Our Lady of Compassion

Catholic Primary School

"Compassion and achievement for all"

Maths Policy

Draft – To be agreed by Governors 7th October 2024

Signed: ……...
Print: ……..
Date: 7th October 2024

At Our Lady of Compassion, we strive for excellence in all that we do. Our goal is to cultivate an environment where children approach Mathematics with positivity and enthusiasm, embracing challenges as opportunities to grow. By developing strong mathematical skills and resilience in problem-solving, we believe our students will not only engage deeply with the subject but also thrive, reaching their full potential.

We aim to do this by:

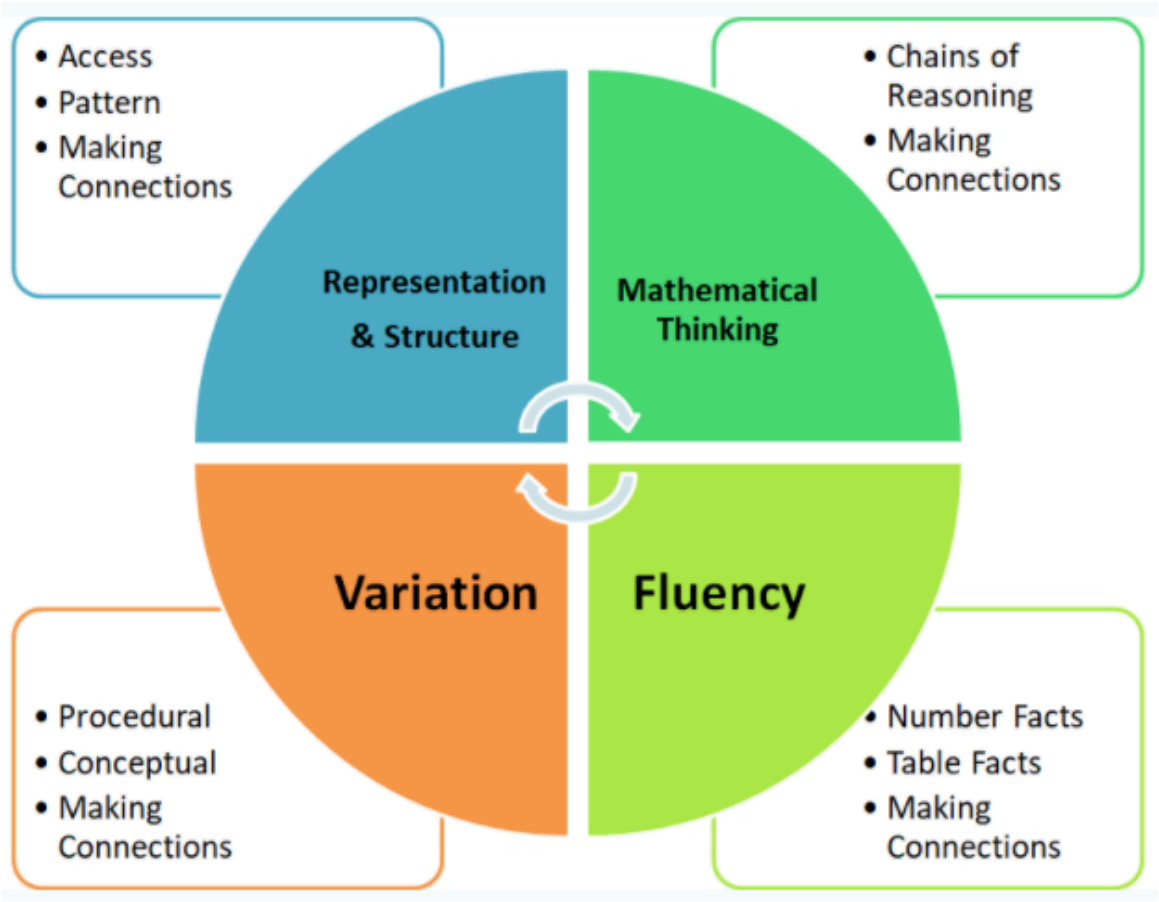
- ***Fostering and nurturing a curiosity towards the subject that will stay with them for the rest of their lives.***
- ***Providing 'real life' opportunities so pupils make links and understand its purpose.***
- ***Providing opportunities to apply their mathematical knowledge to other areas of the curriculum confidently.***

