

Our Lady's Catholic Primary School

Mathematics Policy



Loving, Learning and Reaching Out to All

June 2021

This policy outlines the teaching, organisation and management of Mathematics taught at Our Lady's Catholic Primary School. The policy is based on the 2014 expectations of the 'New 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.

At Our Lady's Catholic Primary School, we are developing a mastery approach to the teaching of Mathematics. At the centre of this approach is the belief that all pupils have the potential to succeed. All children should have access to the same curriculum content and rather than being extended with new content from other year groups, they should deepen their conceptual understanding and fluency by reasoning and problem solving.

Aims

- To develop a growth mind set about ability to learn Mathematics.
- To develop a positive attitude towards the subject.
- To become confident and proficient with number including fluency with mental calculations and looking for connections between numbers.
- To create problem solvers who can reason, think logically, work systematically and apply their knowledge of Mathematics.
- To develop mathematical language which children can use appropriately.
- To help children to become independent learners and to work cooperatively with others.
- To give real life context to learning in Mathematics.
- To apply their mathematical knowledge in other curriculum areas where applicable.

Teaching and Learning

- Teachers plan from the White Rose yearly and medium term plans and overviews, which allow time to focus on topics by teaching in blocked units. These also address the aims of the 2014 National Curriculum of fluency, reasoning and problem solving. The class work together on the same key point /step, whilst at the same time challenging those to gain depth of understanding and supporting those who need more help to achieve.
- Teachers plan using the small steps notes and guidance to ensure progression through the block. They annotate the printed White Rose planning and adapt accordingly. Teachers are asked to use a flexible approach in time spent on steps to meet the needs of the cohort.
- Lessons contain a combination of fluency work, reasoning tasks and problem solving activities, however not all lessons will contain all three. Some small steps may need more than one lesson to ensure that pupils have grasped the concept.
- New concepts are introduced by using a concrete, pictorial, abstract approach (See Calculation Policy). Every Math's lesson should show progress and/or help children to deepen their understanding building on prior knowledge. Therefore all children are challenged.
- Where appropriate, pupils work in mixed ability groups. Pupils who grasp rapidly are challenged through rich and sophisticated problems and reasoning rather than accelerated onto new content. Additional support is given through further use of representations, equipment, directed questioning and additional time or activities (outside the mathematics lesson).
- Math's vocabulary form part of every lesson in order to develop children's knowledge and mathematical talk. Stem sentences (given to all teachers) for display should be used to develop children's mathematical reasoning both verbally and when written down. Working walls and equipment are easily accessible by the children.

- All calculations follow the calculation policy, according to individual needs. The learning intention is clear and shared with the children and the children are aware of the success criteria. Adults should be used effectively in order to develop knowledge. They are aware of focus children in the lesson.
- Opportunities for self and/ or peer assessment are incorporated into lessons. Work is marked according to the marking policy. Indication of support from an adult is noted on work where it was required. Where possible children are given verbal feedback and asked to fix in the lesson. Time is allocated at the start of the next lesson to fix any work. Next steps are given where appropriate. Any corrections are completed in green. Children are encouraged to use a traffic light system or face to show how they feel about their learning.

Early Years Foundation Stage (EYFS)

Teachers support children in developing and expressing their understanding of problem solving, reasoning and numeracy in a broad range of contexts through exploration. Teachers offer opportunities for these skills to be practised in order to give children confidence and competence in their use. The Area of Learning and Development includes: seeking patterns, making connections, recognising relationships, working with numbers, shapes, space and measures and counting, sorting and matching. Children use their knowledge and skills in these areas to solve problems, generate new questions and make connections across other Areas of Learning and Development. Mathematical understanding will be developed through whole class sessions as well as stories, songs, games and imaginative play.

Assessment and Record Keeping

- Assessment is continuous and ongoing and supports planning.
- Assessment values applying mathematics to new and unfamiliar situations.
- 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.
- NFER assessment and KS1 and KS2 SATs papers are used in the summer 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 math's 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 an after 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 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.

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