and supports planning.
- Approximately 2 weeks after completion of a block, children apply their knowledge on understanding by completing the White Rose end of block assessment.
- At the end of each block, children's progress is assessed against the NC statements for maths and this information is placed on to the Insight tracker.
- Teachers can use this information to identify any gaps within their class and support intervention.
- Number Stacks pre assessment is used to support our catch up curriculum before each block. Children can then receive intervention for previous steps so they are ready to progress at the start of a topic.
- White Rose end of term assessments are used for the Autumn and Spring term with NFER used to obtain a standardised score in the summer term. KS1 and KS2 SATs papers are used in Y2 and Y6 in the spring term to support teacher judgement.
- From Y2, children have the opportunity to self- assess using the paper version and online version of TT Rock Stars.
- MTC check in Y4

Home/ School Links

The link between home and school is forged in a number of ways. In EYFS through weekly overview homework and tapestry observations. In key stage 1 and 2, homework is assigned on a weekly basis to support the mathematics work in class. This can be written or via the My Maths online platform. TT rock Stars is introduced from the Spring term in Y2 as an extra resource to use at home. Any children who have PPPs with maths targets meet with parents twice a year (Sept and Feb) to review. Any children who take part in Intervention on a regular basis are informed. Y6 have access to a before school club to consolidate and revise work and for extra support.

Inclusion and Special Needs

We aim to meet the needs of all, taking into account gender, ethnicity, culture, religions, language, disability, age and social circumstances. The provisions for children with special educational needs is detailed in the SEND policy. Central to this is the early identification, intervention and careful planning for intervention through provision mapping.

Monitoring and Evaluation

Monitoring and evaluation of Mathematics teaching and learning in the school is carried out by the Mathematics Lead, teachers during staff meeting time and SLT. When possible, discussion with children through pupil voice interviews will take place along with scrutiny of work. An action plan is written annually.

Role of Subject Leader

The subject leader will be responsible for improving standards of teaching and learning in Mathematics through pupil progress, the quality of the learning environment, taking the lead in training and development of the subject particularly the mastery approach, policy development, auditing, purchasing and managing resources and supporting colleagues in their CPD. They will also support the SLT in feeding back the above to the governing body.

To be reviewed September 2023