We want children to develop fluency, reasoning and problem solving skills across the mathematical curriculum and therefore creating children who are confident and competent mathematicians. Thus, making their transition to high school seamless and also increasing their employability in the future.

This policy outlines the teaching and assessment of mathematics in our primary school. We follow the White Rose Maths scheme of work, ensuring a structured and sequential approach to teaching maths, while also adapting to the needs of individual classes. The aim is to develop fluency, reasoning, and problem-solving skills in every pupil, ensuring a deep understanding of mathematical concepts.

Learning strategies:

It is essential that children are given the opportunity to explore mathematics and present their discoveries not only through written work but also visually and verbally. To support this, the school will implement the concrete, pictorial, and abstract approach.



Ref: mathshub.org.uk

This will allow the children to experience the physical aspects of Maths before finding a way to present their findings and understandings in a visual form before relying on the abstract numbers. Within every lesson, key vocabulary is shared, discussed and explained and children are encouraged to use it when discussing in lessons and reasoning in books. Within the lesson, pupils are encouraged to use resources and equipment (concrete manipulatives) and models and images, concrete, pictorial and abstract. Teachers use careful questions to draw out children's discussions and their reasoning. The class teacher then leads children through strategies for solving the problem, including those already discussed. Independent work provides the means for all children to develop their fluency further, before progressing to more complex related problems allowing them to reason and problem solve.

Teachers at Our Lady's attend staff meetings that regularly have a Maths focus, and which provide information on current thinking, introducing staff to new teaching methodologies and ideas. The school is involved with North West Maths Hub for Learning in relation to the teaching of Mastery.

Active involvement of parents and carers is essential to children's education. To keep them informed about school activities, we use social media platforms like X. Each teacher has a personal account, allowing parents to follow their child's learning journey. Additionally, each subject has its own account, such as @OLOCmaths, which shares updates on the exciting math activities happening across the school. We also use these accounts to share information about current competitions and other important events.

Early Maths in the Foundation Stage

At Our Lady of Compassion, we aim to provide a rich and engaging mathematical foundation for our early learners, aligning with the school's broader maths curriculum. Our approach is inclusive and child-centred, enabling all children to engage in maths at their own pace while ensuring high expectations for all. We prioritise the development of mathematical language, encouraging children to articulate their thinking and explain their reasoning.

In Early Years, we follow the White Rose Maths scheme to ensure consistency across all year groups, supporting children's understanding of key mathematical concepts through practical, hands-on experiences. White Rose Maths within Early Years promotes deep understanding of number, shape, space, and measures, using a mix of structured activities and continuous provision activities that encourage problem-solving, reasoning, and discussion. Lessons are designed to build fluency in early number skills, with a strong emphasis on understanding numbers to 10, patterns, counting, and basic addition and subtraction.

To complement White Rose, we implement the NCETM Mastering Number programme. This initiative helps to embed strong number sense and fluency, ensuring children grasp essential mathematical concepts such as subitising, number bonds, and the relationship between numbers.

White Rose Maths has recently been introduced to Nursery, through enhanced continuous provision activities and short inputs to our N2 children. The N1 children access number rhymes and stories, as well as the enhanced continuous provision available.

Reception follows the White Rose Maths scheme of work, which is split into weekly and fortnightly topics. This scheme is predominantly used, whilst also using NCETM to support learning.

Assessment is ongoing, using observations and informal tasks to assess progress, ensuring that teaching is responsive to each child's needs. Reception children have individual maths books to evidence their early maths skills. Our goal is to foster a positive attitude towards maths, laying a strong foundation for future learning.

Curriculum Planning:

- **Scheme of Work**: The White Rose Maths scheme forms the foundation of our teaching, ensuring a coherent and consistent approach throughout the school. While teachers are expected to follow the general sequence of the scheme, they have the flexibility to adapt lessons to meet the specific needs of their class. At Our Lady's, we also use Nrich Maths to further develop pupils' problem-solving strategies, complementing the White Rose scheme. Each child is provided with a TTRockstars account, and time is allocated within the curriculum for them to practice their times tables.
- Additionally, we utilize the Learning by Questions platform, which offers a wide range of questions, from fluency to reasoning and problem-solving. This tool supports teachers in assessing students by providing real-time feedback on their progress across various areas. It also helps reduce the marking workload in line with government initiatives aimed at easing teacher responsibilities.
- **Adaptation**: Teachers are encouraged to assess their class's progress regularly and adjust the pacing or content of lessons to meet any emerging needs. This flexibility ensures that all students receive the support they need to master key concepts.
- **Daily Maths Lessons**: Maths should be taught daily, with each lesson offering opportunities for fluency, reasoning, and problem-solving. Emphasis is placed on children clearly showing their working in their books.
- **Inclusion:** In accordance with the School's Inclusion Policy, every child is entitled to full access to the Maths curriculum and a wide range of mathematical activities. To ensure this, a variety of teaching methods and learning styles will be incorporated into Maths lessons. Intervention groups, led by teachers or teaching assistants, will be conducted both during and outside of lessons. These sessions may involve individual or small group work, catering to students across the entire learning spectrum.

Assessment:

- **Formative Assessment**: Teachers will utilize ongoing assessment methods during lessons to track progress and guide their instruction. The following day, target time will be used to address any misunderstandings or areas needing extra support. These sessions must be clearly documented in students' books with appropriate dates.
- **NFER Tests**: At the end of each term, NFER tests will be conducted to assess pupils' mathematical understanding. The results will highlight strengths and areas for improvement, enabling teachers to adjust the curriculum and implement targeted interventions as needed. - NFER digital online tests will be trialed in Year 3 & 4 Autumn Term 24/25.
- **Self and Peer Assessment**: To support teacher workload and foster independence, children will mark one lesson per week themselves. This provides valuable opportunities for self-assessment and reflection on their learning.

Marking and Feedback:

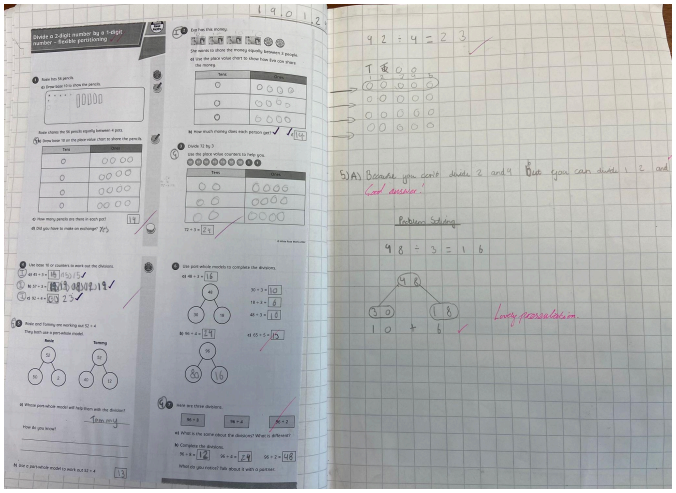
- **Marking Codes**: Marking will follow the school's marking policy. The following codes should be used consistently across all classes:
    - **I**: Independent work
    - **G**: Group work
    - **P**: Partner work
    - **S**: Supported work
    - **VF**: Verbal feedback given

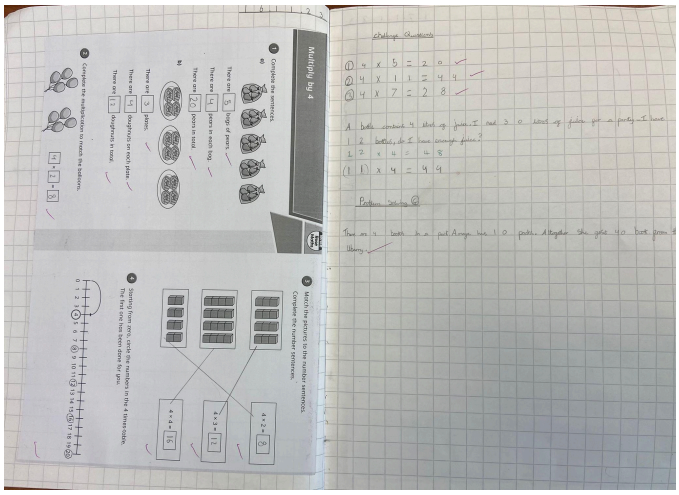
- **Work-Life Balance**: Teachers are not required to provide written comments for each piece of work. Instead, marking will focus on acknowledging students' work and identifying errors for immediate feedback.

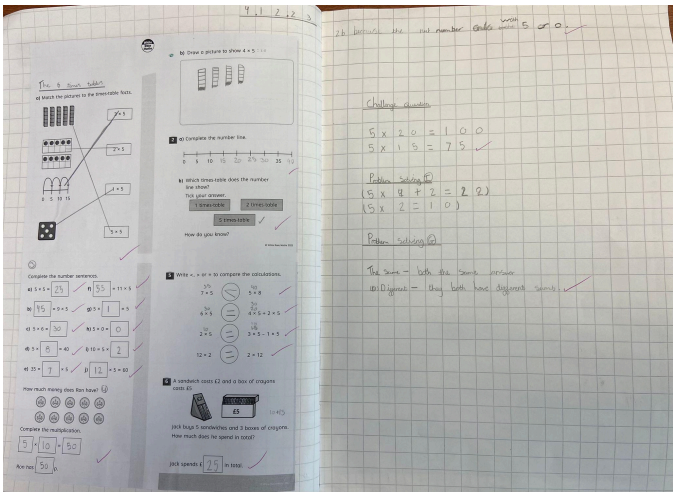
Presentation and Book Work:

- **Use of Books**: All students must show their working in their maths books. The expectation is that students use one square per number, ensuring neat and clear presentation. This consistency helps in the identification of errors and supports a logical approach to problem-solving.
- **Evidencing Work**: Fluency, reasoning, and problem-solving activities must be clearly evidenced in students' books. Teachers should encourage students to show full working out, especially for problem-solving tasks, to ensure depth of understanding.

Examples from Year 3:







Follow-Up and Interventions:

- **Target Time**: Each day, a portion of time should be allocated for addressing any misunderstandings from the previous day's lesson. This should be clearly evidenced in students' books, with corrections or additional work dated for reference.
- **Interventions**: Based on ongoing assessments and NFER test results, targeted interventions should be put in place for pupils who require additional support. These may be conducted during target time or as part of a structured intervention plan.

Resources and Displays:

Each classroom will be equipped with various materials to support the teaching of Maths, including number lines, multiplication tables, 100 squares, 2D and 3D shapes, multilink cubes, dice, and other smaller items. Children are encouraged to utilize any available resources in the classroom that they find helpful when completing their Maths work.

At Our Lady's, we have implemented a dedicated working whiteboard in each classroom for Maths instruction. This resource allows us to highlight key vocabulary, which we encourage students to use during discussions, as well as to showcase common mistakes, challenges, and problem-solving processes. Students actively contribute to the content displayed on our working whiteboard.

Conclusion:

Our maths policy provides a consistent framework across the school while allowing teachers the flexibility to adapt lessons based on their professional judgment and the specific needs of their pupils. By adhering to this policy, we aim to create a positive, engaging, and supportive environment where every student can excel in mathematics.